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CONNECTING OUR GLOBAL HAND SURGERY FAMILY

IFSSH MID TERM COURSE  
(PP2 AND 93)

MEMBER SOCIETY NEWS



“One aim,  
various options”



# IFSSH Mid Term Course

www.ifssh.info

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# A malady, or a human being?

At medical school we were taught how to make diagnoses based on structured history taking and examination of clinical signs, and how to execute appropriate management plans based on our findings.

During our psychiatry rotation however, the opposite was expected. We were taught how to ask open-ended questions and allow patients to share as much as they needed to. All we had to do as clinicians was listen, encourage and prompt patients to dig deeper, to describe their feelings and to share their fears. Patients had to share to the point where they practically diagnosed themselves, while clinicians merely put a name to the condition.

Have we as hand surgeons perhaps forgotten this skill of truly listening to patients, because we are simply too busy? We are so eager to diagnose, that special investigations are often ordered even before the patient is seen.

André Chamay, who features in this edition's Pioneer Profile (p8), was known for seeing the whole person in front of him as a physical, spiritual human being with a unique personality, who happens to suffer a hand malady - not just being another hand problem case.

Sometimes we have to slow down and re-discover our humanity.



Take care,  
Ulrich.

**ULRICH MENNEN**  
Editor

ezone  
**ifssh**  
CONNECTING OUR GLOBAL HAND SURGERY FAMILY

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# President's Message

It gives me great pleasure to announce the pending merger of the Hand Surgery Resource (HSR) into the International Federation of Societies for Surgery of the Hand. The nonprofit Hand Surgery Resource was started in 2016 by Professor Lawrence Hurst of New York's Stony Brook University Hospital. The Hand Surgery Resource provides FREE hand surgery educational materials worldwide via its educational website and its mobile app, which is available through the Apple App Store and Google Play.

The Hand Surgery Source presents the fundamental principles of injuries of the hand and upper extremity, diseases of the hand, and hand surgery. Currently, the Hand Surgery Resource website has 4,054 registered users in over 100 countries. There are 19,000 individuals who receive the Hand Surgery Resource newsletter worldwide. The newsletter is also posted on LinkedIn for 20,028 contacts. The HSR YouTube channel hosts 30 videos and has had over 96,000 views, with 1.4K subscribers. Last year, the Hand Surgery Resource site had over 189,000 views, and the Hand Surgery Source app had over 146,000 events. The Hand Surgery Source app also provides QR codes with deep links and has an audio function that allows users to listen to its content.

The HSR is truly an extraordinary work! The IFSSH and the world's hand surgery community are indebted to Dr. Hurst for creating and disseminating this remarkable free educational resource. The IFSSH is honored to have been chosen by Dr. Hurst to house and nurture this very important educational resource.

Furthermore, the IFSSH is very grateful to Dr. Hurst for offering the HSR to the IFSSH at no cost. The HSR aligns perfectly with the core educational mission of the Federation.

I urge you to visit the HSR website at [www.handsurgeryresource.org](http://www.handsurgeryresource.org) or download the HSR app from the Apple App Store or Google Play Store, create an account (it is free), and begin exploring this amazing Hand Surgery Resource.

Best wishes,



**DANIEL J. NAGLE**  
President: IFSSH

# Message from the Secretary-General



Firstly, we are delighted to welcome the two newest members of the IFSSH - the Georgian Society for Surgery of the Hand and the Emirates Hand Surgery Society. These applications have just been formally approved by the IFSSH Executive Committee and IFSSH Delegates' Council when we met at the American Society for Surgery of the Hand congress in Toronto in October.

I am pleased to report on the continual progress being made by the IFSSH Officers, Members-at-Large, Delegates and Secretariat to improve the delivery of hand surgery around the world.

We have approved a plan to increase the revenue of IFSSH led by Drs Bain, Del Pinal and Clifton. We will be looking at improving and expanding the reach of our social media (@IFSSHHand) led by Jin Bo Tang, Aida Garcia and Belinda Smith.

We are honoured to announce that the Hand Surgery Resource ([www.handsurgeryresource.org](http://www.handsurgeryresource.org)), prepared and delivered over many years by the extraordinary efforts of Dr Larry Hurst, will be transferred to IFSSH with Dr Hurst still supporting this project.

As the IFSSH expands, we are grateful to the work of the Members-at-Large: Greg Bain (Asia-Pacific) Jorge Clifton Correa (North and Central America), Aida Garcia Gomez (South America), and Paco del Pinal and David Shewring (Europe and Africa). Please liaise with the Member-at-Large for your region with any news and enquiries - you can find out which region at [www.ifssh.info/regional\\_allocation.php](http://www.ifssh.info/regional_allocation.php).

One of the tasks of the IFSSH is to maintain and record our heritage. The history of each IFSSH member society is presented on the website ([www.ifssh.info/member\\_nation-histories.php](http://www.ifssh.info/member_nation-histories.php)) and these are published regularly in the Ezine. If your history needs to be submitted or updated then please discuss this with your national Delegate ([www.ifssh.info/member\\_nation.php](http://www.ifssh.info/member_nation.php)) who will present this to the relevant regional Member-at-Large.

## Committee for Educational Sponsorship

Dr Raja Sabapathy, Chair of the Committee for Educational Sponsorship (CES) reported to the 2023 IFSSH Delegates' Council at the October meeting in Toronto.

The CES continues to share funding across a number of worthy projects and events and widely around the world. Recently this has included assisting trainees and low-middle income registrants to attend the 2023 APFSSH Congress in Singapore. Similar sponsorship was also provided to the 2023 World Symposium on Congenital Malformations of the Hand and Upper Limb, held in Minneapolis. Also this year, financial assistance was provided to a WALANT program in Kenya that provided exposure and training to many African surgeons.

Reports of projects, from both the recipient programme group and sponsored individuals, are available on the IFSSH website: [www.ifssh.info/ifssh-sponsored-educational-projects.php](http://www.ifssh.info/ifssh-sponsored-educational-projects.php). These demonstrate the enthusiasm of the organisers, teachers and mentors,

and the gratitude of those learning. The commitment to education in hand surgery is acknowledged by the IFSSH and we thank all involved.

If your society has an upcoming project or event that could benefit from CES financial support, please review the guidelines and application requirements on the website: [www.ifssh.info/educational\\_sponsorship.php](http://www.ifssh.info/educational_sponsorship.php). Questions and submissions can be forwarded to the secretariat ([administration@ifssh.info](mailto:administration@ifssh.info)).

Prof Jin Bo Tang also addressed the IFSSH Delegates' Council, just days after returning from Poland where he had undertaken the IFSSH Harold Kleinert Visiting Professorship. The Polish Society successfully applied to the CES for this guest professorship in 2022. A full report of the professorship will be submitted by the Polish Society and Prof Tang and shared in an upcoming Ezine. If your society is interested in applying for an IFSSH Harold Kleinert Visiting Professor, please consider the program requirements: [www.ifssh.info/pdf/IFSSH\\_Harold\\_Kleinert\\_Visiting\\_Professor.pdf](http://www.ifssh.info/pdf/IFSSH_Harold_Kleinert_Visiting_Professor.pdf)

We look forward to receiving your applications.

## Future Meetings

We have two meetings to look forward to: The Inaugural IFSSH Course in Ecuador ([www.en.ecumano.org/](http://www.en.ecumano.org/)) will prove to be a wonderful event in an extraordinary city thanks to the dedication of Dr Fidel Cayon (IFSSH Delegate, ECUMANO) and Dr Gabriel Alegria (ECUMANO President). Registration is available right now at just \$350 for specialists and \$250 for Residents, Fellows and Therapists. Please book your place now!

The IFSSH Triennial Congress in Washington, D.C. will be held in March 2025 ([www.ifssh2025.org](http://www.ifssh2025.org)). This is evolving smoothly and will be a great credit to the organisers and an excellent resource for world hand surgery. There will be a call for abstracts soon....

A detailed list of national and regional hand surgery meetings is available on the IFSSH website.

As ever if you have any ideas please contact me in person +44 7887 651451 or [davidwarwick@handsurgery.co.uk](mailto: davidwarwick@handsurgery.co.uk), or contact your Delegate or Member-at-Large.

With warm regards,

David



**DAVID WARWICK**

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# André Chamay

## (1939)



André Chamay was born in 1939 in Geneva, Switzerland. After his medical education at the Faculty of Medicine, University of Geneva, he trained in orthopaedic surgery at the Department of Orthopaedics, Geneva University Hospital, as well as at the Hôpital Cochin in Paris, France, where he

developed his interest for hand surgery with Professor Raoul Tubiana. He then got his formal training in hand surgery at the Clinique de Longeraie, Lausanne, Switzerland with Professor Claude Verdan. To broaden his knowledge he visited various hand surgery centres in Great Britain (London, Edinburgh, Chessington and Glasgow) and in the USA (New York, Boston, San Francisco and Louisville). Chamay also spent several months at the Hansenien Hospital in Meched, Iran, on a humanitarian mission to operate on patients with leprosy.

In 1976 André Chamay was appointed head of the newly created Unit for Hand and Peripheral Nerve Surgery at the University Hospital in Geneva. He spent 4 years in this position building the unit which included a centre for replantation surgery.

He then started his private hand surgery practice in 1980 in Geneva, while keeping his position as consultant at the University Hospital and Associate Professor at the Faculty of Medicine of the University of Geneva from 1977 to 2002.

In 2002 he co-founded "CH8", the Centre for Hand Surgery and Therapy in Geneva entirely dedicated to the hand. He remained active as a consultant until his retirement from clinical medicine in 2016.

Chamay has published over 45 scientific articles and book chapters. His notable contribution to hand surgery are the radio-lunate fusion for the rheumatoid wrist, the chevron approach for PIP arthroplasty, the ulnar shift index that bears his name and the trapezio-metacarpal fusion for treatment of basal joint arthritis of the thumb.

From 1986 to 1988 he was President of the Swiss Society for Surgery of the Hand. He is honorary member of the Swiss Society for Surgery of the Hand and of the French Society for Surgery of the Hand, as well as senior member of the British Society for Surgery of the Hand. He was known for his enthusiasm of hand surgery and his surgical and straightforward communicative skills. His handling of patients showed his humanity in that he always saw the whole patient, and not merely the hand problem.

André enjoyed travelling, and especially sailing and skiing. He wrote two books, one on the human condition and its inequalities called "From Sapiens to Sapiens" (2019; in French) and a second on Buddhism and consciousness (in French; 2019).

He is married to Suzanne, and the couple have four daughters.

At the 11th International Congress of the IFSSH in Seoul, Korea in 2010, André Chamay was honoured as "Pioneer of Hand Surgery"

# John Robey Cobbett

## (1930-2016)



John Robey Cobbett was born on 5 May 1930 in Purley, London, England. He attended Charterhouse School in London, and then at Corpus Christi College in Cambridge gaining the qualifications of MRCS and LRCP in 1954, and MB BChir in 1956.

He continued his surgical studies at the London Hospital, before taking up a job as house surgeon at the Queen Victoria Hospital, East Grinstead, later as Senior Resident and in 1968 as Consultant Plastic Surgeon, having gained his FRCS in 1962. His mentors included Sir Archibald McIndoe and Sir Alan Parks. Hand Surgery became well-known under his leadership at East Grinstead and Lewisham Hospitals.

Cobbett's interest in micro-vascular repair of small vessels earned him a Moynihan Travelling Fellowship in 1966 to study the new field of micro-vascular surgery at various centres around the world. He is credited for pioneering elective microsurgical techniques in reconstructive surgery in the UK. In April 1968 he performed the first successful free great toe to hand transfer in a 30 year old woodworker in the UK.

John Cobbett was founding member of the British Society for Surgery of the Hand, served on the council and as Secretary of the British Association of Plastic Surgeons from 1975 to 1977. He was also President of the Plastic Surgery Section of the Royal Society of Medicine from 1975-76.

John married Pamela Irma Bower in 1952 and they had three children. After his retirement in 1995 he pursued his hobbies of boat building, carpentry and jewellery making. He died on 18 January 2016 at the age of 85.

At the 11th International Congress of the IFSSH in Seoul, Korea in 2010 John Robey Cobbett was honoured as 'Pioneer of Hand Surgery'.

# Member Society

## CHILEAN SOCIETY FOR SURGERY OF THE HAND AND MICROSURGERY

### Hand Surgery in Chile: A Brief History

The development of systematic hand surgery in Chile can be traced back to the early 1950s when the Chilean Orthopedic and Traumatology Society (SCHOT) established itself alongside the enactment of the Worker's Compensation Law and the creation of the Traumatologic Institute. At this time, notable pioneers in the field were Dr. Walterio Ihl and Dr. Victor Mouat, who played a significant role in advancing and disseminating knowledge and interest in hand surgery.

In the 1970s, the Hospital del Trabajador (Worker's Hospital) was established to provide specialized treatment for work-related injuries. Dr. Victor Mouat served as its first director, turning it into a leading institution for orthopedic surgery and attracting various orthopedic specialists in Chile. Under the guidance of Dr. Luis Rossel, the first Hand Surgery Team was formed. Similar institutions dedicated to the treatment of work-related injuries emerged in other parts of Chile. Notable hand surgeons such as Dr. Robinson Gonzales and Dr. Juan Carlso Uribe contributed to the development and enhancement of hand surgery in these institutions.

Many of these early hand surgery teams produced a new generation of hand surgeons who later spread their expertise to other hospitals throughout Chile. In the early 1990s, the South American Hand Surgery Federation played a vital role in fostering collaboration and knowledge exchange by organizing meetings where Chilean surgeons had the opportunity to connect with renowned hand surgeons from

South America and around the world. Visits from distinguished surgeons like Drs. Eduardo A. Zancolli, Arlindo Pardini, Eduardo R. Zancolli, Walter Manna Albertoni, Jose Maria Rotella, Rames Mattar, and Mario Rodriguez Sammartino, among others, prompted the formation of the Chilean Society for Surgery of the Hand. This Society became an active member of both the South American and International Federation of Societies for Surgery of the Hand.

In the early 2000s, under the leadership of Dr. Alberto Perez as the head of Hand Surgery at the Hospital del Trabajador, the exposure to international experts led young surgeons to pursue further training in microsurgery, arthroscopy, and other advanced techniques. Collaborations with renowned institutions worldwide, including those in Nancy, Paris, the Kleinert Institute, the Mass General, the Mayo Clinic, the HSS, Barcelona, Madrid, the EWAS, Sydney, and many others, significantly enhanced knowledge, interest, and participation in both local and international meetings.

Today, the Chilean Society for Surgery of the Hand and Microsurgery is a vibrant and growing society with over 300 members actively participating in monthly meetings and annual congresses. The Society has hosted the South American Federation Congress in 2001 and 2015, under the leadership of two esteemed hand surgeons, Dr. Alberto Perez and Dr. Jorge Vergara.

Our Society is a proud and active member of Federacion Latinoamericana de Cirugia de la Mano since its beginnings and the IFSSH since 2012.

The Chilean Society for Surgery of the Hand and Microsurgery

Email: [socimanochile@gmail.com](mailto:socimanochile@gmail.com)



This picture was taken during de IFSSH congress in Buenos Aires.



Chilean delegation during the IFSSH Congress in London



Chilean delegation during the IFSSH Congress in Berlin



Chilean Society Logo

Sebastian von Unger, IFSSH Delegate

## FINNISH SOCIETY FOR THE SURGERY OF THE HAND

The Finnish Society for Surgery of the Hand (FSSH) had an active fall season hosting a number of national meetings.

In August we held the now traditional "Wrist Master" Conference which focused on traumatic conditions of the forearm, carpal instability patterns and proximal nerve conditions affecting hand and wrist function. A separate evening symposium on 3-D-planned solutions for individual patients with bony forearm reconstruction was held.

The Wrist Master Conference has been an essential meeting of Finnish hand surgeons and therapists since 2009. Approximately 60 surgeons and therapists attended this time to improve their know-how from the fruitful lectures and discussions which was held in Helsinki from 31.08.-.01.09.2023.

In September we were happy to host visiting lecturer Dr. P C Ho from Hong Kong who shared his knowledge of scapho-lunate injuries. The scapho-lunate injury -webinar was a part of our national webinar series which focused on wrist conditions such as DRUJ arthroses, scaphoid fractures and Kienböck's disease.

In October the Finnish Society was invited to the 63rd annual congress of the German Society for Surgery of the Hand which was held in lovely Leipzig. This added an "international dimension" to our fall calendar!

The FSSH annual national conference, which will be held with other surgical specialties, will wrap up our fall meeting calendar in November. The upper extremity session will focus this time on elbow conditions, surgical management of nerve conditions and thoracic outlet syndrome.

Apart from our national meetings, we are pleased to announce that the arrangements for FESSH 2025

in June are well on schedule. An exciting scientific program and unique social events are planned! We warmly welcome everyone to attend this meeting in summery Helsinki!



## THE FOLLOWING

# Reprinted Newsletter

**IS FROM THE ASIAN-PACIFIC FEDERATION. IT CONTAINS MANY INTERESTING REPORTS INCLUDING REPORTS FROM MEMBER SOCIETIES , IE. MALAYSIA, PHILIPPINE, AUSTRALIA, BANGLADESH, INDIA, JAPAN, KOREA, NEW ZEALAND AND SINGAPORE.**



VOLUME 3, ISSUE 1, NO. 5



JULY 1, 2023

# HANDS-ON

Biannual Newsletter  
Asian-Pacific Federation of Societies for Surgery of the Hand



"The greatness of our lives is not what we leave behind, but what we send forward."

- Ray Noah

This fifth number of 'Hands-On' will be my last issue as editor. I am immensely thankful to my editorial team for their support, without whom this journey would not have been possible. Michael Boland from New Zealand will be taking over as the new editor of the newsletter and his team will have a mixture of some old and new faces. I wish him and the new editorial team the very best.

In addition to our regular content, this issue has updates on the fellowships offered by APFSSH, a report on the recently concluded APFSSH meeting at Singapore and an 'In-Memoriam' article on Sajedur Reza Faruquee. This heartfelt article by Dr Sabapathy is a must read for all young hand surgeons. Please continue to support Michael and his team with articles and pictures. We cannot do this without your help.

Happy Reading.

Editorial Team @ Hands-On

Jennifer, Norimasa, Pankaj, Raymar & Sandeep

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## Message from Our President Anthony Berger



### Looking Back, Moving Forward

It is a great honor and privilege to be appointed President of the APFSSH. This is a wonderful organization dedicated to furthering education and training in hand surgery in our region. I feel very humbled to follow in the footsteps of our previous Presidents and I hope that, with the help of our very talented executive, to further the aims of our founding forefathers.

Those of you who were in Singapore with me will have, I am sure, enjoyed and benefited greatly from our first face to face conference since the outbreak of COVID. How much more enjoyable, beneficial and efficient it is to meet, learn and discuss in person and to renew and make new friends. I would like to thank Mark Puhaindran and Jacquelin Tan and their organizing committees for creating such a wonderful and comprehensive program. I would also like to thank the conference organizers for the seamless integration of all the facets of this congress and the enormous support from the trade. Without them we would not be able to run such events. I certainly know from experience how difficult these conferences are to organize and how valuable early preparation can be in ensuring a smooth event.



I would also like to congratulate the Conference organizers for adopting the theme of Diverse and Inclusive for this conference. Looking around the conference halls I think I can safely say that the APFSSH is one of the most diverse and inclusive organizations in the world. Diverse not only in gender but in religion, culture, language and

"....APFSSH is one of the most diverse and inclusive organizations in the world."

Anthony Berger  
PRESIDENT APFSSH



HANDS-ON | PAGE 2



APFSSH Newsletter



## Message from Our President Anthony Berger



economies and yet all working together for a common goal in treating our patients with respect. Jennifer Green in the session entitled Women in Orthopaedics talked about her journey with diversity and rightly stated that Diversity is Strength and a more diverse organization is more effective in achieving its goals. I am hopeful that our executive and I can encourage other Hand Surgery Societies in our region to join the APFSSH, further strengthening our organization and hopefully helping more patients

Many great things have been achieved by the APFSSH executive under the leadership of Goo Hyun Baek and Raja Sabapathy. Just prior to the pandemic we opened a bank account in Singapore in January 2020. This account received money from member society subscriptions, profits from prior APFSSH conferences and contributions from our Journal. We recently received a very generous donation from Raja Sabapathy to kick-start our Fellowship Programs for which we are extremely grateful. Our Education Committee has now been formalized and we are advertising the APFSSH Travelling Fellowship and the APFSSH Visiting Professorship programs in this newsletter. We hope to develop further educational programs in the near future so I would encourage all of you to keep in contact with what is happening through the Newsletter and our website. I would again like to acknowledge the great work of Sandeep Sebastin in editing our newsletter. This is a great way we can all keep in touch and learn of the many activities in our region.



**35 years of friendship and fellowship (1988-2023)**

(L-R): Fuminori Kanaya (Secretary General), Raja Sabapathy (President) and Anthony Berger (President-Elect) at the 13th APFSSH Congress at Singapore, 31 May-3 June, 2023

We are now expanding the size of our executive to include Members at Large.



## Message from Our President Anthony Berger



These surgeons will assist in the growing activities of our executive and to bring in a more diverse input into our organization so we can more appropriately reflect the needs and ambitions of our member societies. I am hopeful we are heading in the right direction and that we will be able to grow. I would encourage any member of an APFSSH society to contact me or the Executive with ideas to help with our growth.



In closing I would like to say how wonderful it was to meet face to face again in Singapore. Many people I met again have been friends for decades and I think this is one of the great strengths of the APFSSH. I wrote last year on the value of Fellowship in our Federation and how important it is to make new friends and renew old friendships. It is an interesting coincidence that Raja Sabapathy, Past President, myself as current President and Fuminori Kanaya, President Elect were all Fellows with Harold Kleinert in the same year, 1988. After 35 years of friendship we are still working together.

Enjoy our Federation, engage in its activities and in your society events, travel and meet new people.

Hope to see you all in India in 2025, if not before.

**Anthony Berger, President, APFSSH**  
tony.berger@vhsa.com.au



# Secretary General's Report Alphonsus Chong



## Exciting Times

It is my pleasure to write this message as the incoming Secretary-General. We just had a very successful 13th APFSSH scientific meeting in Singapore, held in conjunction with APFSHT and APWA meetings. The conference was a scientific and social buffet, well represented geographically from our region and beyond. It was a pleasure

meeting in person many old friends and colleagues from the region, and making new ones. Kudos to the co-chairs Drs Mark Puhaindran and Jacqueline Tan for delivering such a wonderful meeting, much of it organized whilst we were deep in the Covid-19 pandemic with all its restrictions and uncertainties.

**"Biennial meetings and a 2-year executive term will make APFSSH more dynamic and effective"**

Alphonsus Chong  
SECRETARY GENERAL,  
APFSSH



The Singapore meeting also saw Drs Dawn Chia, Sandeep J Sebastin (Deputy Editor of JHSAP) and S Raja Sabapathy (our immediate past President) launching their book "Crafting a Legacy: The incredible lives of Asian-Pacific Hand Surgery Pioneers" published by World Scientific Publishing Company, which also publishes our journal. This compilation of the lives of 48 of our pioneers provides a close up and behind the scenes look at hand surgeons who have contributed to their nation, the region and beyond. Each congress



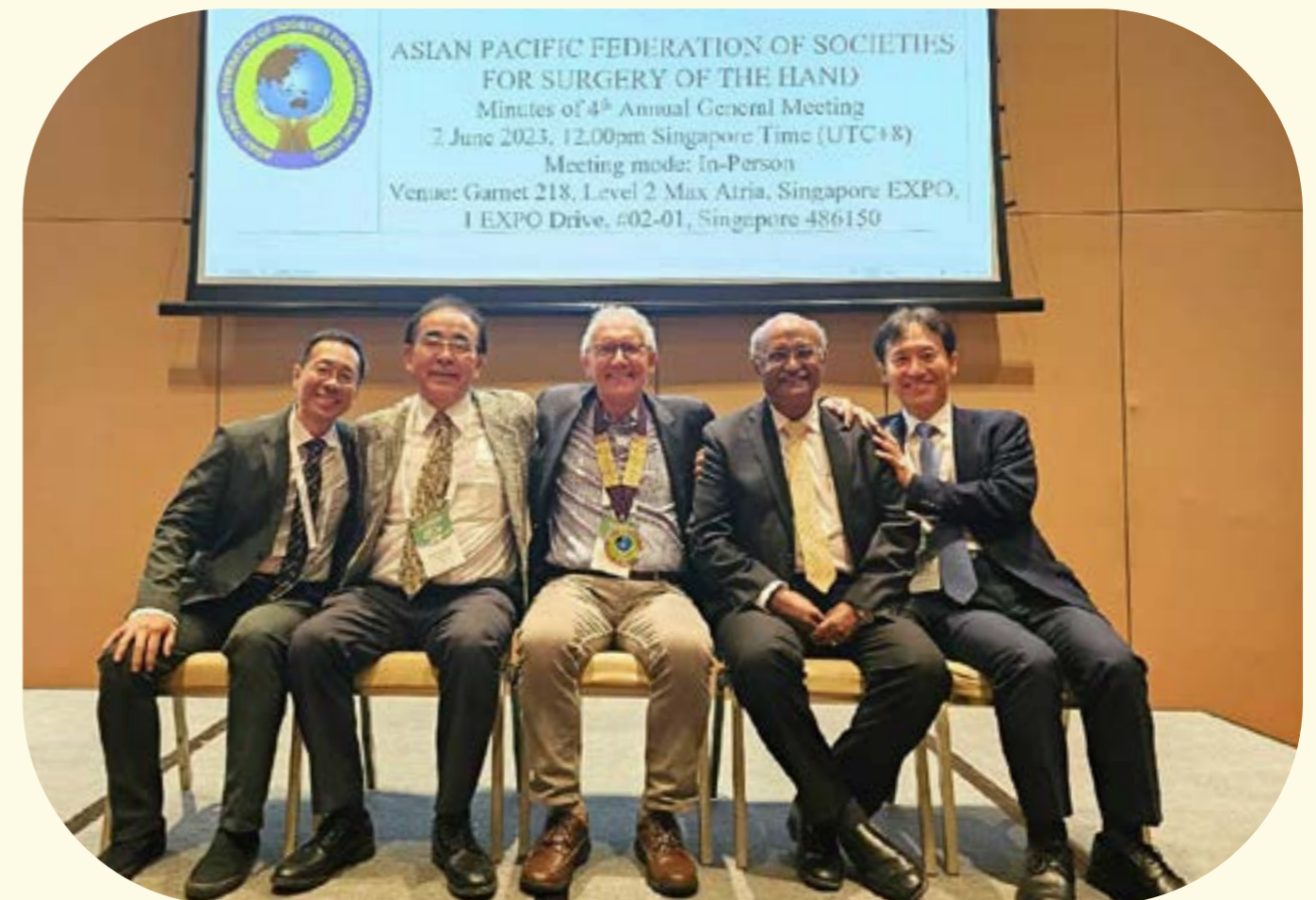
# Secretary General's Report Alphonsus Chong



participant received a copy of the book. The authors have generously donated future royalties to the APFSSH. We still have books available for sale, so please reach out if you wish to get a copy.

The 2023 congress marks a transition in the frequency of our scientific meetings from 3 yearly to 2 yearly. Since our inaugural meeting in Perth, Australia 1997, we have had regular biennial meetings. This changed after 2014 when the meetings became triennial events. In 2020, our society decided to return to biennial meetings after 2023. In tandem with the biennial meetings, the executive committee terms will also shorten from 3 to 2 years. We believe these changes will help make the APFSSH more dynamic and effective.

We have a new executive committee (exco). The Annual General Meeting in Singapore



2023-2025 APFSSH EXCO

(L-R): Alphonsus Chong (Secretary General), Fuminori Kanaya (President-Elect), Anthony Berger (President), S Raja Sabapathy (Immediate Past President), and Hyun Sik Gong (Treasurer)



## Secretary General's Report

### Alphonsus Chong



was completely represented by all the member nations, with some countries sending additional representatives to observe the proceedings. I am both gratified and humbled by this overwhelming support for our society, and the new exco will do our best to serve the APFSSH. This exco represents both continuity and renewal. Dr Anthony Berger is our new President, with Dr S Raja Sabapathy stepping into the role of Immediate Past President. I have worked with Tony since 2017, first, to formalize the constitution we now use, and since then on multiple other initiatives for APFSSH. He is a pleasure to work for and be with, and I look forward to his leadership in this term. We welcome Dr Gong Hyun Sik from South Korea as our new Treasurer. Hyun Sik is new to the exco, but not new to our society, having been a member of the editorial board of the JHSAP over the last term. I would also like to thank Dr Goo-Hyun Baek, who has stepped down as Immediate Past President. Goo-Hyun has made immense contributions to our society and journal, and it is also on his shoulders that we stand on today as a society.

Our new executive committee has started work to forward the mission of APFSSH. In this issue of the newsletter is the announcement for the travelling fellowship and professorship. These are initiatives that we are happy to see come to fruition. In particular, the travelling fellowship has been greatly helped by a personal donation of SGD 50,000 by our Immediate Past President Dr S Raja Sabapathy. We are confident these educational programs will be an important part in advancing Hand Surgery in the Asian-Pacific region.

Looking forward, I see exciting times ahead for our society. On behalf of the APFSSH Executive Committee and 2025 Meeting Organizing Committee, we welcome you to our next Scientific Congress from 10-13 October 2025 in Mahabalipuram, India. Looking very much to meeting many of you in person there!

**Alphonsus Chong, Secretary General, APFSSH**  
alfchong@gmail.com



## APFSSH EDUCATION - TRAVELLING FELLOWSHIP

### Dr Clara Wong



### APFSSH TRAVELLING FELLOWSHIP

**Name:** This Fellowship will be known as the APFSSH Travelling Fellowship.

**Aims:** The aim of this travelling fellowship is to provide limited financial support to a young surgeon from an APFSSH member society to travel to an international hand surgery conference and then travel to at least one further hand surgery centre in that city or country to learn and gain further experience and to make new contacts.

One Fellowship will be offered each year.

**Application:** Applications will be accepted by the APFSSH Education Committee from hand surgeons no later than 1st December in the year prior to their proposed Fellowship.

**Pre-requisites:**

1. Applicants must be under the age of 45 at the time of application
2. Applicant must be a full member of their countries Hand Surgery Association / Society.
3. Applicant should outline the desired outcome of their Fellowship and what they hope to achieve
4. Applicants must outline their travel plans in detail including the Congress they are to attend and what other centres they intend to visit. This should be accompanied by a letter from the host society confirming the program.
5. Application must include a current CV.

**Selection Criteria:** The APFSSH Travelling Fellowship will be reviewed by the members of the APFSSH Education Committee and awarded based on the quality of the proposed educational activity, the detail of the application process and the perceived value of the Fellowship for the travelling fellow and their parent Society. Preference will be given to conferences in the Asian-Pacific region.

The successful candidate will be notified of the decision of the Education Committee within 4 weeks of closing date. The Fellowship must be concluded within the year following acceptance of the Fellowship.



## APFSSH EDUCATION - TRAVELLING FELLOWSHIP

Dr Clara Wong



**Support:** The APFSSH will be offering one Travelling Fellowship each year with financial support of \$5000SGD for each candidate. The successful candidate will arrange for any extra expenses themselves. The candidate may seek further support from their parent Society and the guest society. The APFSSH Executive will assist with introductions and contact details.

It is expected that the fellow will acknowledge the support of the APFSSH in any presentation and publication arising out of the Travelling Fellowship.

**Post Fellowship obligations:** Following the Fellowship it is a requirement that the fellow provide to the Education Committee a reconciliation of how the grant was used. It is also expected that the Fellow will provide a written report to the Education Committee on their experience and to present their experience to the next APFSSH Biennial Congress.

**Liability:** The successful candidate will indemnify the APFSSH and the Executive for any adverse events that may occur during the course of the fellowship.

**Clara Wong, Member, Education Sub-committee, APFSSH**  
 clara.wongclara@gmail.com



## APFSSH EDUCATION - VISITING PROFESSOR

Dr Clara Wong



### APFSSH VISITING PROFESSOR

**Name:** APFSSH VISITING PROFESSOR

**Aims:** The aim of this Visiting Professor is to assist with the funding for a member society to attract a senior surgeon to attend their scientific meeting and to visit and teach in 1-2 other institutions before or after the conference. Ideally the Visiting Professor will be a keynote speaker for the conference and would be expected to make a significant contribution to the host meeting but does not have to have the title of Professor.

**Application:** The conference organizing committee of member society will send requests to the APFSSH Education Committee outlining the name of the surgeon for whom they are applying, what is to be expected from the Visiting Professor and a program for the pre- or post-conference visits by the Visiting Professor.

The organizing committee of the member society conference will have already invited the speaker and established a program for them. Once the speaker has accepted the invitation then the organizing committee will apply to the APFSSH educational committee outlining their program and seek funding.

It is expected that the organizing committee will provide free registration for the Visiting Professor and assist where possible with travel and accommodation costs as well as assisting them in organising the additional education program.

The APFSSH Visiting Professor should be recognized as an expert in their field and be a published author. It is preferable that the Visiting Professor is from an APFSSH member nation.

The application should be received by the APFSSH Education Committee via the Secretariat before 1st December of the year prior the member society conference. Each member society may apply for only one Visiting Professor for the year.

**Selection Criteria:** The decision of the Education committee will be based on the perceived value of the education program for the Visiting Professor and their planned contributions to the conference and the institutions that they visit.



## APFSSH EDUCATION - VISITING PROFESSOR

Dr Clara Wong



**Support:** The APFSSH will support one Visiting Professor to the value of \$5000SGD each year paid to the organizing committee. The successful surgeon will be acknowledged in all advertising as the APFSSH Visiting Professor. Whilst additional funding for this Visiting Professor may be sought from trade partners etc. this will not impact the naming rights for this position.

**Reporting:** It is a requirement of the Visiting Professor that after the conclusion of the Visit that the organizing committee provides a report to the APFSSH Education Committee on how the funding was used and what the Visiting Professor achieved.

it is also expected that either the Visiting Professor or a member of the host organizing committee will present their experience of the Visiting Professor at the following APFSSH congress or in the APFSSH Newsletter.

**Liability:** The successful organizing committee and member society will indemnify the APFSSH and the Executive for any adverse events that may occur during the course of the Visiting Professor's travels.

**Clara Wong, Member, Education Sub-committee, APFSSH**  
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## Update on Our Journal

S Raja Sabapathy



### Stay Informed About the Progress of Your Journal

This is the second year of the new editorial team and we are working hard to reach the goals that we had set when we took over. It will be good to pass on to you relevant information on the progress.

We maintain 6 issues per year starting with February 2022. Still, institutional subscriptions in the form of hand societies ordering bulk subscriptions to their members remain the main source of sale of the journal with Japanese society being the single largest subscriber with 1058 members in 2022. One notable change we have seen over the year was that most societies shifted to e-subscriptions. Many surgeons have personally conveyed to me that the print issue of JHS-AP is one of their popular journals to read, with pleasing format and font styles. But the journal with 180 to 200 pages per issue is heavy and the rising air cargo rates have made it uneconomical to offer the print subscriptions to members. Japan, Australia, South Korea, India and Singapore are some of the member nation societies that subscribe to the journal in bulk. As Editor in Chief, I request all the member nations to take advantage of the attractive e-subscription rates. It is our journal and there is strength in numbers.

In the year 2022, we had published 162 articles averaging about 17 articles per issue. They comprise a mixture of original articles, invited articles, case reports, and technical notes with at least 10 original articles per issue. We introduced the system of free downloads of case reports, technical notes and editorials. It is encouraging to note that the download rate of articles from the journal increased 20 times over the year 2022 and our journal articles are becoming popular. We

**"The download rate of articles from the journal increased 20 times over the year 2022."**

**S Raja Sabapathy**  
EDITOR-IN-CHIEF, JHS-AP



## Update on Our Journal

### S Raja Sabapathy



request you all to make JHS (AP) your journal of choice to send in your best work for publication.

The speed of review process and publication remains a work in progress. The number of days from submission to the first decision on an average is 41 and we feel that it is long. While efforts are made to reduce this lag, once again we invite all who could provide quality and timely reviews to join our reviewer panel. The submission base remains wide with Japan, India, United States, Australia and United Kingdom being the countries providing maximum submissions. All these metrics point to a future robust growth of the journal. The journal will also get a new Editor-in-Chief from the coming year. Sandeep Sebastin who is at present one of the 5 editors will take over as the Editor-in-Chief from 2024. I think it will herald one more positive steps of growth of the journal. Sandeep being one of the most active editors, I am sure the transition will be very smooth. It has been a fabulous 2 years working with a great team, committed to work and quality and who could put in what is needed no matter how demanding it is.



#### Crafting a Legacy

Dawn Chia, Sandeep Sebastin & S Raja Sabapathy

As editors we also made a significant contribution in recording the life journey of 48 great hand surgeons of the Asian-Pacific region who have been recognized by the IFSSH. The book titled 'Crafting the Legacy', as the name suggests, immortalises the work and memories of these great individuals. What began with a question of what to do for the 25 years of the JHS-AP, ended up with this book which was released by Prof. Fu Chan Wei on the first day of the APFSSH congress in

Singapore early this year. Those interested to obtain a personal copy can get at a concessional cost till stocks last by e-mailing [admin@apfssh.net](mailto:admin@apfssh.net) or ordering directly from the [APFSSH website](http://APFSSH_website). The editors are really proud of this contribution. As our journal marches ahead, please support us by sending in your best academic work for publication and participate in all ways possible to make it the preferred journal of Hand surgery.

**Dr S Raja Sabapathy, Editor-in-Chief, JHS-AP**  
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## JHS-AP Article In-Focus

### Praveen Bhardwaj

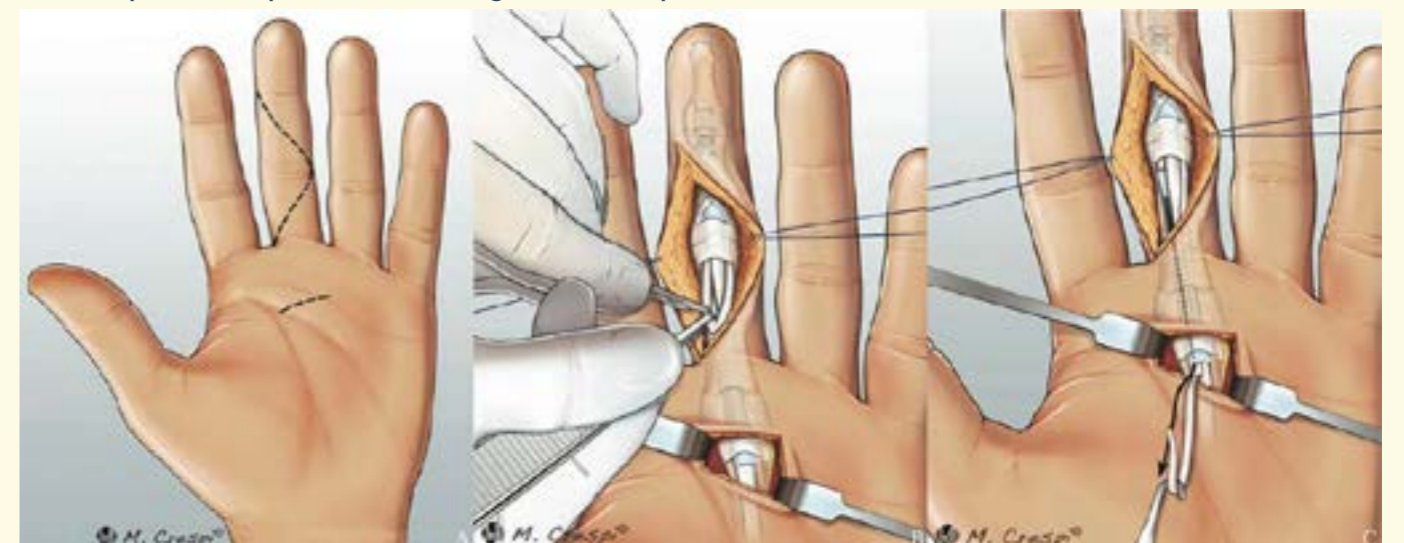


#### Flexor Digitorum Superficialis Excision for Trigger Finger - A Systematic Literature Review.

Crouch G, Xu J, Graham DJ, Sivakumar BS. J Hand Surg Asian Pac Vol. 2023 Jun;28(3):388-397.

'Complimentary access to full text of this article has been provided by the World Scientific Publishing Co. (Singapore) and requires registration at the journal website. Registration is free.'

Trigger finger (TF) release is considered as one of the 'simple' operations in hand surgery. However, in some cohorts a simple release may be associated with persistent symptoms or recurrence in as high as 23% of patients. The authors of this article have done a systematic review to provide us clear indications to perform the excision of one slip or complete flexor digitorum superficialis (FDS) for the treatment of TF.



The authors' preferred technique for FDS slip excision showing A. preferred incisions; B. Division of an FDS slip at its insertion on the middle phalanx; and C. Proximal retrieval of the cut FDS slip, followed by A1 pulley and FDS tendon excision through the proximal wound.

Any of the two slips can be removed, however, in cases of rheumatoid arthritis the ulnar slip excision has been often suggested to prevent the ulnar drift of the fingers seen in these patients. Interestingly, if needed, the whole FDS excision is also considered to be safe. The authors provide a clear guideline, that primary excision of FDS should be considered if the A1 pulley release does not relieve the triggering completely during the surgery; and can be considered in patients at high risk of disease recurrence (those with insulin dependent diabetes or rheumatoid arthritis) or with preoperative fixed flexion deformity of the proximal interphalangeal joint. FDS release is effective at decreasing the fixed flexion deformity and results in lower recurrence rates among these high risk cohorts.

**Praveen Bhardwaj, Editor, JHS-AP**  
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## JHS-AP Article In-Focus

Praveen Bhardwaj



### Does the Functional Status of the Upper Limb Influence Limb Length Discrepancy in a Child with Birth Brachial Plexus Palsy?

Bhardwaj P, Malokar D, Sankaran A, Varadharajan V, Venkatramani H, Sabapathy SR. J Hand Surg Asian Pac Vol. 2023 Feb;28(1):5-12.

'Complimentary access to full text of this article has been provided by the World Scientific Publishing Co. (Singapore) and requires registration at the journal website. Registration is free.'

There are many issues in birth brachial plexus palsy (BBPP) which are often discussed in the literature but still remain controversial. However, some common issues, like limb length discrepancy (LLD) are not much discussed. Nonetheless, LLD is a common concern among the parents and they often ask the treating surgeon if that can be prevented. A common instruction is to encourage the child to use the hand more and it is thought to prevent limb shortening. However, there is no literature evidence for

this assumption. Authors of this article have prospectively measured limb length in consecutive 100 children with BBPP to assess the LLD and have correlated it with the functional status of the upper limb. Authors observed that LLD was seen in almost all the children with BBPP. The functional status of the upper limb was found to be significantly

associated with LLS. Even in the children with comparable extent of plexus involvement, those with better functional scores had significantly lesser LLD. Thus, the papers provides an evidence to the common assumption that increasing the use of the affected hand would reduce the LLD. However, it was particularly noted that the children who 'independently' use their involved upper limb are the ones who would have the least LLD. This information could be very useful for parental education and planning rehabilitation for the children with BBPP.



Limb length discrepancy noted in children with birth brachial plexus palsy.

Praveen Bhardwaj, Editor, JHS-AP  
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## Report on 13<sup>th</sup> APFSSH, 9<sup>th</sup> APFSHT, & 8<sup>th</sup> APWA Congress

Mark Puhaindran



The 13th APFSSH Congress was held in conjunction with the 9th APFSHT and 8th APWA meetings between 31 May to 3 June 2023 at the Singapore Expo, Singapore. This was the first APFSSH Congress since the onset of the Covid pandemic, which also caused national lockdowns that led to the abrupt conclusion of the 12th APFSSH Congress in Melbourne, Australia in 2020. We faced numerous challenges preparing for this meeting due to the uncertainties as to whether Covid restrictions would be lifted, with some participating members still unable to travel at the time of the congress due to national travel restrictions that were still in place. Despite this, we were fortunate that we were still able to proceed with this meeting in the planned physical format.



APFSSH Executive Committee along with SSHTS Organising Committee



### Report on 13<sup>th</sup> APFSSH, 9<sup>th</sup> APFSHT, & 8<sup>th</sup> APWA Congress Mark Puhaindran



The theme for the meeting was “Diverse and Inclusive”, which was evident throughout from the opening ceremony and performance, and reflects the character of the host country, Singapore. A total of 840 participants attended the conference, representing 33 countries, with 378 abstracts presented, and 171 speakers.



Dance Performance at the Inaugural Ceremony



### Report on 13<sup>th</sup> APFSSH, 9<sup>th</sup> APFSHT, & 8<sup>th</sup> APWA Congress Mark Puhaindran



Prof RWH Pho delivering the Tajima Oration

The Pioneer Lecture was delivered by Professor Fu Chan Wei, while Professor Robert Pho delivered the Tajima Lecture. Professor Tunku Sara gave the Presidential Lecture. In addition to these plenary lectures, the Scientific Programme was well received, with the Meet the Masters and Morning Rounds Sessions fully subscribed. There were also sessions on “Women in Orthopaedics”, “Harnessing the Power of Social Media in Hand Surgery”, and discussions on “What is Happening in My Part of the World”

For the first time, a Nurses Symposium was held as part of this Congress.



Prof FC Wei delivering the Pioneer Lecture



Prof Tunku Sara Ahmad felicitated after the Presidential Lecture  
(L-R): Raja Sabapathy, Jacqueline Tan, Tunku Sara Ahmad, and Anthony Berger





### Report on 13<sup>th</sup> APFSSH, 9<sup>th</sup> APFSHT, & 8<sup>th</sup> APWA Congress Mark Puhaindran



The Congress Dinner was held in the beautiful setting of the Flower Dome in Gardens by the Bay. The musical performances literally got the participants on their feet, making it a night to remember.



### Report on 13<sup>th</sup> APFSSH, 9<sup>th</sup> APFSHT, & 8<sup>th</sup> APWA Congress Mark Puhaindran



**Organising Committee**

(L-R): Dawn Chia, Robert Yap, Soumen Das De, Mark Puhaindran, Jacqueline Tan, and Andrew Chin

The pictures from the meeting are available [here](#). We owe a deep debt of gratitude to many who helped to contribute to the success of this meeting - all the participants, the APFSSH and IFSSH Executive Committees, our sponsors, the Event Organiser, ICS (International Conference Services), and our Organising Committee. We look forward to next APFSSH Congress in Chennai, India in 2025, as well as to hosting the IFSSH Congress in Singapore in 2028.

**Mark Puhaindran, Co-Chair, APFSSH Congress-2023, Singapore**

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## Associate Professor Sajedur Reza Faruquee (1968-2023)

S Raja Sabapathy



### THE POWER OF ONE

*A Farewell to Faruquee*

#### 'THE BEST FROM BANGLADESH'

**March 2006:** I had been to Bangladesh as a guest lecturer for the annual meeting of the Bangladesh orthopaedic society. After the meeting, I visited the wards with Prof Kairy and realised that there was a great need for microsurgery and trauma reconstructive surgery in Bangladesh. I offered a fellowship for a surgeon from Bangladesh at Ganga hospital with a modest stipend and wanted good candidates. I always found it difficult to identify an ideal candidate from a developing country based on the CV. I requested Prof Kairy and Prof Kalam both of whom I held in high regard, to choose the best candidate. They in-turn probed me for selection criteria, and I asked them to choose the best youngster that had a good attitude to work and who would do good on returning to Bangladesh. The first person they selected was Faruquee.

#### 'PASSIONATE BANGLADESHI'

**July 2006:** Faruquee arrived at Ganga, settled fast and I started learning some lessons. We had a patient from Pakistan and as I was going to see him, I called Faruquee to come help with Urdu language. Then he told, 'Sir, I also don't know the language. In Bangladesh we speak Bengali and went on to explain their freedom movement which led to the birth of Bangladesh, the language issue and how the liberation day of Bangladesh is celebrated around the world as the Mother Tongue Day.' On one of my visits back to Bangladesh, he accompanied me to all the memorials and museums and passionately explained their freedom struggle.

#### 'SCOLD ME BUT PLEASE DON'T SCOLD MY COUNTRY'

**August 2006:** The defining moment in our relationship came within a month of his arrival. He

**'Sir, I thank you for scolding me. But please don't scold my country. It is my mistake, and I do not want to bring any disrepute for my country'**

Sajedur Reza Faruquee  
August 2006, Ganga Hospital



## Associate Professor Sajedur Reza Faruquee (1968-2023)

S Raja Sabapathy



had committed an error in patient care. I was very upset and reprimanded him strongly. In one of the sentences, I told him that 'countries like yours don't grow because educated people like you are not responsible'. He took the scolding calmly, appeared to be moved and went away. Then he met me in the evening when I was alone, apologised for the mistake and then said, 'Sir, I thank you for scolding me and appreciate you for correcting me. But please don't scold my country. It is my mistake, and I do not want to bring any disrepute for my country'. I was moved. I got up and held his hand and said, 'Faruquee, I am proud of you. The greatest quality anyone can have is to have true patriotism to one's country. Rarely we have people who are truly proud of their country, and I am so proud to have you'. I don't know if this event was a God's design, but from that moment, our relationship was on a different level. I respected him. That was the last time ever I had raised my voice with him.



Seated (L-R): Prof Kalam, Dr Sabapathy and Prof Kairy  
Dr Faruquee standing in the middle- March 2006

#### 'SIR, ARE YOU PROUD OF ME?'

**August 2007:** When he was with us, he could be trusted. That is the highest word I could use for a trainee. He always did what the unit needed and not what he just liked to do or was comfortable with. He had a good relationship with everyone in the unit. I am sure the trainees at that time would vouch for that. There were lighter moments too. I always remember the sight of him with his huge frame as a pillion rider with the frail Anuradha, our trainee riding the two-wheeler. So many memories. Nurses loved him. When he left as he shook hands and I said, 'Faruquee, make your country proud of you' He replied, 'Yes Sir, also I want to make you proud of me'. From then on, every time we met, he would narrate all that has happened since our last meeting and the final words when we departed would be - 'Sir, are you proud of me?'

#### 'ALWAYS MAKING IT HAPPEN'

**November 2007:** After going back, Faruquee on behalf of the local organisations, organized a CME and invited me. I noticed that there were very few passengers checking in for the Dhaka flight from Kolkata, but did not realise that something was amiss. There was an impending cyclone warning that I had completely missed. There were heavy rains when we arrived in Dhaka, and I reached the hotel safe and slept through the night. Bangladesh experienced one of their worst cyclones that night.



## Associate Professor Sajedur Reza Faruquee (1968-2023)

S Raja Sabapathy



When I woke up early the next day morning and came to the hotel foyer, I saw Faruquee sleeping on a sofa. I went up to him and asked him why he was there. He said 'Sir, the whole night there was terrific cyclone and so many trees were uprooted, and all roads are blocked. I couldn't commute by car and did not want to be late to meet you in the morning. So, I walked and slept on the sofa'. That was Faruquee, always making it happen. The CME was supposed to be in the hospital. I was the only speaker and scheduled to give 12 talks. However, there was no power supply in the entire hospital, and I wondered what we would do without the power to run the projector. Faruquee said, 'Never mind, Sir. We will go. All will come. I have made arrangements. You just talk'. I was surprised to see about 75 surgeons. We just talked and discussed for 4 hours non-stop. By then they made arrangements in another hospital that had power supply. We moved over and then Faruquee said, 'Sir, now you can give all the 12 talks that you were supposed to give'. I will never forget how he went about making things happen that day.

### 'TAKING BANGLADESH TO THE WORLD'

**June 2008:** Faruquee was keen that Bangladesh should also be on the world stage and every time he met me used to ask me what he should do. It was so lovely to talk to him. You just have to tell him, and it would be done. First, he helped organize the Bangladesh Society for Surgery of the Hand on a sound footing. The best progress Bangladesh



Faruquee making things happen at NITOR. Nov. 2007

made was the quick entry into the IFSSH. From the word 'go' when the process was started it was smooth. I wondered if they could muster the annual membership fees. He and his young friends would say that it would be done. And they did it! India was one of the sponsors of their application and when they joined IFSSH, they almost paid as much as what India was paying. Having been part of the IFSSH leadership I will say that the entry of Bangladesh was one of the smoothest and quickest and they were the 50th member nation of IFSSH. I am sure it is the collective action of all but even when a team does it, some have to be at the front. Faruquee was one of them. He was so proud when it happened. At the 2010 Seoul IFSSH, the book on the history of the member nations was published he was proud that the flag of Bangladesh was there.

### 'BECOMING A HAND SURGERY SUPER-POWER'

**May 2022:** Faruquee used to ask me to give a pathway to progress - not just for him



## Associate Professor Sajedur Reza Faruquee (1968-2023)

S Raja Sabapathy



but for Bangladesh Hand Surgery. One of the things I had told him was to institute orations in the Hand Society in the names of the people who were the pioneers of Hand Surgery in Bangladesh. His respect for Prof Kairy and Prof Kalam was something to be believed. One day I got a message that the Bangladesh Society for Surgery of the Hand had created the Prof Kairy oration and that I must come to deliver the first oration. It was an invitation that I could not refuse. I agreed and was smiling to myself, proud of the trajectory they were taking. Faruquee gave a wonderful introduction on the organization of the oration and it was very touching. I wish they recorded that speech. Respect for teachers could not have been better expressed. During a conversation as to what could be the topic of the oration, Faruquee told me 'Sir, please guide us as to how to make our work and BDSSH great'. So, when I jokingly suggested the topic as, 'Roadmap for becoming a Hand Surgery Super-Power', Faruquee said 'Sir please keep that itself. One day with God's Grace we will become a super-power'. In the talk the first requirement to become a super-power I listed was that leaders must have patriotism and pride in the institution they work. To explain the point, I put the picture of Faruquee and quoted the incident when Faruquee told me 'Sir, please scold me but don't scold my country'. That night Faruquee was not present at dinner. The next morning, I found him and enquired about his absence. He said that he had a call for a replant, and he travelled back to hospital (about 30 km from venue), finished the replant, and came back. He showed the photographs of the case and said, 'Sir, I know this will make you proud of me than me being at dinner'. I was indeed proud of him.

The night before we left, they offered an honorarium for the oration. When I refused to have it, Faruquee said, 'Sir if you refuse, we can't do anything. But don't make me sad. I am just following what you asked me to do'. When I asked him what is that I said, he recollected the conversation I had forgotten. He said 'Sir one day when I was with you at Ganga, you told me, that instituting orations in the Hand Society is not only to honour the person on whose name the oration is created but also an opportunity to showcase your nation to an important person. When you invite the orator, please do not say that you are a poor country, and that you can't afford his travel etc. You must pay an honorarium - not that the orator needs it, but it puts your association on a good pedestal'. It seems I had continued, 'Starve if you would, but don't say your country is poor. Act as if you are rich'. I had forgotten the conversation. He continued, 'I am doing what you asked me to do Sir. Please accept'. I hugged him and accepted it. He then asked me, 'Sir, are you proud of me?'. Sure, I was. That was the last time we met.



## Associate Professor Sajedur Reza Faruquee (1968-2023)

S Raja Sabapathy



### 'NATION BUILDING. ONE HAND SURGEON AT A TIME'

**April 2023:** We now have had visitors from 71 countries. Rarely does one person's visit help forge a continuous relationship. After Faruquee, we have had 42 trainees from Bangladesh that have come to train at Ganga. Every 6 months we will get a note from Faruquee that Profs Kairy and Kalam have selected these candidates and to please help them come. He was so very proud that in a small way we are together contributing to capacity building of Bangladesh. His strength was his nature to follow up. If we miss a reply, you can be sure to have a WhatsApp reminder. I am sure the young trainees will miss someone like him.

### 'ALWAYS WANTING TO LEARN'

**May 2023:** Faruquee was the face of Bangladesh Hand Surgery. He was the national delegate to the APFSSH council and had planned to come for the APFSSH meeting at Singapore, but he could not make it as he could not get Government permission to travel. Although he was upset, he made alternate arrangements for representing Bangladesh at the council meeting. We missed his talk on his replant experience in Bangladesh. It is a loss to all of us. He had applied to stay for a week after the meeting to observe hand surgery at the National University Hospital to further develop his unit. He was always thinking for the good of the country.

### 'MISSING HIM'

**June 2023:** I was packing my bags after the APFSSH congress in Singapore and I casually picked up my phone to look at WhatsApp messages and saw this dreadful message 'Faruquee is no more'. Oh my God, I thought. I thought of the scene of him saying for the last time 'Sir are you proud of me?' and I could not help tears welling up in my eyes. What a great loss - loss of a good surgeon, a good son of Bangladesh, a good product of Ganga and more than that, loss of a great human being. Now sitting on the flight back, I decided to take out my laptop and put in words as to how much he meant to me personally and all of us at Ganga and how much he wanted for Bangladesh. He worked tirelessly for Bangladesh out of the limelight and the work done by him must be told to generations of trainees as to how one person can make a difference. As a mark of respect, we have named the Fellowship for Bangladeshi Surgeons at Ganga as the **Faruquee Fellowship for Bangladesh Hand Surgeons** so that we will keep his memory alive for posterity.

**Sajedur Reza Faruquee - THE POWER OF ONE**

**S Raja Sabapathy, Editor-in-Chief, JHS-AP**

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## Diversity in Hand Surgery

Jennifer Green



### DIVERSITY EVENTS at the APFSSH "DIVERSE & INCLUSIVE" CONGRESS, Singapore, June 2023

The theme of the APFSSH Congress in Singapore was Diverse and Inclusive and two symposia were held to explore the concept of diversity and inclusion and how they affect our organisations, our recruitment of hand surgeons, the leadership of our organisations and, ultimately our patient care. The Congress Diversity Symposium was moderated by Ted Mah & Jennifer Green.



2023 APFSSH DIVERSITY SYMPOSIUM

Margaret Fok opened the symposium with the evidence-based benefits of diversity - attracting the top talent, being more innovative and making better decisions; the data showing inequity of healthcare delivery to patients who are female or from minority cultures; and the strategies to improve diversity - visible role models, mitigating unconscious bias in selection to training and promotion; flexibility in the workplace and mentorship/sponsorship. Gillian Smith explained why the UK NHS has been vigorously promoting diversity in the medical workforce in the UK and creating opportunities for those from less economically privileged and more culturally diverse communities to enter medical school as they are more likely to work in areas of need. In the UK, doctor's children are 24 times more likely than their peers to enter medicine.

Jai Sungaran spoke about the Australian Orthopaedic Association's initiatives to increase the inclusion of culturally diverse members in leadership roles and to provide sponsorship for aspiring orthopaedic surgeons of diverse cultural backgrounds. The purpose being to provide better healthcare to Australia's very multicultural community. Roohi Ahmad discussed how leaders can improve the diversity of their organisations by being positive role models and creating a culture where everyone is welcome regardless of gender, race/ethnicity or socioeconomic status.



## Diversity in Hand Surgery

Jennifer Green



It was an honour to be able to convene this inaugural event at APFSSH and I would like to thank my co-moderator Ted Mah for his insightful questions and all the speakers who contributed to this important discussion about equity in healthcare.



**PANELISTS FOR THE 2023 APFSSH DIVERSITY SYMPOSIUM**

(L-R): Ted Mah, Jai Sungaran, Roohi Ahmad, Margaret Fok, Gillian Smith & Jennifer Green

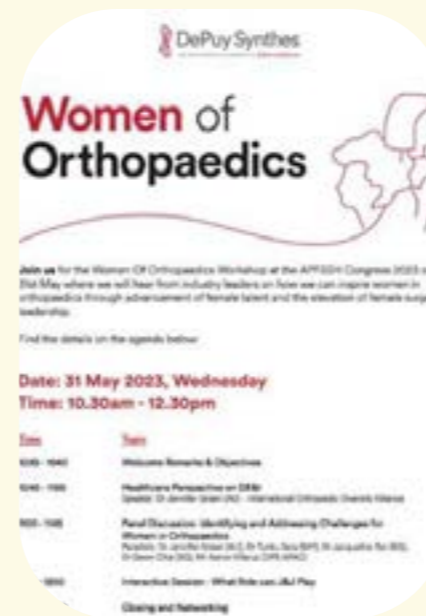
DePuy Synthes Asia Pacific hosted an event focussed on Gender Diversity - a first for APFSSH. The session was well-attended with excellent audience engagement and vibrant discussion. William Foster (Senior Director Regional Marketing, J&J, Singapore) provided an introduction followed by a global overview of diversity in orthopaedics (Jennifer Green) and a vibrant discussion moderated by Sophie Guerin (Head of Diversity, Equity & Inclusion, J&J APAC, Singapore).

The panel included orthopaedic women in leadership - Sara Ahmad (Malaysia), Jennifer Green (Australia), Jacqueline Tan (Singapore) and Dawn Chia (Singapore)



## Diversity in Hand Surgery

Jennifer Green



**2023 APFSSH GENDER DIVERSITY SYMPOSIUM**



**PANELISTS FOR THE 2023 APFSSH GENDER DIVERSITY SYMPOSIUM**  
(L-R): William Foster (J&J), Sophie Guerin (J&J), Aaron Villaruz (J&J), Dawn Chia (Singapore), Tunku Sara Ahmad (Malaysia), Jacqueline Tan (Singapore) & Jennifer Green (Australia).

and Aaron Villaruz (Vice President DePuy Synthes APAC, Singapore). The discussion explored all aspects of diversity, equity and inclusion, covering the following topics:

- The challenges of the lack of female peers in a predominately male-dominated profession and the lack of women in leadership in surgical societies.
- Opportunities for collaboration between the MedTech industry and surgical societies to decrease the gender gap - inclusive technology design, sponsored educational opportunities and industry advocacy.
- Changes in the professional landscape regarding the inclusion of female surgeons
- How surgical societies can take a more active role in encouraging women to pursue careers in surgery
- Actions that male allies can take to advance gender diversity in surgery.

DePuy Synthes/Johnson & Johnson have a 20-year history of promoting diversity, equity and inclusion. Their support in organizing and hosting this important discussion at APFSSH was greatly appreciated by the panel and the audience. As a member of the APFSSH Council and President of the International Orthopaedic Diversity Alliance, I look forward to further championing diversity, equity and inclusion and developing a diversity strategy for APFSSH.

**Jennifer Green, Secretary, Australian Hand Surgery Society**  
jennifer.green1312@gmail.com



## Society in the Spotlight - Malaysia

### Shalimar Abdullah



### Malaysian Society for Surgery of the Hand (MSSH)

Hand surgery in Malaysia began as leprosy management, with a leprosarium established in Sungai Buloh near Kuala Lumpur. Patients residing around the hospital formed a community and engaged in flower and plant sales to support themselves economically. Dr K Thambyrajah, a pioneer in Malaysian hand surgery, worked at Sungai Buloh Hospital in the 1960s, performing procedures to address high ulnar nerve lesions caused by leprosy. The legendary leprosy surgeon, Dr Grace Warren from Australia and "The Leprosy Mission of England" provided assistance and guidance to the leprosy centre.



Dr K Thambyrajah completed his fellowship with Dr Pulvertaft from the Derbyshire Royal Infirmary and on his return joined the Orthopaedic Department of University of Malaya and established a microsurgical practice. The university has been running a Basic Microsurgery Course together with the National Orthopaedic Centre of Excellence for Research and Learning (NOCERAL) for the past two decades.



Sungai Buloh Leprosarium Ward

Meanwhile, Dr Abdul Hamid Kadir, obtained a fellowship under the hand surgeon Dr Campbell Semple in the UK and introduced microsurgery at Universiti Kebangsaan Malaysia. Under the banner of the Malaysian Orthopaedic Association and the College of Surgeons of Malaysia, he organized a Hand Surgery Course in 1983. The next Hand and Microsurgery Department was then established by the Ministry of Health in Kuala Lumpur Hospital in 1986 which later moved to Selayang Hospital. It was headed by Dr V Pathmanathan.

The Malaysian Society for Surgery of the Hand (MSSH) was formed on 3rd of March 1993, with an emphasis on excellence through hand surgery. Dr Abdul Hamid Kadir was the first President and Dr V Pathmanathan, the secretary. The motto of the society is "Excellence through Hand Surgery". The society recognized the importance of collaboration with therapists, initially making them full members, but later adjusting the membership structure to align with international practices. The



## Society in the Spotlight - Malaysia

### Shalimar Abdullah



Malaysian Orthopaedic Surgery Association / College of Surgeons of Malaysia National Course on Hand Surgery  
(L-R): SP Chow, Venkataswami, PC Leung, Campbell Semple, Chehab Helmi, Robert WH Pho, Khaw Joo Hwa, Abdul Hamid Abdul Kadir.

therapists has since formed their own society, the Malaysian Society of Hand Therapists (MSHT). Prof Dr Tunku Sara Ahmad designed the society's logo in 2007 which portrays a weaving motif used in many local Malaysian foods and handicraft reflecting the interweaving of many different cultures and disciplines when working towards excellence in hand surgery.

Various training opportunities abroad and the involvement of international experts have contributed to the development of hand and microsurgery in Malaysia. MSSH organized the 1st Malaysian Conference on Surgery and Rehabilitation of the Hand in 1993, followed by the 2nd Hand Meeting, attracting renowned therapists and surgeons from around the world. The society has been actively promoting knowledge exchange through circle meetings, annual scientific meetings, and specialized courses. Subspecialty postgraduate courses, advancements in surgical techniques like WALANT (Wide Awake Local Anaesthesia No Tourniquet), and international collaborations have further enhanced the field.



**Society in the Spotlight - Malaysia**  
Shalimar Abdullah



1st Malaysian Conference on Surgery and Rehabilitation of the Hand in 1993.

Notable achievements by the hand surgeons in Malaysia include the world's first successful arm and hand transplant on a one-month-old baby girl from her twin, on 18th May 2000 by Dr V Pathmanathan. It was also the world's 9th successful hand transplant. Malaysian hand surgeons have also sought international benchmarking with candidates sitting for the FESSH (Federation of European Societies for Surgery of the Hand) exams. Dr Vaikunthan Rajaratnam won the Churchill Livingstone prize whilst Dr Sharifah Roohi Ahmad topped the FESSH exam in 2008. Others who passed the exams were Prof Dr Tunku Sara Ahmad and Dr Shalimar Abdullah.

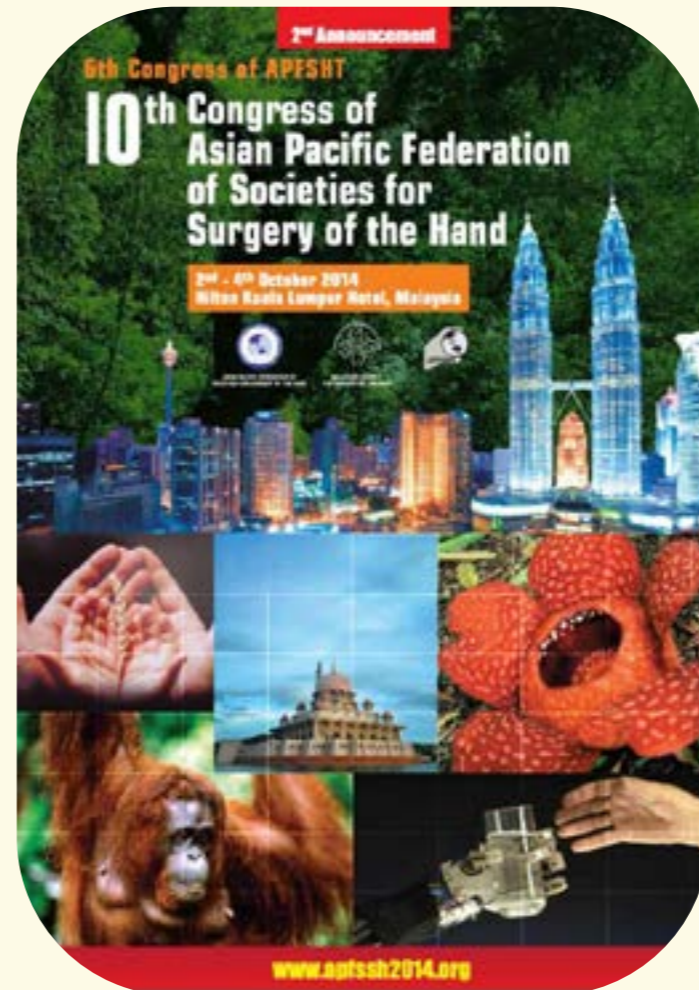


**FESSH 2008 in Lausanne, Switzerland**  
(L-R): Sharifah Roohi Ahmad, Tunku Sara Ahmad, Shalimar Abdullah.

The society has also participated in international conferences, including organising the highly successful 10th Asian Pacific Federation of Societies for Surgery of the Hand and 6th Asian Pacific Federation of Societies for Hand Therapists in 2014 as well as annual APFSSH and IFSSH meetings.



**Society in the Spotlight - Malaysia**  
Shalimar Abdullah



Cover of programme for the APFSSH and APFSHT 2014 Meeting in Kuala Lumpur.



Malaysian Hand surgeons and friends at the 2008 APFSSH Hong Kong posing at the hand print of Jackie Chan.

(L-R): Roohi Ahmad, Saw Kim Beng, Iskandar Mohd Amin, Tunku Sara Ahmad, Md Nawar Arrifin, Ng Eng Seng, Kamil Mohd Kasim, Shalimar Abdullah



Malaysian delegates at 2019 IFSSH Berlin  
(L-R): Jeremy Prakash, Chai Siau Chiu, Liew Siew Khei, Roohi Ahmad, Shalimar Abdullah, Amir Ahmad, Ruban Sivanoli.



Amir Adham Ahmad and Shalimar Abdullah with Donald Lalonde at the IFSSH 2019 Berlin meeting.

Dr Donald Lalonde was a plenary speaker in the 2014 meeting and introduced WALANT surgery which was practised by Dr Shalimar Abdullah. Observing the practice, Dr Amir Adham Ahmad developed the technique further to include bony WALANT which has been recognised globally as an efficient and effective method for hand procedures.

In recent years, MSSH has adapted to online platforms for courses and symposiums due to the COVID-19 pandemic. The society remains dedicated to advancing hand surgery and fostering



## Society in the Spotlight - Malaysia

### Shalimar Abdullah



international collaborations. MSSH has been proactive in injury prevention and community engagement, particularly in reducing hand injuries caused by firecrackers during festive seasons.

Currently the society has 62 member surgeons with two emeritus members, Dato' Dr Abdul Hamid Kadir and Prof Dr Tunku Sara Ahmad. The Past Presidents have been Dr Abdul Hamid Kadir, Prof Dr Tunku Sara Ahmad, Prof Sharifah Roohi Ahmad, Prof Manohar Arumugam and Dr Rashdeen Fazwi. The aims of the Malaysian Society for Surgery of the Hand are enumerated below and with a dynamic group, a critical mass of members and God's grace, we hope these goals can be achieved.

- To have a uniformly high standard of care for hand conditions and injuries throughout the country, by training a sufficient number of good specialists.
- To have a high standard of local postgraduate training in hand and microsurgery.
- To aid, catalyze and foster formation of hand therapists groups for training and learning, nationally and internationally.
- To form and maintain closer international links in the subspecialty.
- To perform useful, cutting edge research.
- To look into prevention and treatment of hand injuries in the local context.
- To maintain a presence at all international conferences.
- To publish pioneering work in all major hand surgery journals.

**Shalimar Abdullah, Honorary Secretary, MSSH**  
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#### Executive Body MSSH

|                            |  |
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| <b>President:</b>          | Mohd Iskander Mohd Amin  |
| <b>Vice-President:</b>     | Jeremy Prakash   |
| <b>Honorary Secretary:</b> | Shalimar Abdullah  |
| <b>Honorary Treasurer:</b> | Shams Amir Shamsul Bahar   |
| <b>Committee Members:</b>  | Aniza Faizi Anoar, Mohd Sallehuddin Hassan, Ruban Sivanoli & Vijay Gopal |
| <b>Auditors:</b>           | Sharifah Roohi Ahmad & Tunku Sara Ahmad                                  |



## Report from PSHT

Jose Ma. Rafael D. Ramos



### Philippine Society of Hand Therapists (PSHT)

The Philippine Society of Hand Therapists (PSHT) is a non-profit organization of licensed occupational therapists (OTs) and physical therapists (PTs) who specialize in the rehabilitation of hand and upper extremity injuries and disorders. The PSHT was founded in 2016 by a group of OTs and PTs who saw the need for a professional organization dedicated to advancing the field of hand therapy in the Philippines.



The PSHT's mission is to promote the highest standards of care in hand therapy, to provide education and training to OTs and PTs, and to advocate for the rights of hand therapists. The PSHT has a membership of over 100 OTs and PTs from all over the Philippines.

**Early years and accomplishments:** In its early years, the PSHT was active in organizing hand specialization workshops and other continuing professional development (CPD) activities. The PSHT also played a key role in organizing the 2017 Asian Pacific Federation of Societies for Hand Therapy (APFSHT) Congress in Cebu. The APFSHT Congress is the largest and most prestigious hand therapy conference in Asia, and the PSHT was proud to host it in the Philippines.



APFSHT Meeting at the 2017 APFSSH Congress, Cebu, Philippines,

**Challenges and setbacks:** The PSHT has faced a number of challenges in its short history. One of the biggest challenges has been rallying people for support. The field of hand therapy is still relatively new in the Philippines, and many OTs and PTs are not aware of the benefits of specialization. As a result, it has been difficult to get





## Report from PSHT

Jose Ma. Rafael D. Ramos



people to join the PSHT and participate in its activities. Another challenge that the PSHT has faced is the COVID-19 pandemic. The pandemic has forced the PSHT to cancel or postpone many of its events, and it has also made it difficult to provide education and training to OTs and PTs.



**Reestablishing itself and looking to the future:** Despite the challenges it has faced, the PSHT is committed to reestablishing itself and being more active in its role as a professional organization. The PSHT plans to resume its educational activities, to advocate for the recognition of hand therapy as a specialty, and to collaborate with other organizations to improve the quality of care for people with hand and upper extremity injuries and disorders.

**Jose Ma. Rafael D. Ramos, President, PSHT**  
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## Australian Hand Surgery Society (AHSS)

David McCombe



This year has seen a post-COVID return to face to face meetings. The Australian Hand Surgery Society hosted the British Society for Surgery of the Hand at our annual meeting in Sydney in March. Professor Max Haerle from Germany was our guest speaker and together with the local faculty



and our British guests provided a stimulating academic programme together with a very enjoyable social programme.



Combined Meeting of AHSS and BSSH, Sydney, March 23

AHSS members also participated in the highly successful APFSSH congress in Singapore in June which highlighted the diversity and inclusion across the Asia-Pacific hand surgery community. At this congress, one of our members, Anthony Berger, was elected President of the

APFSSH and we wish him and the APFSSH executive well for their upcoming terms. Later in the year, the AHSS will be convening the hand surgery programme at the Australian Orthopaedic Association meeting in Melbourne in November, with Scott Edwards and Ann Van Heest from the US attending to contribute to the programme and we are looking forward to another busy year in 2024 with combined meetings in Hawaii and India as well as our regular education programmes.



Session of Diversity at the AHSS-BSSH meeting, Sydney, March 23

**David McCombe, President, AHSS**  
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### Executive Body AHSS

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| <b>Education Committee:</b>      | Randy Bindra                  |
| <b>General Board Member:</b>     | Sarah Tolerton & Gregory Bain |
| <b>Newsletter Editor:</b>        | Jennifer Green                |
| <b>Archivist:</b>                | Roland Hicks                  |



## Bangladesh Society for Surgery of the Hand (BDSSH)

Sajedur Reza Faruquee



BDSSH organised 3 CME cum instructional lecture course in 3 peripheral medical colleges in Bangladesh. The 4th one is going to be held on 30th September in Rajsahi medical college, in the Northern part of country. 4 member delegation of society led by President, joined IFSSH Congress in London. President also attended delegates' meeting there. 2 members of our society joined in APFSSH conference in Singapore. 4 members joined in ISSH conference in India. At our last National conference, 269 surgeons including 4 foreign faculty joined. Our next National conference will be held on 18-19 November, near Dhaka.

**ASM Monirul Alam, President, BDSSH**  
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### Executive Body BDSSH

**President:** ASM Monirul Alam  
**Vice-President:** Krishna Priya Das  
**Honorary Secretary:** Md Mohiuddin  
**Treasurer:** Krishna Priya Das  
**Joint Secretary:** Tanveer Ahmed



## Indian Society for Surgery of the Hand (ISSH)

Anil Bhat



**Events:** The ISSH is celebrating its golden jubilee in 2023-2024 and the new executive committee assumed office on 1 Jan 23. ISSHCON 2023, the 46th annual meeting of ISSH was held at Chandigarh from 8-10 Sept 23 organised by the Department of Plastic surgery, PGIMER, Chandigarh. Dr Mark Pickford from UK delivered the Dr B.B. Joshi oration on 'Toe to Hand transfer' and Dr Roger Cornwall from USA delivered the Dr Venkataswami oration on 'Brachial Plexus Birth Injury'. Dr Michael Tonkin from Australia was awarded the Emperor Ashoka award and he delivered his talk on 'Life of Congenital Hand Surgery'. Dr Mukund Thatte was awarded the ISSH award of Pioneer in Hand surgery for his contribution towards the growth of hand surgery practice in India and beyond. The golden jubilee was celebrated during this conference and 14 Past Presidents of ISSH were felicitated, A very innovative initiative of "Training the trainers" programme, the Presidential theme of Dr. Santosh Rath was conducted post conference. ISSH celebrated National Hand Surgery day on 23rd Aug 23 with the theme of Hand safety for our patients. The ISSH will host the APFSSH conference in September 2025 and World Congenital malformation symposium in 2026.

**Education:** The ISSH research wing, chaired by Dr Anil Bhat has completed 12 Indian normative database projects of upper limb which was the presidential theme of Dr. Mukund Thatte last year. The research wing has also taken up the project of developing Clinical practice guidelines for Indian hand surgeons for 2023-24. Our ISSH members, Dr. Mithun Pai from KMC, Manipal was awarded the BSSH travelling fellowship from the pool of APFSSH members & Dr. Sathya Vamsi Krishna from Bangalore was awarded ASSH travelling fellowship for 2023. The ISSH academic team headed by Dr Praveen Bharadwaj conducted various academic activities including a surgical video series every Sunday and a new initiative is on case-based discussion with expert faculty.

**Anil Bhat, Secretary & Treasurer, ISSH**  
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### Executive Body ISSH

**President:** Santosh Rath  
**Vice-President:** Rajendra Nehete  
**Secretary & Treasurer:** Anil Bhat  
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**Managing Trustee:** S Raja Sabapathy  
**Trustees:** Bhaskaranada Kumar, Ravi Mahajan



## Japanese Society for Surgery of the Hand

Toshiyasu Nakamura



**Activities in 2023:** Since mid-autumn 2022, most academic activities held in Japan are returning to normal since Covid-19. In 2023, the JSSH was nominated as the guest society of American Association of Hand Surgery returning to normal from Covid-19 pandemic. In 2023, the JSSH was nominated as the guest society of American Association of Hand Surgery Annual (AAHS) meeting in Miami, January and many Japanese doctors attended the AAHS. We held the 66th Annual Meeting of the JSSH in Tokyo on April 20-21, 2023 in a great success with a hybrid style (in-person and on-demand). Most of the participants attended the meeting face to face in Keio Plaza Hotel, Tokyo. We also had foreign guests, 2 from USA, 2 from Europe, 1 from Australia and 1 from Korea in this meeting. Travelling fellowship programs with ASSH, HKSSH (Hong Kong), TSSH (Taiwan) and 1 from Hong Kong.

From May 31 to June 3, many Japanese doctors attended the APFSSH meeting in Singapore. While meeting and chatting with Asian Pacific, USA and European friends in the Expo Venue Singapore, we felt that the situation was back to normal. An executive committee meeting was held three times (Aug 22, Jan 23 and Mar 2023) in webinar style under the leadership of current



66th Annual meeting of JSSH, Apr 21-22, 2023, Tokyo

president of the JSSH, Prof. Norimasa Iwasaki of Hokkaido University.

**Plans for 2024:** Two Japanese fellows will attend the ASSH meeting at Toronto as JSSH-ASSH travelling fellow and 1 fellow will attend the KSSH meeting. The 67th Annual Meeting of JSSH will be held at Nara in 2024. Nara is the old capital city of Japan and is close to Kyoto and Osaka. We welcome all APFSSH members to feel the traditional atmosphere in Nara.

**Toshiyasu Nakamura, JSSH Delegate for APFSSH**  
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### Executive Body JSSH

**President:** Norimasa Iwasaki, MD, PhD  
**Vice-President:** Keiichiro Nishida, MD, PhD  
**Vice-President:** Hiroshi Furukawa, MD, PhD



## Korean Society for Surgery of the Hand

Bo Young Park



Despite the challenges brought by the COVID-19 pandemic, the resilience and commitment of the medical community has remained steadfast. The 2022 annual congress of the Korean Society for Surgery of the Hand (KSSH) was a testament to our enduring dedication to medical advancement. Successfully held offline from 5-6 November 2022, the congress served as a hub for substantial academic discourse. Diverse sessions related to hand surgery topics sparked intensive academic debates and presentations, paving the way for notable academic accomplishments. Building on the momentum of last year, we continued with the innovative "Young Investigator's Camp" and introduced the "Young Surgeon-Scientist session." This platform allowed budding hand surgeons in academic pursuits to present their theses and gain invaluable insights from senior researchers. An additional highlight of the congress was the enriching lectures from our three invited speakers: Dr. Chin-Hsien Wu, Dr. Hisao Moritomo, and Dr. Andrew Chin Yuan Hui. Their insights brought global perspectives, amplifying the depth and breadth of our discussions.



KSSH members with Prof Goo Hyun Baek congratulating him on his retirement from the university

This year, our Annual Congress of the KSSH is set to be held on November 4th, which is the time when the fall foliage is at its peak, at the Ewha Womans University Medical School in Seoul. This symposium promises to be a melting pot of knowledge exchange, and we eagerly anticipate meeting our members and welcoming various international speakers. Our leadership, President In Hyeok Rhyou, Chairman Dong Chul Lee, and General Secretary Bo Young Park, remain committed in ensuring this gathering is both educational and engaging for local and international attendees alike. Furthermore, we are pleased to announce that we have been selected as the host country for the 2027 APFSSH. Preparations are already in full swing to ensure a successful event.

**Bo Young Park, General Secretary, KSSH**  
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### Executive Body KSSH

**President:** In Hyeok Rhyou  
**Chairman:** Lee Dong Chul  
**Director:** Bo Young Park



## Member Society Updates - New Zealand

Michael Boland



### New Zealand Society for Surgery of the Hand (NZSSH)

The IFSSH triennial meeting in London in 2022 was the first international meeting that a lot of New Zealanders managed to attend. Collectively as a society, we must congratulate the organisers for what was an amazing meeting in such turbulent times. The contingent that made it to the Congress are part of our New Zealand Society for Surgery of the Hand which currently stands at 105 members from both an Orthopaedic and Plastic Surgical background.



The first local meeting with international guest speakers was in December 2022. We had the Joint meeting between NZSSH and NZ association of Plastic surgeons in Wellington which was a great success and we extend our sincere appreciation to our International (Australian) guest speakers Anthony Berger for his amazing presentations and Greg Bain for his Virtual Contributions. 2023 has brought more stability and has allowed us to try to help ease the growing number of patients on our elective waiting lists. Many of our members attended the Triennial Congress of the federation in Singapore and with enjoyment of the dinner at the flower dome in particular. In August, in Queenstown on the South Island, Don Lalonde and Randy Bindra were the invited guests the combined Hand Society and New Zealand Orthopaedic Association continuing education meeting. For all who attended, the conference was a huge success, with great support from Industry, our members and from our Orthopaedic Colleagues.

At the recent Annual General Meeting, I stepped down and Simon MacLean was elected as the new representative of New Zealand to the Federation. We all wish Simon well in his new role. I was thanked for my contribution over a number of years.

**Michael Boland, APFSSH Delegate, New Zealand**

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#### Executive Body NZSSH

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## Singapore Society for Hand Surgery (SSHS)

Soumen Das De



2023 has been an exciting year for the SSHS. A momentous event was the 13th APFSSH/ 9th APFHST/ 8th APWA congress that we hosted at the Singapore Expo Convention Center from 31 May to 3 June. The theme was "Diverse and Inclusive". The event featured 840 delegates and 171 speakers



from 33 countries. Through the many lectures, free papers, workshops, and debates, we had the opportunity to learn from master clinicians, hone technical skills, and forge new friendships. Congratulations to the organizing team steered by Mark Puhaindran, Jacqueline Tan, and Andrew Chin for an extremely successful meeting!



**SSHS Dinner Lecture by Singapore's Director General - Health**  
(Clockwise from L) - Mark Puhaindran, Sreedharan Sechachalam, Anthony Foo, Winston Chew, Duncan Angus McGrouther, Soumen Das De, Sia Wei Tee, Andrew Chin, Kenneth Mak (Director General - Health), Tan Ter Chyan, and Dawn Chia

As in previous years, the Society will continue to hold its quarterly case-based interactive sessions which bring together surgeons, therapists, residents, and fellows. A new initiative the SSHS took this year was a dinner engagement session with Singapore's Director-General of Health, A/Professor Kenneth Mak. Colleagues from both the public and private sectors participated in a very stimulating and productive dialogue. There was plenty of food for thought, as we examined the future of our specialty, maintaining relevance, pushing traditional boundaries, and reconceptualizing surgical training. We look forward to working with our membership and relevant partners to address these issues.

**Soumen Das De, Secretary, SSHS**

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#### Executive Body SSHS

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| <b>Secretary:</b>      | Soumen Das De                   |
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| <b>Editor:</b>         | Sia Wei Tee                     |
| <b>Members:</b>        | Duncan McGrouther and Dawn Chia |



# News from IFSSH

Daniel Nagle



## International Federation of Societies for Surgery of the Hand (IFSSH)

Many of the IFSSH Executive Committee members had the pleasure of attending the recently concluded Singapore APFSSH Congress. Professor Raja Sabapathy, IFSSH President-elect was in attendance in his role as President of the APFSSH. Doctor Sabapathy and the program committee headed by Mark Puhaindran and Jacqueline Tan hosted a very successful Congress. Professor Daniel Nagle, IFSSH President, Professor Jin Bo Tang the IFSSH Communications Director and Professor Gregory Bain IFSSH Asia Pacific Member-at-large were also in attendance. During the Congress, podium time was offered to Professor Nagle to speak of the IFSSH mission, which is to promote the worldwide exchange of hand surgery knowledge and expertise. To that end, the IFSSH is pleased to announce the first IFSSH Mid-term Course to be held in Quito, Ecuador from January 31 through February 3. This course is being hosted by the Ecuadorian Society for Surgery of the Hand and is led by Doctor Fidel Cayon. Dr. Cayon and his program committee are very busy putting together a great course.



I would like to take this opportunity to remind APFSSH members of the upcoming IFSSH Triennial Congress to be held in Washington DC from March 23- 28, 2025. The Program Chairs, Professors James Chang and Brian Adams, are very busy preparing an outstanding Congress. Washington DC is a great venue, and it will be even more amazing as the Congress is scheduled to be held during the annual cherry blossom festival.



Prof Daniel Nagle @ APFSSH 2023, Singapore



# News from IFSSH

Daniel Nagle



There are over 3000 cherry trees planted along the Washington Tidal Basin which, weather permitting, will be in full bloom during the 2025 IFSSH Congress. An added bonus is that admission to all the Smithsonian Museums is free of charge. This Congress, like the London Congress, will be preceded by a pre-Congress traveling fellowships for worthy, young hand surgeons. These fortunate fellows will visit several hand surgery centers located in the Eastern United States and then attend the IFSSH Washington DC Congress.

Speaking of Triennial Congresses, the Singapore Society for Hand Surgery will be the host of the 2028 IFSSH Congress. Dr. Mark Puhaindran has informed me that the Congress venue will be in downtown Singapore. He assured me the Congress Committee is already hard at work preparing for the Congress. If the recent APFSSH Congress is any indicator, the 2028 IFSSH Congress will be phenomenal!

The IFSSH looks forward to collaborating with the APFSSH and its member societies as we pursue our mission of promoting hand surgery knowledge around the world. We thank the editors of the APFSSH Newsletter for the opportunity to bring its readers up to date on IFSSH initiatives.

Wishing you all the best,

Daniel Nagle, President, IFSSH

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### Executive Body IFSSH

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| Immediate Past President:                  | Marc Garcia-Elias    |
| Chief Administrator:                       | Belinda Smith        |



News & Events  
Sandeep Sebastin



**ASSH**  
**ENGAGE**

78TH ANNUAL MEETING OF THE AMERICAN SOCIETY FOR SURGERY OF THE HAND  
OCTOBER 5-7, 2023 • TORONTO, ON

**BSSH**  
The British Society for Surgery of the Hand

**2023 AUTUMN SCIENTIFIC MEETING**

23-24 NOVEMBER, GLASGOW

With Guest Society: Indian Society for Surgery of the Hand

**AAHS 2024 Annual Meeting**

Grand Hyatt Baha Mar | Nassau, BAHAMAS  
JANUARY 9-13, 2024

The 67<sup>th</sup> Annual Meeting of the Japanese Society for Surgery of the Hand

**Functional Anatomy and Innovation in Hand Surgery**

**Dates:** April 25 (Thu) - 26 (Fri), 2024  
**Venue:** Nara Prefectural Convention Center/JW Marriott Hotel Nara  
**Chairman:** Shohei Omokawa, MD., PhD. (Professor, Department of Hand Surgery, Nara Medical University.)  
**Abstract Submission Period:** Sep 25 (Mon) - Nov 7 (Tue), 2023



News & Events  
Sandeep Sebastin



**IFSSH**  
**Mid Term Course**

**Second Ecuadorian Hand Surgery Congress**

31 JANUARY - 3 FEBRUARY 2024  
METROPOLITAN CONVENTION CENTER - QUITO

6<sup>th</sup> Congress of Asian Pacific Federation of Societies for Reconstructive Microsurgery  
**APFSRM 2024**  
8<sup>th</sup>-10<sup>th</sup> March

16<sup>th</sup> Biennial Conference of Indian Society for Reconstructive Microsurgery  
**ISRM 2024**  
7<sup>th</sup> March

The Leela Ambience Hotel & Residences Gurugram, New Delhi, India

Theme: C&E - Collaborate & Excel

**BSSH** The British Society for Surgery of the Hand

**2024 SPRING SCIENTIFIC MEETING**

25 - 26 April 2024, Royal Armouries, Leeds

**THE 47<sup>th</sup> ANNUAL CONFERENCE OF INDIAN SOCIETY FOR SURGERY OF THE HAND**

4 | 5 | 6, October, 2024, Bengaluru

4 | 5 | 6, October, 2024, Bengaluru  
**The 47th Annual Conference of Indian Society for Surgery of the hand**

First combined Annual Hand Society meeting of India, Australia, Emirates & Singapore



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# IFSSH Sponsorships

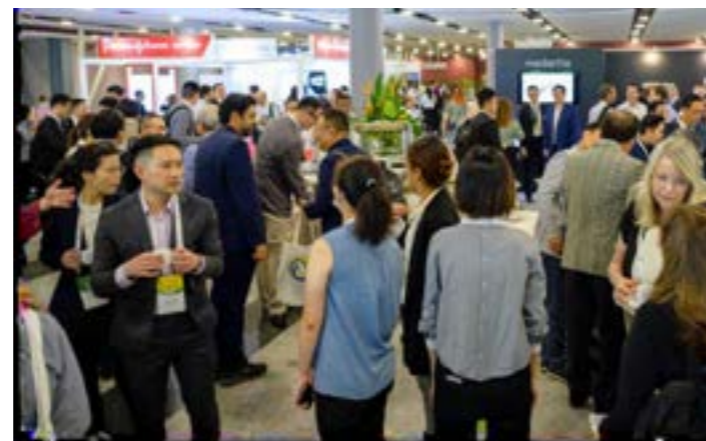


## Final Report

**Dr Mark Puhaindran, 13th APFSSH Chair**

The 13th APFSSH Congress was held in conjunction with the 9th APFSHT and 8th APWA meetings between 31 May to 3 June 2023 at the Singapore Expo, Singapore. This was the first APFSSH Congress since the onset of the Covid pandemic, which also caused national lock downs that led to the abrupt conclusion of the 12th APFSSH Congress in Melbourne, Australia in 2020.

We faced numerous challenges preparing for this meeting due to the uncertainties as to whether Covid restrictions would be lifted, with some participating members still unable to travel at the time of the congress due to national travel restrictions that were still in place. Despite this, we were fortunate that we were still able to proceed with this meeting in the planned physical format.



The theme for the meeting was “Diverse and Inclusive”, which was evident throughout from the opening ceremony and performance, and reflects the character of the host country, Singapore. A total of 840 participants attended the conference, representing 33 countries, with 378 abstracts presented, and 171 speakers.



The Pioneer Lecture was delivered by Professor Fu Chan Wei, while Professor Robert Pho delivered the Tajima Lecture. Professor Tunku Sara gave the Presidential Lecture. In addition to the plenary lectures, the Scientific Programme was well received, with the Meet the Masters and Morning Rounds Sessions

fully subscribed. There were also sessions on “Women in Orthopaedics”, “Harnessing the Power of Social Media in Hand Surgery”, and discussions on “What is Happening in My Part of the World” For the first time, a Nurses Symposium was held as part of this Congress.





The Congress Dinner was held in the beautiful setting of the Flower Dome of Gardens by the Bay. The musical performances literally got the participants on their feet, making it a night to remember.



We owe a deep debt of gratitude to many who helped to contribute to the success of this meeting – all the participants, the APFSSH and IFSSH Executive Committees, our sponsors, the Event Organiser, ICS (International Conference Services), and our Organising Committee.

We look forward to next APFSSH Congress in Chennai, India in 2025, as well as to hosting the IFSSH Congress in Singapore in 2028.



IFSSH has kindly offered a US\$20,000 grant to subsidise the registration fees of 25 residents, therapists and surgeons mostly from developing nations.

Here is the list of applicants.

- Mohd Azam Abdul Halim -Malaysia
- Md Sohaib Akhtar -India
- Dina Aprilya -Indonesia
- Jane Marie Astorga -Philippines
- Most Nurunnahar Begum -Bangladesh
- Consleovy Correos -Philippines
- Emiliana Guerra -Australia
- Pankaj Gupta -India
- Yeon Wook Kim -South Korea
- Amit Limbu -Nepal

- Tomoki Matsuo -Japan
- Sayantani Misra -India
- Angelino Mari Wilfried Molano -Philippines
- Sybill Sue Moser-De Mesa -Philippines
- Jie Hui Nah -Singapore
- Zhi Yang Ng -United Kingdom
- Jaymee Oclarit -Philippines
- Taufiqur Rakhim -Indonesia
- Melissa Mae Sanchez -Philippines
- Benedictus Anindita Satmoko -Indonesia
- Shilu Shrestha -Nepal
- Yin Ying Tan -Malaysia
- Thiyagarajan Thiagarajan
- Singaram -India
- Aviva Wolff -United States
- Rafael Iñigo Yutangco -Philippines



**IFSSH Grant Recipients**



**Name:**  
**Mohd Azam Bin Abdul Halim**  
**Institution: Institut Latihan**  
**Kementerian Kesihatan Malaysia,**  
**Sungai Buloh, Selangor**  
**Country: Malaysia**

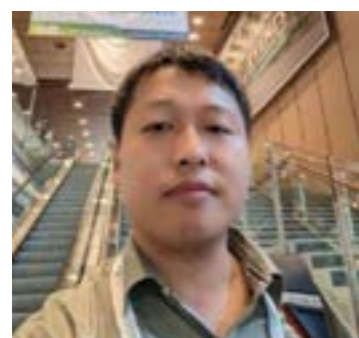
I learned a lot during the congress with all the knowledgeable clinical sharing from experts by Doctors and Therapists. Moreover, this grant has opened doors to invaluable networking and collaboration opportunities in the field of hand rehabilitation. I am honored and privileged to have been chosen as a recipient. Thank you once again for your unwavering support.

I am writing to express my deepest gratitude for the generous grant that I have received from IFSSH to attend this congress. Being selected as a recipient of this grant has not only filled me with immense joy but has also provided me with the resources necessary to pursue my goals and make a positive impact in my field and career as Occupational Therapist. Congratulations and thank you to the host for their effort to make this grant possible for me.





**Name: Dr. Amit Limbu**  
**Institution: BP Koirala Institute of Health Sciences**  
**Country: Nepal**



These words won't be enough to express my gratitude on how thankful I am for giving me an opportunity to get engaged in one of the best academic meetings. It is almost impossible for surgeons like me from a

developing nation like Nepal because we have to invest almost all our income to attend such events. Learning from the masters, meeting with people from different cultures and countries and attending workshops has been a wonderful and blissful experience. I strongly felt, hailing from a developing nation and resource constraint environment, that one must at least be highly aware of the progress, developments and research which is happening all over the world. All this was made possible by this wonderful grant. This meeting allowed me to compare my current practice

to what I might be doing wrong or differently and learning from the best people. This encouraged me to adopt good evidence-based practices to serve my community better.

Again, I can't stress more on how thankful I am and, how important it is for surgeons from developing nations to continue their endeavor to gain knowledge in order to serve their people better.

(PS: the food was amazing)

**Name: Jane Marie C. Astorga, MD**  
**Institution: Jose R. Reyes Memorial Medical Center**  
**Country: Philippines**



As a trainee who is just beginning to understand the world of orthopedics, I am truly very grateful to have been given an opportunity to participate in this international conference. To be able to present my study is also a huge privilege. Hand Surgery has always fascinated me and this conference was a delight to participate in. I have met a lot of wonderful people who are trailblazers in their chosen field, and it has inspired me to become a better surgeon.

Through the grant from the IFSSH, this experience has changed the way I approach my surgeries and the way I treat my patients. This is an experience that I will remember for a lifetime, and I have the utmost gratitude to the IFSSH for the assistance. As a trainee, this had a great impact on me. It made me realize that opportunities will come and there will be people who will help me along the way, like the IFSSH. I hope to participate in more conferences in the future.

**Name: Zhi Yang Ng**  
**Institution: Oxford Deanery**  
**Country: United Kingdom**



I was able to connect with new colleagues from Malaysia, Thailand and Hong Kong, sharing thoughts and ideas on various issues. This included discussions about the type of flap to use for extremity degloving injuries, based on their patient population and healthcare systems, referral patterns to Hand Therapy, as well as the training paths in Hand Surgery in their countries.

I also met and reconnected with ex-colleagues from the USA and Singapore. We are now in discussions about a possible collaboration based on my virtual microsurgery training concept that I have trialed successfully in the UK since 2021.

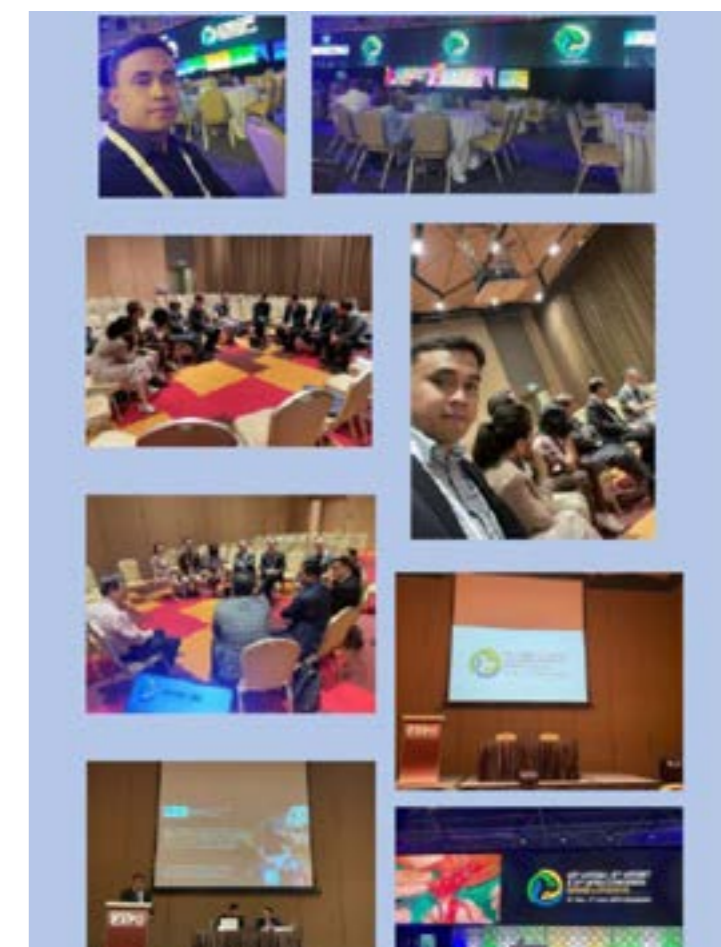
Finally, I have been exposed to a fundamentally different concept in reconstructive hand surgery (see pic) compared to what I have been taught in the West. This was reiterated by a special Meet-the-Masters session where I had the chance to speak with none other than Prof Fu Chan Wei himself.

Overall, it was a great experience and I was most pleased to have two abstracts presented as ePosters. Thank you very much once again for the opportunity to attend this wonderful meeting.

**Name: Benedictus Anindita Satmoko**  
**Institution: Airlangga University**  
**Country: Indonesia**

I was honoured to be accepted as a grant applicant. First of all, I would like to say many thanks to you for enabling me to join the conference. It was absolutely a great experience for me to attend this meeting. I could meet many seniors and experienced hand surgeons from many countries, particularly the surgeon from China who presented a case of brachial plexus injury treated by trans-thoracic nerve transfer.

What I really also did appreciate from this event was that I could present my senior's case; an unforgettable moment in my life. The opening ceremony with attractive visualisation on the screen was astonishing. The venue was a vast, impressive hall. Indeed, I did really enjoy visiting Singapore and attending this conference.



**Name: Md Sohaib Akhta**

**Institution: Neotia Getwell Multispeciality Hospital**

**Country: India**

I am writing this letter to express my deepest gratitude for the generous financial grant you provided me to attend the APFSSH 2023 Congress. Your support has made it possible for me to participate in this important event, and I am incredibly thankful for this opportunity. Conferences like these play a crucial role in expanding knowledge, fostering professional growth, and connecting with like-minded individuals in the field. Thanks to your grant, I will be able to learn from experts, exchange ideas, and gain insights that will undoubtedly benefit my career.

Your belief in my potential means a great deal to me, and I am committed to making the most out of this experience. I promise to utilize the knowledge and skills gained from this conference to contribute positively to my work and the community. Once again, thank you from the bottom of my heart for your invaluable support. Your generosity will have a lasting impact on my professional development, and I am truly grateful for your kindness.

**Name: Jia Hui Nah**

**Institution: Yong Loo Lin School of Medicine**

**Country: Singapore**

Receiving the IFSSH grant provided me with an exceptional opportunity to participate in APFSSH 2023, which turned out to be an unforgettable experience. The 3.5 days provided me ample opportunity to immerse myself in a world of new cutting-edge ideas. Thought-provoking “expert face-offs”, case presentations of rare surgeries, and new surgical techniques, ignited a sense of curiosity in me whilst other speakers expanded my understanding of fundamental surgical concepts. The conference also brought invaluable networking opportunities as it brought together experts and younger residents alike.

It was an enlightening and inspiring experience to feel the palpable passion and knowledge that the experts had in their fields while connecting with younger, like-minded physicians embarking on similar journeys.

As I reflect on this experience, I am grateful for the gracious support I have received from the IFSSH grant and my seniors alike. It was not just about the knowledge gained, but also the personal development and newfound confidence that I took away from the event. I am determined to apply the lessons I have learned through the conference to advance both my career and passion, to ultimately strive for better care for my future patients. I eagerly look forward to attending many more conferences in the future, each presenting new opportunities for growth and learning.

**Name: Sayantani Misra**

**Institution: Nippon Medical School, Tokyo, Japan**

**D.N.B. Orthopedic Surgery, India**

**Country: India**



Attending the APFSSH in Singapore this year has been an experience of a lifetime, and I am immensely grateful to the International Federation of Societies for Surgery of the Hand (IFSSH) for their generous grant that made it all possible. The opportunity to be part of this prestigious conference, supported by IFSSH Grants, has enriched my professional life in countless ways.

One of the highlights of the conference was the chance to present my paper on “Intercostal Nerve Transfer in Management of Biceps and Triceps Co-contraction in Brachial Plexus Birth Palsy”. This research, which I conducted during my paediatric hand surgery fellowship in Tokyo with the guidance of Dr. Takehiko Takagi, is very close to my heart. Sharing my findings and insights with the esteemed audience at the APFSSH was an honour, and the constructive feedback received has further motivated me to pursue excellence in my field.

Beyond the academic aspect, the conference provided an invaluable platform for networking and collaboration. Meeting experienced and senior hand surgeons from India and across the globe would have been difficult without this opportunity. I was particularly thrilled to meet Dr. Chris Dy, whose “upper hand podcast” has been a significant source of inspiration and motivations during my daily commutes. Our interaction has left a lasting impact on my professional aspirations, and I will cherish this encounter forever.



Further more, I had the privilege of connecting with esteemed surgeons like Dr. Sabapathy, Dr. Abhatt, and the Indian fellows from Ogori Daiichi Hospital, where I am scheduled to pursue my final hand surgery fellowship next year. The insights and knowledge they shared about my upcoming fellowship were immensely valuable, and I feel better prepared to embark on this next phase of my surgical journey.



The interactions extended beyond borders, as I made new friends from Indonesia, Malaysia, and Australia. Connecting with them on social media has allowed me to stay updated with their work and share knowledge in a virtual global community. I hope to meet them again in the future, fostering a sense of camaraderie that transcends geographical boundaries.

Among the various inspiring encounters, meeting Dr. Heri Suroto from Indonesia left a lasting impression on me. His clinical research and dedication to his patients have motivated me to strive for excellence in my clinical practice and explore research avenues that can positively impact the lives of my community.

In conclusion, my overall experience at the APFSSH conference has been nothing short of transformative. I extend my heartfelt gratitude to IFSSH for their generous grant, which made it possible for me to participate in this enriching event. The exposure to cutting-edge research, networking with experienced surgeons, and connecting with inspiring professionals have all contributed to my growth as a hand surgeon. I am confident that the knowledge and inspiration gained from this conference will not only benefit my patients but also enhance the level of care and expertise I provide to my community.

**Name: Melissa Mae R. Sanchez**  
**Institution: Jose R. Reyes Memorial Medical Center**  
**Country: Philippines**



I would like to take this opportunity to thank the IFSSH for their financial generosity which enabled me to participate in this Congress. I was able to learn a lot from the speakers, especially rehabilitation protocols and current practices in hand surgery.

**Name: Emiliana Guerra**  
**Institution: Monash University**  
**Country: Australia**



I had an incredible four days at this year's combined Asian-Pacific Federation of Societies for Surgery of the Hand/Asian-Pacific Federation of Societies of Hand Therapy Congress held in Singapore.

With the support of IFSSH, I presented my honours research project which investigated telehealth-based goniometry to measure digit range of motion.

It was a fantastic experience sharing my research with experts in the field at this well organised and prestigious event. I received encouraging feedback from delegates, and my paper was awarded the Best Therapist Free Paper.

Networking in-person with hand therapists and hand surgeons from around the world was certainly a highlight. I have built friendships and connections with likeminded individuals that will last a lifetime. Additionally, a comprehensive scientific programme meant that the learning opportunities were endless. I have returned home full of new knowledge and techniques which I look forward to implementing in my practice and sharing with my colleagues to improve our quality of care to the community.

Thank you again, IFSSH for the grant.

**Name: Dina Aprilya**  
**Institution: Indonesian Association for Hand, Upperlimb, Microsurgery**  
**Country: Indonesia**

I sincerely thank the committee for this wonderful opportunity to attend APFSSH 2023. I met a lot of big names in hand surgery as well as learned about hand surgery updates around the world.

All of these great experiences were made possible for me (with limited funding) by the IFSSH grant. Once again, many thanks!



**Name: Most Nurunnahar Begum**  
**Institution: Sheikh Hasina National Institute of Burn and Plastic Surgery, Dhaka, Bangladesh**  
**Country: Bangladesh**

I am currently working as an assistant professor of plastic surgery at the above Institute. I was eagerly looking forward to attend the APFSSH 2023 Congress in Singapore.

My 3 original articles on the congenital hand differences and electric hand burns were accepted for presentation at the Congress. But as a young plastic surgeon from a LMIC country, it was very difficult to bear all the expenses to make it possible. The registration fee was also very high, but it was made possible by the kind subsidy provided by the IFSSH grant.



I am so grateful to the IFSSH for making it possible for me to attend the conference.

Attending this conference gave me the opportunity to upgrade my knowledge, experience, attitude towards patients and skill for betterment of my patients. In my country we are overburdened by burn injuries.

Patients we usually manage are acute burns including devastating electric burns, post burn soft tissue defects, post burn scar contractures, post electric burn deformities with nerve and tendon loss, as well as trauma cases, and congenital hand differences.

Every session was amazing and so interactive. I have learned a lot and it was also very important for future collaboration and development of friendship. I would like to do research and try to adopt new concepts where appropriate, and in doing so, become a better hand surgeon.

Once again, I am grateful to IFSSH for giving me the opportunity to become a part of the conference. All the best!



**IFSSH Sponsored Educational Program  
WALANT workshop  
April 23-26, 2023 - Mombasa, Kenya**

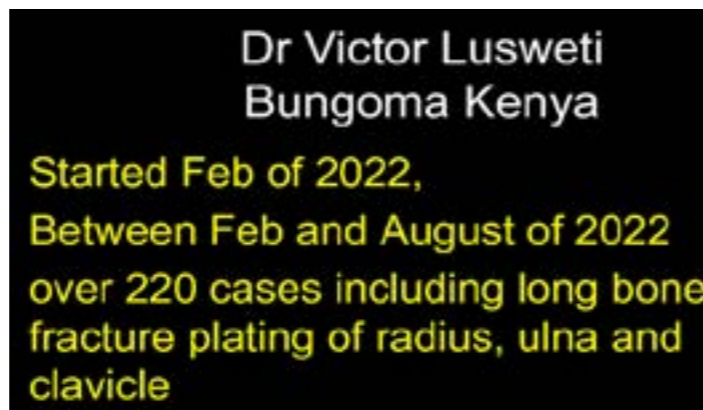
Dear colleagues of the IFSSH and BSSH, We are writing to report on the very well spent investment from the IFSSH and the BSSH for the worthwhile outreach and teaching project in April 23-26, 2023 in Mombasa Kenya.

With your generous support, we did fund 30 surgeons from 10 East African countries for 4 days of lectures and live surgery demonstrations.

1. Ethiopia
2. Uganda
3. Kenya
4. Tanzania
5. Malawi
6. Zambia
7. Burundi
8. Zimbabwe
9. Zanzibar
10. Ghana

These 30 surgeons were vetted by Professor Jani, the past president of COSECSA <https://www.cosecsa.org/> and others to be sure they would be most likely to go home to their hospitals and be champions for the cause of starting more affordable surgery with the same infection rates and patient comfort. Professor Jani organized their budgets to make certain that all of the money was invested wisely. With the help of the IFSSH, Prof Jani and I have organized one day Zoom/ live workshops that have resulted in starting WALANT minor procedure rooms in more than 12 hospitals in Kenya and Tanzania in the last 2 years. Professor Jani is passionate about spreading WALANT surgery throughout Kenya and surrounding countries as a means of alleviating poverty and making surgery safer, more accessible and affordable to the majority of Africans who currently do not have access.

Below are the numbers of patients who got surgery in two of those hospitals in their first year of WALANT minor procedure room surgery by two of the instructors of the course who started WALANT in their hospitals. Those patients would not have been able to afford the surgery before WALANT minor procedure room development.



**At the International Congress on Innovations in Global Surgery the 4 day course in Mombasa was attended by the 30 surgeons:**

- **Day 1** April 23 lectures from international and African surgeons who use WALANT
- **Day 2** April 24 live surgery and lectures with ICIGS <https://surgicalinnovations.org/wpp/> The international Congress of Innovations in Global Surgery, of which WALANT was a part. Please go to <https://www.youtube.com/watch?v=nf94e1Jlyrw> for a newsclip interview with Professor Jani on this event
- **Day 3** April 25 lectures with ICIGS and WALANT
- **Day 4** April 26 lectures with Lalonde

Some of the surgeons stayed on for 27 and 28 April with the 2023 Surgical Society of Kenya annual meeting <https://www.ssk.or.ke/2022-conference/> which contained 4 more WALANT lectures.

**Goals of the course that will almost certainly be accomplished with each surgeon.**

**At the end of the course, the 30 attendees were able to return to their hospitals and**

1. Eliminate the unnecessary use of the tourniquet and sedation for most extremity surgery
2. Eliminate unnecessary sedation with minimally painful injection of tumescent local anesthesia to anesthetize large areas of the body
3. Move many surgical procedures out of the main operating room with evidence based sterility (with no increase in infection rates) for many common procedures.

Each of these three things will increase access to surgery while improving safety, efficiency, and convenience for both patients and surgeons.

This course was also supported by the AAHS, as they also saw good value in teaching local African surgeons about WALANT so they can improve access to more affordable safer surgery to the poor of Africa.



**The International WALANT team (Champions) who all funded their own way to give the course. Amir Ahmad (Malaysia), Matt Jones (UK), Greg Kolovich (USA) Nik Jagodzinski (UK), Don Lalonde (Canada)**



**The entire faculty instructors in the WALANT course from left to right: Victor Lusweti (Kenya), Asif Admani (Kenya), Eliud Aluvaala (Kenya), Don Lalonde (Canada), Greg Kolovich (Savannah USA), Nik Jagodzinski (UK), Matt Jones (UK), Amir Ahmad (Malaysia) and absent from this photo Pankaj Jani (Kenya)**



**Prof Pankaj Jani preparing to give his talk**



**Dr. Donald Lalonde emphasizing a point**



Dr Asif Admani presenting WALANT in Mombasa where they have just started surgery in a new minor procedure room. Dr Victor Lusweiti ready to start his presentation.



The 30 surgeon attendees at the Sunday April 23 course who all took WALANT and minor procedure room surgery back to their home countries and hospitals. Their names, emails, and countries are listed separately in the Excel spreadsheet that is attached.



Don Lalonde and Pankaj Jani distribute instrument sets to surgeon attendees so they can go home and start WALANT surgery on 10 patients per day in minor procedure rooms.

| Diagnosis Of Live Surgery Cases         | Procedure                        |
|---|----------------------------------|
| 1. Two Ganglion cysts                   | Excision                         |
| 2. Carpal tunnel syndrome               | Carpal tunnel release            |
| 3. Right back lipoma                    | Excision                         |
| 4. Thumb schwannoma                     | Excision                         |
| 5. Distal radius fracture with malunion | Corrective osteotomy and plating |
| 6. Transverse patella fracture          | Tension band wire fixation       |
| 7. Flexor contractures of fingers       | Contracture release              |
| 8. Zone 2 flexor tendon injuries        | Tendon repair                    |



The 30 surgeons split to observe and participate in 4 simultaneous operations on 4 operating tables on the surgery day on Monday April 24.



Lipoma excision



Patellar fracture wiring performed under WALANT

Lecture Schedule for Sunday April 23

| TIME           | SPEAKER                               | TITLE OF TALK/ TOPIC   |
|----------------|---------------------------------------|--|
| 8:30 - 9:00    | Professor Pankaj Jani (Nairobi Kenya) | Introduction and the importance of WALANT for all of our patients                      |
| 9:00 - 10:00   | Professor Don Lalonde (Canada)        | Essentials of starting WALANT to improve access, safety, and surgery for our patients. |
| 10:00 - 10:30  | Dr. Eliud Aluvaala (Machakos Kenya)   | Overview of Walant in Kenya  |
| 10:30 - 11:00  | tea break                             |  |
| 11:00 - 12:00  | Dr. Amir Ahmad (Malaysia)             | Breaking barriers with WALANT: the future of fracture treatment                        |
| 12:00 - 12:30  | Dr. Victor Lusweti (Bungoma Kenya)    | Overview of Walant in Rural Kenya  |
| 12:30 - 1:00   | Dr. Asif Admani (Mombasa Kenya)       | Walant experiences in Mombasa  |
| 1:00 - 2:00    | LUNCH                                 |  |
| 2:15 - 2:45    | Mr. Nik Jagodzinski (UK)              | How and why to build a WALANT practice.  |
| 2:45 - 3:00 PM | Mr. Matt Jones (UK)                   | Why we know it is safe to move some main theater surgery to minor procedure rooms      |
| 3:00 - 4:00    | Dr. Greg Kolovich (USA)               | Advanced Applications of WALANT in Hand Surgery  |

Below are some of the reading materials, videos, video lectures, and power point slides that we provided to all the attendees, which we continue to communicate with on Whatsapp

A "must read paper and see videos" is how to not hurt patients when injecting large volume tumescent local anesthesia

[How to Minimize the Pain of Local Anesthetic Injection for W... : Plastic and Reconstructive Surgery – Global Open \(lww.com\)](#)

Here is a link to a great 2021 review of WALANT by Steve Koehler New York [Wide-awake Local Anesthesia with No Tourniquet: An Updated R... : Plastic and Reconstructive Surgery – Global Open \(lww.com\)](#) His paper is also inserted with this email.

Link to WALANT book 2nd edition (2021) Wide Awake Hand Surgery and Therapy Tips with over 500 videos [Orthopaedic Surgery | Wide Awake Hand Surgery and Therapy Tips \(thieme.com\)](#) Also available on Amazon.

**Here are some very useful power point presentations with many videos**

How WALANT is improving so many things surgeons do  
<https://www.mediafire.com/file/qn6o6fqsaa38sxc/RMH+Monday+lecture+Rwanda+how+wide+awake+surgery+is+changing+things+we+all+do.pptx/file>

How to inject tumescent local anesthesia in large parts of the body with minimal pain injection  
<https://www.mediafire.com/file/axdjwlvvnits5pj/Rwanda+how+to+inject+local+2nd+lecture.pptx/file>

evidence based sterility taking procedures out of the main operating room  
<https://www.mediafire.com/file/1gsjui0m06cm1g9/Rwanda+evidence+based+sterility+and+Canadian+model.pptx/file>

Challenges of implementing WALANT  
<https://www.mediafire.com/file/1k211j675x0f1nl/challen>

[ges+of+implementing+WALANT.pptx/file](#)

How to get better results in flexor tendon surgery  
<https://www.mediafire.com/file/g8g34epz9452bfl/Rwanda+flexor+tendon+repair+recon++Lalonde+60.pptx/file>

How to get better results in finger fracture management  
<https://www.mediafire.com/file/0yj6eoyon2nktw3/Rwanda+better+results+finger+fractures+Lalonde+20.pptx/file>

How to get better results in nerve decompression surgery  
<https://www.mediafire.com/file/ir0g4xnd4ahsin9/Rwanda+Better+results+nerve+decompression+40+Lalonde.pptx/file>

Managing wounds and infection  
<https://www.mediafire.com/file/rnqifz67xs5pqay/Rwanda+wounds+and+infection+management+2023+.pptx/file>

ICIGS Lalonde Essentials of WALANT 50 minutes Sunday  
<https://www.mediafire.com/file/425ts7d5kjt1x4y/Lalonde+Essentials+of+WALANT+50.pptx/file>

ICIGS Lalonde Monday 10 minutes WALANT to help eliminate poverty  
<https://www.mediafire.com/file/ex59yyh1o3pr92t/WALANT+in+Africa+to+eliminate+poverty+10.pptx/file>

ICIGS Lalonde Tuesday 5 minutes Technology to increase manpower  
[https://www.mediafire.com/file\\_premium/rszjevvi0v03fty/Lalonde\\_technology\\_enabling\\_WALANT\\_bridge\\_gap\\_in\\_surgical\\_access\\_low\\_resource\\_settings\\_5.pptx/file](https://www.mediafire.com/file_premium/rszjevvi0v03fty/Lalonde_technology_enabling_WALANT_bridge_gap_in_surgical_access_low_resource_settings_5.pptx/file)

Surgical Society of Kenya meeting Lalonde power point 8 minutes Thursday  
How WALANT is Making Surgery Safer and Affordable

to Help Alleviate Poverty  
<https://www.mediafire.com/file/1z1fds8w6icil14/SSK+2023+DL+WALANT+surgery.pptx/file>

Lecture on tendons and fractures power point Wednesday April 26,2023 on flexor tendons, transfers, fractures, and WALANT with new videos of recent cases <https://www.mediafire.com/file/vkex6wh4vv0vwa/2023+Mombasa+tendon+fracture.pptx/file>

Video of the tendon fracture lecture I gave Wednesday April 26,2023 on flexor tendons, transfers, fractures, and WALANT with new videos of recent cases <https://www.mediafire.com/file/uhadz35vzsaj1nt/Lalonde+getting+good+results+with+flexor+tendon+and+fractures+Mombasa+2023+226.mp4/file>

Respectfully submitted,  
**PROFESSOR PANKAJ JANI (KENYA)**  
**PROFESSOR DON LALONDE (CANADA)**

## WALANT WORKSHOP, INNOVATIONS IN GLOBAL SURGERY - APRIL 2023

During the last ten days of April 2023, Mombasa was graced by the annual Surgical Society of Kenya Scientific Conference. As part of the pre-conference workshop, Innovations in Global Surgery (ICIGS) hosted a WALANT workshop. The workshop was instructed by an international team of surgeons including Dr. Donald Lalonde (Canada), Dr. Nik Jagodzinski (UK), Dr. Matt Jones (UK), Dr. Amir Ahmad (Malaysia), Dr. Greg Kolovich (US). A variety of consultant surgeons from the COSECSA region also gave WALANT-themed presentations. Thirty attendees included surgical trainees thirteen different COSECSA countries benefited from this workshop.

The three-day WALANT workshop started at Coast General Teaching and Referral Hospital with lectures and discussions. Topics included WALANT basics, evidence-based use of adrenaline, different experiences with WALANT as well as a how-to guide on how to set up WALANT theatre. Cost implications and accessibility was also thoroughly discussed. Hand surgery tips and tricks were featured in several presentations. Lastly, the opportunity for young surgical trainees to network and interact with each other cannot be overstated. Attendees from thirteen different COSECSA countries were represented across plastic, orthopaedic and general surgery. The second day included practical training in the OR. Dr. Lalonde and his team gave the trainees hands-on teaching on how to prepare and safely administer WALANT. The third day of the even was held at the conference venue and featured more presentations on different applications of WALANT to the wider surgical community.

WALANT is an essential skill and has a variety of uses in global surgery. The low-cost feature allows for accessible and safe surgery. Tumescent anaesthesia also makes dissection easier. The added feature of

being able to evaluate hand function intra-operatively during tendon repair has also proven useful.

In our training hospital, we have already begun planning to set up a more permanent WALANT room as well as conduct local WALANT workshops. Most of the attendees have agreed that WALANT is going to be a game changer in the COSECSA region and we are all excited to see how this innovation can bring patients and surgeons together.

As a native of Mombasa, it was an honour to host such a workshop in our city. Special thanks to Prof. Pankaj Jani, Dr. Donald Lalonde and Dr. Asif Admani for organizing the event. We look forward in doing our part to spread the benefits of WALANT and provide safe and accessible surgery in our communities.

**DR. IMRAAN SHERMAN (Kenya)**

Plastic Surgery Resident (FCS-ECSA Candidate)  
Mulago National Teaching and Referral Hospital,  
Uganda



Having a chat with the instructors at the beach after a long day of lectures.

Left - Dr. Nik Jagodzinski, Dr. Donald Lalonde  
Right - Dr. Imraan Sherman, Dr. Matt Jones



Day 1- Dr. Donald Lalonde giving lecture on WALANT surgery,



Day 2- Learning the intricacies of minimally painful tumescent anaesthesia.

**Impact of WALANT on a Surgeon Trainee's Perspectives**

My name is Dr Mtonga Moses, a Plastic and Reconstructive Surgery Resident from Lusaka, Zambia but currently based in Kigali, Rwanda doing my training under The College of Surgeons for East, Central and Southern Africa (COSECSA). I'm in my 4th of 5 years of rotating through two main Hospitals in Kigali; The University Teaching Hospital of Kigali (CHUK) and Rwanda Military Hospital (RMH) under the the Supervision of Col. Dr Furaha Charles and Prof Ntirenganya Faustin.

It is such a great pleasure to be given this opportunity as one of the recipients of the educational training program that transpired in Mombasa, Kenya in April under the WALANT project. I should make mention that this was the second time I had an encounter with Prof. Lalonde over the WALANT project on Hand Surgeries. He came to Kigali, gave us amazing lectures from how to make the Tumescent fluid to how to perform these complex surgeries under WALANT, above all we even had an opportunity to operate with him on several Hand Surgeries which was mind blowing.

Fast forward, we got invited for the WALANT project happening in Mombasa via our collegiate, which we gladly accepted. In Mombasa, I got to see the application of tumescent fluid injection on different body parts be it a mastectomy by General Surgery or forearm plating by Orthopedic surgery and even experienced the procedures being done. Some local presentations really fascinated me about how WALANT rooms were started in Kenya, what materials were needed and how that progressed across the whole of Kenya. It is an understatement to say that no one has not heard of WALANT and its amazing benefits to the health system and how it can save the Hospital vast amount of money.

Lastly, I would say I'm one of the advocates for WALANT back here in Kigali and whenever we have

hand cases or we want to do skin grafting when the main OR is busy with emergencies. The only thing remaining is the possibility of making rooms specific for WALANT like how it's been done in Kenya. Otherwise it's a widely accepted innovation and saves a lot of money for both the Hospital and the patient.

**MOSES MTONGA**

Zambia/Rwanda



Pictures showing Dr Amir Ahmad taking us through a lecture on bony plating, myself posing with him after lectures and finally operating with the team in theatre.



# Hand Therapy for Chemotherapy-Induced Peripheral Neuropathy (CIPN)

## Introduction

This article introduces the rich potential that hand therapy has to offer patients with chemotherapy-induced peripheral neuropathy (CIPN) and presents a few key recommendations for treatment of CIPN of the hands. These treatment suggestions are based on over 10 years' experience of the primary author (CC) in treating patients with CIPN and learning from them. Chemotherapy-induced peripheral neuropathy in children may present differently from adults, due at least in part to different chemotherapy drugs being used (Gilchrist, 2017). For this reason, the information and recommendations presented here are intended for adults with CIPN.

In adults CIPN is defined as autonomic or somatic symptoms due to damage of the autonomic or peripheral nervous system caused by chemotherapy agents (Gutierrez-Gutierrez et al., 2010). People with pre-existing nerve problems are at higher risk of developing CIPN (Grisold et al., 2012). The incidence of CIPN depends in part on the drugs used but is often reported to be 68% or higher (Beutler et al., 2017). The problem of CIPN is believed to be under-reported, and the actual incidence is expected to grow (Beutler et al., 2017), (Cidon, 2012).

In our experience, the most effective time to initiate therapy for CIPN is as soon as symptoms arise. Our efforts to treat patients with longstanding CIPN symptoms have not been as successful as our results when treating symptoms very early on.

CIPN negatively affects ADL and overall quality of life (Mols et al., 2014). The severity of symptoms may necessitate chemotherapy dose reduction or discontinuation; this is called a dose-limiting factor (Majithia et al., 2016). Promoting symptom recovery helps patients maximally tolerate and benefit from chemotherapy treatment and can therefore be profoundly important to patients' lives and to their longevity.

Peripheral nerve vulnerability to CIPN is affected by the nerve's length, with longer nerves being more at risk than shorter nerves (Grisold et al., 2012). This explains why lower extremity CIPN may develop before upper extremity symptoms. CIPN in the lower extremity often affects proprioception and balance (Argyriou, 2020). Referral to physical therapy can be very helpful in such instances.

In the adult patients that we have seen, CIPN appears to impair sensory function more than motor function. Chemotherapy toxicity impact is not limited to peripheral nerves; other portions of the nervous system can be affected, from the sensory bodies in the dorsal root ganglion to the distal axon (Addington and Freimer, 2016). Most instances of CIPN involve both small nerve fibers and large nerve fibers (Gutierrez-Gutierrez et al., 2010). Nerve conduction studies are not entirely helpful in this population since they examine only large fibers, not small fibers (Gutierrez-Gutierrez et al., 2010).

“Symptoms tend to be worse on the volar surface of the hand...”

Symptoms tend to be worse on the volar surface of the hand and the plantar surface of the foot (Majithia et al., 2016). In the literature, CIPN is reported to start distally, and is described as occurring in a glove and stocking distribution (Seretny et al., 2014). But in the experience of the primary author (CC), looking at these adult CIPN patients from a hand therapist's perspective and using hand therapy sensory assessments, in fact the patients we have seen do NOT present with symmetrical glove and stocking sensory loss.

Most of our patients do not present symmetrically and they frequently demonstrate more sensory symptomatology in the median nerve distribution of the digits than in the ulnar nerve distribution. This observation is relevant because it allows us to focus our treatment strategies on the areas most implicated so we can be more effective.

Our observations of the sensory picture of patients with CIPN are based on our use of the TEN Test with CIPN patients (Strauch et al., 1997). This test reveals a different clinical picture of this population than what has been reported in the literature to date (Seretny et al., 2014). In our experience, sensory testing with monofilaments or two-point discrimination has not been informative. This is likely because the pathophysiology of CIPN is different from other diagnoses such as nerve entrapment or nerve repair.

We may be finding that the sensory effects of chemotherapy neurotoxicity cannot be appreciated by using our traditional tests for compression or receptor density. Such unanswered questions reflect the breadth of potential clinical research where hand therapists can be influential. We feel that the CIPN population's true sensory picture needs to be further explored and that hand therapists are best equipped to provide important and valuable information to the oncology profession in this regard.

The chemotherapy agents that are thought to contribute to CIPN include microtubule-stabilizing agents, platinum compounds, cisplatin, oxaliplatin, carboplatin, vinca alkaloids, proteasome inhibitors, thalidomide, and lenalidomide (Addington and Freimer, 2016). Those patients who are treated with platins may generally be more likely to experience allodynia or nerve pain, and those patients who are treated with taxanes may generally be more likely to experience numbness and tingling (Brewer et al., 2016). Combinations of these symptoms may also occur. Patients who report allodynia and/or nerve pain are more likely to demonstrate cold intolerance in our experience.

## Treatment Concepts

Patients often tell us during their treatment that their sensory symptoms feel improved, even at the first session. Post-treatment TEN Test findings support their subjective reports.

If their CIPN sensory symptoms were entirely attributable to actual neurotoxic damage, then we would not expect such immediate favorable responses. The CIPN patients we see often have decreased levels of activity, fatigue, and inactivity. They also frequently demonstrate poor posture. We conjecture that these patients are susceptible to subclinical edema (i.e., International Society of Lymphology stage 0 with no visible swelling). (Lymphology, 2016) and that our treatment helps stimulate lymphatic flow and promotes circulation, which likely helps normalize sensation.

This might explain why our patients would report such immediate relief during a therapy session. While treating, we recommend you ask your patients frequently "How does this feel?". Doing so helps them pay more attention to their sensory experience, which is therapeutic. We also suggest you teach them to really focus mentally and visually on the area of demarcation where normal sensation seems to become less than normal. This process may help restore their sensory cortical mapping.

Patients with CIPN benefit greatly from general oncology rehabilitation approaches that promote improved daily functioning, management of fatigue, instruction in energy conservation, provision of adaptive devices, and education about compensatory and protective strategies related to sensory impairment.

To add to the oncology rehabilitation repertoire based on our experience, we advocate treatment for CIPN that combines three categories: 1) edema control and gentle manual therapy; 2) active range of motion (AROM), gentle nerve slides and tendon glides; and 3) sensory rehabilitation. Do not cause pain. Use a calming voice and offer reassurances as appropriate. If sensory pain is reported, as associated with platins, we find it very helpful to apply paper tape over the painful areas (See figures 1 and 2).



Fig 1. Paper tape over painful finger pad



Fig 2. Paper tape over painful fingernail tip

This simple strategy has helped some of our patient resume work at the computer, which had otherwise been too painful to perform. Other simple treatment suggestions follow:

#### Manual Therapy

Emphasize edema control, starting with deep breathing and incorporate breathing throughout all aspects of the treatment. Light nonadherent compressive wraps may be useful but must not be tight.

- Manual edema mobilization (MEM) may be appropriate if the lymphatic system is intact. It is advisable to discuss this option with the oncologist as needed. Do not perform MEM if the

lymphatic system has been disrupted. In those cases, refer to a qualified lymphedema therapist who may consult with the oncologist regarding precautions.

- Perform gentle transverse carpal ligament stretch and simultaneously ask the client to actively extend and abduct the digits comfortably.
- Perform gentle mobilizations of hand/digits as appropriate.
- Myofascial techniques (MFR) may be very helpful.

#### Active Range of Motion/Nerve Slides and Tendon Glides

- Teach AROM in pain-free ranges, bilaterally, including trunk motion and scapular stabilizing motions.
- Perform tendon gliding exercises as comfortable, including FDP and FDS, using good posture.
- Try soft isometric exercises of wrist and hand muscles including digital abduction/adduction.

#### Sensor Rehabilitation

- Explain neuroplasticity in simple language and teach that sensory symptoms are reinforced by disuse.
- Many patients like pleasant vibratory stimulation over symptomatic areas.
- Perform sensory rehabilitation based on hand therapy's body of knowledge (Rosen et al., 2021). Perform these interventions bilaterally from proximal to distal and include the non-involved areas that are adjacent to the involved areas.
- Ask the patient to mentally and visually note where the demarcation is for normal versus impaired sensation.
- Encourage frequent tactile exploration of objects with different textures, surfaces, and shapes. Try to select sensory objects and materials that are meaningful to the client.
- Incorporate laterality, graded motor imagery, and mirror box therapy interventions.

#### Marketing Ideas

In the United States, it is not typical for oncology groups to refer patients with CIPN to hand therapists, and for this reason we are concerned that people with CIPN may not have easy access to our valuable services. In our experience, patients who have benefited from our CIPN treatment have often told their doctors how valuable hand therapy intervention has been to them. That has led to more referrals. Our patients have also told their 'transfusion buddies', who have then requested referral to hand therapy.

Seek out nurse navigators and/or referral coordinators in oncology groups. Explain that any patient who is experiencing sensory symptoms (pain, numbness, tingling) or weakness is a good candidate for referral. Provide a simple referral sheet and make the process as easy as possible for the referrers. If the patient tells you that your treatment has been valuable and effective, encourage the patient to tell this to their doctors.

#### Conclusion

This introductory article has described CIPN and identified some of the unique areas of contribution that hand therapists are well-suited to offer.

CIPN is a largely unexplored area ripe for further research, including basic descriptions of the qualities of sensory loss in CIPN using hand therapists' sensory tools and knowledge.

Several treatment ideas have been presented. We encourage you to explore the needs of your patients with CIPN and to develop highly individualized home programs for them. Be prepared for the possibility of personally touching and rewarding work with these patients, whose quality of life will most likely be improved by your care and expertise.

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**IFSHT NEWSLETTER - REACH VOLUME 3, NO. 2**

Issue 2 of volume 3 of the IFSHT newsletter is now available on the IFSHT website. Please check out the following link to access it:

[https://ifsht.org/publications/?publications\\_category=29](https://ifsht.org/publications/?publications_category=29)

The publication aims to collate Research, Education, Achievement and Clinicians in Hand and upper limb therapy around the world.

In this edition of REACH we look to the future; consider how knowledge expands and how hand therapists can move with the tide with our continued

new section on how to write and publish research and horizon scanning for ongoing research which may affect our practice in the near future. It seemed pertinent then that this issue feature clinical pearls on the use of 3D printing, a technology that has now become mainstream in recent years.

This issue's Spotlight On! Section features the British Association of Hand Therapists, we also continue our new "Volunteer" section and ongoing profiles of recipients of the prestigious IFSHT Lifetime Achievement Awards.

We call on hand and upper limb therapy clinicians and researchers to submit any contributions for consideration to: [informationofficer@ifsht.org](mailto:informationofficer@ifsht.org)

The IFSHT is excited to present edition eight of the quarterly newsletter, REACH. The publication aims to collate Research, Education, Achievement and Clinicians in Hand and upper limb therapy around the world.

**UPCOMING EVENTS**

It's now over a year now since the last Joint Triennial Congress in London. Now fast approaching is the next Joint Triennial Congress in Washington in 2025.

The website for this event is launched so please follow for updates!  
<https://www.ifssh2025.org/s/>



*Art Exhibit #18*

**Title: "Holding Hands of Promise"**

**Kang, Hee Duk (1948 - )**

**- Korean sculptor 2007, marble, Seoul-Forest Park in Seoul, Korea**



# 2024



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### Main theme

Innervate and excite

### Abstract submission deadline

30 November 2023

### Instructional Course

Peripheral nerve surgery of  
upper extremity

### Author notification

10 January 2024

### Congress dates

26-29 June 2024

### Venue

De Doelen ICC, Schouwburgplein 50



Congress President:  
Brigitte van der Heijden



Congress President:  
J. Henk Coert



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# Re-published Article

## "RETURN TO PLAY AFTER THUMB ULNAR COLLATERAL LIGAMENT INJURIES MANAGED SURGICALLY IN ATHLETES" -A SYSTEMATIC REVIEW - JOURNAL OF HAND SURGERY GLOBAL ONLINE



Journal of Hand Surgery Global Online 5 (2023) 349–357



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Journal of Hand Surgery Global Online

journal homepage: [www.JHSGO.org](http://www.JHSGO.org)

Original Research

### Return to Play After Thumb Ulnar Collateral Ligament Injuries Managed Surgically in Athletes—A Systematic Review



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**Purpose:** The purpose of this systematic review was to summarize the available data on how surgical management of injuries to the thumb ulnar collateral ligament (UCL) complex affects athletes and their return-to-play (RTP) and postinjury performance metrics in addition to evaluating rehabilitation guidelines.

**Methods:** A systematic search was performed on PubMed and Embase databases for articles on outcomes of surgical treatment of thumb UCL injuries in athletes. Articles with expert recommendations on postoperative management and RTP guidelines were also included separately. Study characteristics were recorded, including sport, RTP rates, and data on performance. Recommendations were summarized by sport. The Methodological Index for Non-Randomized Studies (MINORS) criteria was used to assess methodological quality. The authors also present their recommended return-to-sport algorithm.

**Results:** Twenty-three articles were included, including 11 with reports on patients and 12 expert opinions on guiding RTP. The mean MINORS score for the applicable studies was 9.4. In the 311 patients included, RTP was 98.1% in aggregate. No performance detriments were noted in athletes after surgery. Thirty-two (10.3%) patients had postoperative complications. The recommendations on timing to RTP vary by sport and author, but all recommended initial thumb protection when returning to sport. Newer techniques, such as suture tape augmentation, suggest the permission for earlier motion.

**Conclusions:** Return-to-play rates after surgical treatment of thumb UCL injuries are high, with reassuring return to preinjury level of play with few complications. Recommendations for surgical technique have trended toward suture anchors and, now, suture tape augmentation with earlier motion protocols, although rehabilitation guidelines vary by sport and author. Current information on thumb UCL surgery in athletes is limited by the low quality of evidence and expert recommendations.

**Type of study/level of evidence:** Prognostic IV.

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Tears to the ulnar collateral ligament (UCL) of the thumb metacarpophalangeal (MCP) joint are commonly sustained sports injuries, with an incidence of approximately 50 per 100,000 emergency room visits per year.<sup>1</sup> Occurring through extreme radial

stress to the MCP joint, thumb UCL injuries most often result from avulsion of the ligament from its distal insertion on the proximal phalanx.<sup>2</sup> These injuries can occasionally be complicated by avulsion fractures of the base of the proximal phalanx of the thumb and are sometimes associated with Stener lesions, in which the aponeurosis of the adductor pollicis becomes interposed between the UCL and its attachment site on the proximal phalanx.<sup>3,4</sup>

Stable injuries, or in other words grade I thumb UCL sprains (tenderness along the UCL without laxity) and grade II thumb UCL injuries (increased laxity with a firm end point on stress testing), may be successfully managed nonsurgically, and patients typically have no long-term pain or disability.<sup>5</sup> Nonsurgical treatment typically involves immobilization, which may involve thumb spica

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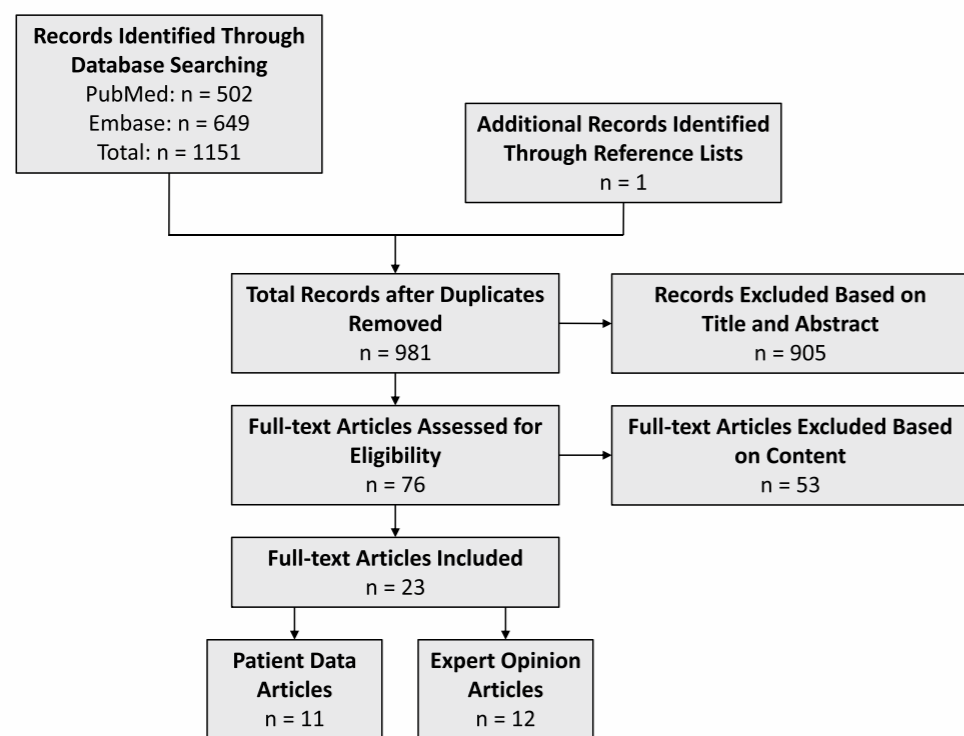


Figure 1. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart for study inclusion. Twenty-three full-text articles were included.

casting (short-arm or hand-based), custom thermoplast splints, removable thumb spica splints, and functional braces.<sup>6</sup> The period of immobilization before initiating motion exercises varies but is typically approximately 4 weeks, and the goal is to protect the MCP joint and reduce pain and inflammation.<sup>5–7</sup> On the other hand, although partial thumb UCL tears can be treated by immobilization, Stener lesions and acute full thickness tears with instability are managed through surgical intervention because these UCL injuries frequently result in decreased pinch strength, instability, and reduced range of motion (ROM) of the thumb.<sup>3,5,8,9</sup> These functional impairments and the goal of limiting long-term joint degeneration support surgical treatment for unstable injuries.

The importance of restoring stability and function is especially important in those who use their hands frequently. For example, in high-level athletes, this injury may affect performance and, therefore, job and career potential. Furthermore, if they require surgery, athletes may also lose playing time for wound and ligament healing in addition to immobilization after surgical management. Athletes also have increased risk for future injury during both noncontact and contact sports. Therefore, identifying an optimal surgical technique and rehabilitation protocol to facilitate return-to-play (RTP) in a safe and reliable manner is imperative, especially for athletes or those with substantial demands on their hands. Considerations for athletes include their hand dominance, specific sporting demands, practicality of playing with immobilization of the thumb, timing in season or career, and patient-specific goals.<sup>7</sup> However, data on RTP after thumb UCL injuries in athletes have remained sparse and heterogeneous in the literature perhaps because of evolving surgical techniques, the unique demands of different sports and playing positions, and the difficulty of conducting comparative studies on elite athletes.

The purpose of this systematic review was to summarize the available data on how surgical management of injuries to the

thumb UCL complex affects athletes and their RTP and postinjury performance metrics in addition to evaluating rehabilitation guidelines. The authors hypothesized that RTP would be high and athletes would have minimal performance detriments after surgery; furthermore, we hypothesized that the recommended timing for RTP would have substantial variation.

**Materials and Methods**

This systematic review was registered on the International Prospective Register of Systematic Reviews (CRD42022300157). The study adhered to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Fig. 1). A systematic search using the PubMed and Embase databases was performed in December 2021 for the following search terms: (thumb) AND ((UCL) OR (ulnar collateral)). Studies were included if they were written in the English language and discussed surgical management of thumb UCL injuries in an athlete population, whether professional or nonprofessional. The authors sought data on RTP of sports and not return to work specifically. Expert opinions on management of athletes were included and summarized separately; the purpose of including these articles was to evaluate the variability in recommendations by technique. Review articles or technique articles without patients or expert opinion on management were excluded. Studies reporting on one patient (ie, case reports) were excluded from data analysis.

The screening and selection process was performed independently by two authors for inclusion (J.W.K. and S.A.) in a staged process from titles to abstracts to full-text review. Any article identified as eligible by one author was included in subsequent review.

Data collected from the included articles included publication characteristics, such as the year it was published, study design, and

Table 1 Summary of RTP and Performance Data

| Author, Year*                     | No. of Patients                          | Follow-Up Time                  | MINORS Score | Sport  | Surgical Technique   | RTP Time frame  | Performance Data  | Complications   |
|-----------------------------------|--|---------------------------------|--------------|--|--|---|---|---|
| McCue et al. <sup>11</sup> 1974   | 41                                       | Not stated                      | 8            | Mix of sports (football, wrestling, skiing, baseball, basketball, lacrosse, polo, softball, and horse jumping) | "Reattachment of the ligament to periosteum and bone with a pull-out wire"   | NA  | 40/41 (97.6%) RTP at preinjury level  | 1/40 (2.5%) with osteoarthritis, weakness, stiffness, and pain of the MCP joint     |
| Derkash et al. <sup>12</sup> 1987 | 69                                       | 31.6 mo (range, 16–46 mo)       | 7            | Skiing   | Suture button + prolene 3-0 prolene  | NA  | 66/69 (96%) RTP at preinjury level<br>Mild weakness of pinch in 31/69 (44.9%), moderate weakness in 2/69 (2.9%), and severe weakness in 1/69 (1.4%) | 3/69 (4.4%) could not RTP because of pain or fear of reinjury                       |
| Lane. <sup>13</sup> 1991          | 36                                       | 3.9 y (range, 2.0–8.5 y)        | 11           | Mix of sports (football, tennis, skiing, and wrestling)  | Old technique: pullout suture, K-wire fixation of joint<br>New technique: suture to adductor pollicis or UCL remnant, K-wire fixation of bony avulsion, no fixation of joint | RTP some level, earlier in new-technique patients<br>Old: 8.8 ± 2.3 wk<br>New: 4.6 ± 1.4 wk<br>RTP previous level, earlier in new-technique patients<br>Old: 14.1 ± 4.0 wk<br>New: 10.2 ± 2.6 wk<br>Immediately after surgery | Old: 7/7 (100%) RTP at preinjury level.<br>New: 29/29 (100%) RTP at preinjury level   | Failure of repair at 2 wk in 1/36 (2.7%), rerupture in 1/36 (2.7%) at 9 mo          |
| Zeman et al. <sup>14</sup> 1998   | 45                                       | 18 mo (12–26 mo)                | 8            | Skiing and mountain biking   | Suture anchor + 2-0 PDS  | 8 wk permitted: all patients returned to activities within 3 mo   | 44/45 (97.8%) RTP at preinjury level and had no complaints of instability at MCP joint  | 7/45 (15.6%), numbness 3/45 (6.7%), pain with activities 12/45 (26.7%), reduced ROM |
| Badia. <sup>24</sup> 2006         | 12                                       | Mean, 34.2 mo (range, 12–84 mo) | 7            | Sport not specified  | Arthroscopic debridement + K-wire fixation of the bony avulsion  | 8 wk permitted: all patients returned to activities within 3 mo   | 36/36 (100%) RTP at preinjury level   | None  |
| Werner et al. <sup>22</sup> 2014  | 18                                       | 6 y (range, 2.5–9.5 y)          | 10           | Football   | Suture anchor + braided polyester suture   | 4 wk of nonskilled position, 7 wk of skilled position   | 18/18 (100%) RTP at preinjury level. No significant differences in QuickDASH scores for skill vs nonskill position players                          | None  |
| Werner et al. <sup>23</sup> 2017  | 26 (17 isolated UCL; 9 combined UCL/RCL) | Not stated                      | 11           | Football   | Suture anchor, braided polyester suture  | 6 wk  | 26/26 (100%) RTP at preinjury level, including 17 isolated UCL and 9 combined UCL + RCL   | None  |

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Table 1 (continued)

| Author, Year                         | No. of Patients | Follow-Up Time | MINORS Score | Sport  | Surgical Technique                                   | RTP Time frame   | Performance Data   | Complications  |
|--------------------------------------|-----------------|----------------|--------------|--|--|--|--|--|
| Jack et al. <sup>27</sup> 2018       | 21              | At least 1 y   | 11           | Baseball   | NA   | Total: 120.0 ± 75.9 d<br>In season: 56.2 ± 15.0 d  | 21/21 (100%) RTP at preinjury level. Infielders had a lower rate of postoperative wounds above replacement relative to before surgery. However, no differences in performance relative to controls, no difference based on hand dominance of injury, and no decrease in games per season or career length after injury | None   |
| Sochacki et al. <sup>28</sup> 2019   | 23              | At least 1 y   | 10           | Football   | NA   | Total: 132.2 ± 126.1 d<br>In season: 34.8 d  | 22/23 (95.7%) RTP at preinjury level; 1-y NFL career survival rate of 87.0%. No differences in positions or compared with matched controls   | 1/23 (4.3%) failed medical physical examination after surgery, unknown if related to surgery |
| Gibbs and Shin, <sup>30</sup> 2020   | 17              | At least 1 y   | 10           | Mix of sports (baseball, basketball, hockey, and volleyball) | Suture anchor, suture tape, braided polyester suture | Total: RTP some level, 50.5 ± 53.77 d<br>RTP same level, 58.5 ± 56.31<br>In season: RTP some level, 30.9 ± 10.06 d<br>RTP same level, 36.3 ± 11.22 | 17/17 (100%) RTP at preinjury level  | None   |
| Bernstein et al., <sup>29</sup> 2020 | 3               | 1 y            | 10           | Football   | Suture anchor, braided polyester suture              | 13.3 ± 2.9 d   | 3/3 (100%) RTP at preinjury level  | 3 ipsilateral PIP joint dislocations in two-third patients (67%)                             |

DASH, Disabilities of the Arm, Shoulder, and Hand; MINORS, Methodological Index for Non-Randomized Studies; NA, data unavailable; PDS, polydioxanone suture; PIP, proximal interphalangeal; RCL, radial collateral ligament.  
\* Articles are listed in chronological order.

Table 2  
Summary of Expert Opinions/Recommendations on Return to Sport

| Sport—Articles (Author, Year)*                              | Surgical Technique   | Rehabilitation   | RTP Timing   |
|---|--|--|--|
| Hockey<br>Schroeder and Goldfarb, <sup>3</sup> 2015         | Suture anchor + nonabsorbable sutures. If bony fragment > 20% articular surface, fix with a K-wire or screw                          | Thumb spica cast for 4 wk after surgery, then hand-based thumb spica splint for 4 more wk  | NA   |
| Basketball<br>Carlson, <sup>17</sup> 2012                   | Suture anchor + nonabsorbable sutures. Transfix MCP joint with K-wire when early RTP is required                                     | Hand-based thumb spica splint for 6 wk after surgery, then cut down the cone splint over the thumb for 6 wk  | 6–8 wk, shorter if can be splinted during play   |
| De Giacomo and Shin, <sup>31</sup> 2017                     | Suture anchors with suture tape augmentation   | Plaster splint for 3 d. Hand-based thumb spica splint with beginning of ballhandling drills at 8 d after surgery. Strengthening, shooting, and position-specific drills begin at 3 mo  | 5 wk unprotected   |
| Football<br>Williams, <sup>19</sup> 2012                    | Suture anchor  | Hand-based casting or splinting for 2–3 wk with IPJ free, then begin ROM. Strengthening at 6 wk. Continue immobilization during play until 6–8 wk, and then athletic taping for the remainder of the season  | 2 wk to allow wound healing  |
| Schroeder and Goldfarb, <sup>3</sup> 2015                   | Suture anchor + nonabsorbable sutures. If bony fragment > 20% articular surface, fix with a K-wire or screw                          | Thumb spica cast for 4 wk, then hand-based thumb spica splint for 4 wk   | NA   |
| Baseball<br>Chhor and Culp, <sup>18</sup> 2012              | Suture anchor + nonabsorbable sutures. K-wire to transfix MCP joint. A small screw or pin for avulsion fracture                      | Forearm-based thumb spica splint with IPJ free. Pin removal and ROM at 4 wk after surgery. Strengthening at 6–8 wk in the nonthrowing arm or 10–12 wk in the throwing arm  | Nonpitcher RTP when ROM and strength 80% of contralateral. Pitcher RTP when ROM and strength 100% of contralateral |
| Schroeder and Goldfarb, <sup>3</sup> 2015                   | Suture anchor + nonabsorbable sutures. If a bony fragment > 20% articular surface, fix with K-wire or screw                          | Nonthrowing arm: immobilization for 6 wk after surgery, then progressive ROM/strengthening with hand-based thumb spica splint or cutdown dorsal radial splint for 4 more wk<br>Throwing arm: immobilization for 6 wk after surgery, then progressive ROM/strengthening   | "In elite athletes, sport-specific algorithms may allow earlier return to play"                                    |
| Sport unspecified<br>Morgan and Slowman, <sup>15</sup> 2001 | No mention of the technique for ligamentous injury. For bony injury, recommend tension band wiring or interfragmentary screw         | High-contact sport: Thumb spica gauntlet cast for 4 wk after surgery. Then, begin ROM and strengthening with a protective thermoplastic splint for 2 wk, followed by 6 more wk of rigid athletic taping<br>Low-contact sport: Thumb spica gauntlet cast for 4 wk. Then, begin ROM and strengthening with a thermoplastic short opponens splint | Immediate  |
| Johnson and Culp, <sup>16</sup> 2009                        | Suture anchor + nonabsorbable sutures. Transfix MCP joint with a K-wire<br>For fracture, fix with screw, pin, or tension band wiring | Thumb spica splint with IPJ free. At 7–10 d after surgery, remove sutures, begin IPJ ROM, and place in a thermoplastic thumb spica splint. At 4 wk, remove pin, begin MCP joint ROM, and continue splinting. At 6–8 wk, splint only during play. At 12 wk, discontinue splint during play, and continue athletic taping indefinitely           | 4 wk for protected play and 12 wk for unprotected play with taping   |
| Ng and Hayton, <sup>21</sup> 2013                           | Suture anchor<br>For fracture, screw or tension band wiring  | Full-time radial blocking splint for 6 wk with immediate flexion/extension with a therapist. Then, continue radial blocking splint only during play until 12 wk  | Immediate  |

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| Sport—Articles (Author, Year)*     | Surgical Technique  | Rehabilitation  | RTP Timing  |
|------------------------------------|---|---|---|
| Dy et al. <sup>20</sup> 2013       | NA  | NA  | Protected play:<br>5/36 surgeons recommended RTP immediately after surgery, 20/36 surgeons recommended 2 wk, 10/36 surgeons recommended 6 wk, and 1/36 surgeons recommended 3 mo<br>Surgeons treating football athletes tended to have earlier RTP, and those treating basketball athletes tended to have later RTP<br>Unprotected play:<br>23/36 recommended 3 mo after surgery<br>2 wk to allow wound healing |
| Goldfarb et al. <sup>25</sup> 2016 | Suture anchor + nonabsorbable suture  | Thumb spica cast for 3 wk after surgery, then early ROM. Thumb spica splint until 6–8 wk, and then cutout cone splint until 12 wk<br>Cast for 6 wk after surgery, then ROM and removable splint for 4 more wk. Strengthening begins at 8 wk after surgery | RTP "early on" if immobilization allowed and sport does not require use of the thumb  |
| Owings et al. <sup>26</sup> 2016   | Suture anchor. Midsubstance tears repaired directly with nonabsorbable braided sutures            | Hand-based thumb spica splint with IPJ free for 6 wk after surgery, and during sports until 3 mo. Finger and thumb IPJ motion begins immediately. MCP joint ROM begins at 6 wk  | Immediately after surgery   |
| Avery et al. <sup>5</sup> 2017     | Suture anchor + nonabsorbable sutures. Transfix MCP joint with K-wires when early RTP is required | NA  | NA  |

NA, data not available; IPJ, interphalangeal joint.  
\* Articles are organized by sport. The article by Schroeder and Goldfarb<sup>3</sup> is listed multiple times throughout the table on the basis of recommendations by sport. The article by Dy et al.<sup>20</sup> represents data from surveys of NFL, National Basketball Association, and Major League Baseball surgeons.

level of evidence; sport played; and outcome measures from the studies themselves. Methodological quality of the articles was assessed using the Methodological Index for Non-Randomized Studies (MINORS) criteria by two independent reviewers (J.W.K. and S.A.).<sup>10</sup> MINORS scoring was applied to all articles with patients. Data were aggregated for qualitative and descriptive analyses. The authors also present their recommended return-to-sport algorithm.

**Results**

Twenty-three articles met the criteria for inclusion (Fig. 1).<sup>3,5,11–30</sup> Eleven (47.8%) articles were patient case series (level IV evidence), and 12 (52.2%) articles were expert opinions and recommendations on RTP (level V evidence).<sup>3,5,11–31</sup>

Of the case series studies, six (54.5%) were published in 2014 or after.<sup>22,23,27–30</sup> The MINORS score for the patient-based studies, each of which was noncomparative, averaged at 9.4 (range, 7–11) (Table 1).

*RTP and performance*

The summary of RTP data in the 11 articles reporting on patients is provided in Table 1.<sup>11–14,22–24,27–30</sup> The sports included were American football, soccer, basketball, baseball, skiing, hockey, and a mix of general/unspecified sports.

In total, 311 patients were included in patient-based articles. In general, the rate of RTP was high in all sports/articles, with all studies reporting a RTP rate of >96% and most reporting a RTP rate of 100%. In aggregate, the rate of RTP at the same level as preinjury after surgical treatment was 305 (98.1%) of 311. The RTP time frame ranged widely from immediately after surgery to >4 months in athletes out of season. Studies that evaluated athletes both in- and out-of-season reported sooner RTP in-season.<sup>27,28,30</sup>

In terms of performance, in addition to a high rate of return to a similar preoperative level of play, Jack et al<sup>27</sup> and Sochacki et al<sup>28</sup> found no performance metric detriments relative to matched controls in Major League Baseball (MLB) and National Football League (NFL) athletes, respectively.

The surgical technique that was used varied by patient series (Table 1). Wire fixation was used in three studies, each from 2006 or earlier.<sup>11,13,24</sup> Braided sutures along with suture anchors were specifically noted in articles from 2014 and later.<sup>22,23,29,30</sup>

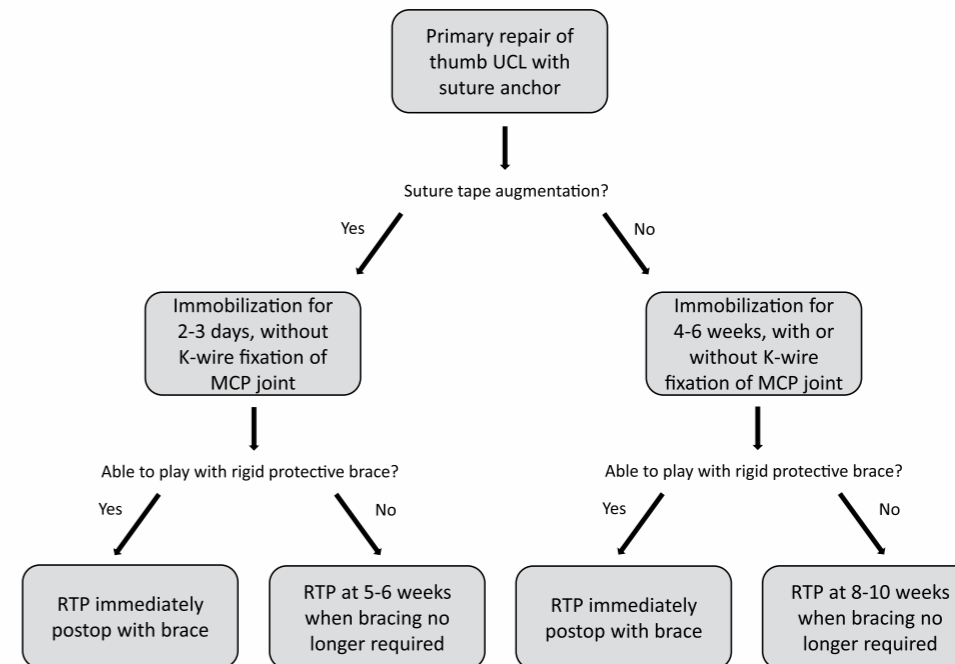
A total of 32 (10.3%) patients were reported to have postoperative complications. Only two (0.64%) patients, both in the study by Lane,<sup>15</sup> were reported to have failure of repair or rerupture during the study period.

*Survey section and recommendations on RTP*

Expert opinions and recommendations are summarized by sport in Table 2.<sup>3,5,15–21,25,26,31</sup> The recommendations on timing to RTP vary by sport and author. Injuries with unstable bony components were recommended to be fixed with wires, screws, or tension band constructs by all authors commenting on these injuries.<sup>3,15,16,18,21</sup> Some authors advocated for transfixing the MCP joint to ensure stability of the construct before beginning ROM exercises.<sup>5,16–18</sup>

All authors recommended initial immobilization in rehabilitation and protection of the thumb when returning to sports.<sup>3,5,15–21,25,26,31</sup> The timing of return varied. Some authors recommended specific time frames, such as after 2 weeks for wound healing or after several weeks.<sup>16,17,19,25,31</sup> Immediate return to sporting activity was also suggested by several experts.<sup>5,15,21</sup>

On the other hand, RTP was also guided by sport, rehabilitation criteria, and hand dominance, particularly in baseball.<sup>3,18,26</sup> Chhor



**Figure 2.** The authors' recommended postoperative treatment and return-to-play (RTP) algorithm after thumb ulnar collateral ligament (UCL) repair in athletes. The recommendations in this flowchart represent our experience in consideration of the data reviewed in this study. MCP, metacarpophalangeal.

and Culp<sup>18</sup> stratified RTP criteria by position, requiring pitchers to have better strength and ROM relative to nonpitchers before RTP (100% strength and ROM relative to contralateral for pitchers vs 80% strength and ROM relative to contralateral for nonpitchers).

Dy et al<sup>20</sup> surveyed team physicians in the NFL, the National Basketball Association (NBA), and MLB on RTP after thumb UCL tears. Although there was heterogeneity in the recommended time to RTP, most (20 of 36, 55.6%) recommended 2 weeks for protected RTP.<sup>20</sup> Interestingly, those who treated football athletes were more likely to recommend earlier protected RTP than nonfootball-treating surgeons, and those who treated basketball athletes were less likely to recommend earlier protected RTP than nonbasketball surgeons.<sup>20</sup> Accordingly, Williams<sup>19</sup> recommended RTP at 2 weeks for football athletes and Carlson<sup>17</sup> recommended RTP at 6 to 8 weeks for basketball athletes, although if they could play protected, play may be allowed sooner. For unprotected RTP, 23 of the 36 (63.9%) surveyed recommended waiting 3 months, which is similar to the protocol suggested by Johnson and Culp.<sup>16,20</sup>

**Discussion**

The present systematic review summarizes data and recommendations in the literature on RTP for athletes sustaining injuries to the thumb UCL complex that were managed surgically. Overall, the included studies on patients were all level IV evidence and noncomparative in nature. Return-to-play rates were high, and athletes returned to pre-injury competitive levels regardless of the sport played. Few complications have been reported in the literature even in high-level and high upper extremity-demand athletes. Rehabilitation guidelines appear to vary by sport, technique, and author; some authors recommend time-based RTP, whereas others recommend metric-based RTP. This study, therefore, supports the authors' hypotheses of high RTP rates, minimal postoperative performance detriments, and heterogeneity in RTP criteria.

The overall RTP rate in the literature exceeded 98% in aggregate. This rate of return is high relative to the RTP rates after orthopedic surgeries cited in the NBA and NFL.<sup>32–34</sup> In NBA players, one of the most reliable RTP rates previously investigated is that after hand or wrist fractures, noted to be 98.1%.<sup>32,33</sup> Similarly, a study in NFL athletes found one of the highest RTP rates after orthopedic surgery to be 96.3% after forearm fracture open reduction internal fixation.<sup>34</sup> In general, it appears that although hand and wrist injuries may ostensibly be intricately related to sport, players fare well after appropriate treatment.

For those who did return to sports, all athletes returned at the same level as that before injury. Additional performance metrics were scarce in the available literature relative to other procedures. For example, many other data on performance after injury or surgery delve into game-play statistics and career longevity.<sup>32–36</sup> In the NFL, thumb UCL sprains may account for 4% of hand and digital injuries and have been reported to result in a mean of 23 days of missed play.<sup>37</sup> Sochacki et al<sup>28</sup> found that after thumb UCL surgery in NFL athletes, they had no decrease in games per season or career length, and data did not differ by position or relative to matched controls. In MLB, Jack et al<sup>27</sup> found infielders to have a lower rate of postoperative wins above replacement relative to that before surgery; however, these authors did not find a decrease in games per season, career length, or other performance statistics relative to matched controls, and there was no difference based on hand dominance of the injury.<sup>27</sup> Future studies on thumb UCL injuries treated surgically in athletes should continue to evaluate sport-specific data, which may guide trainers and coaches to target areas prone to performance detriment and may direct counseling of athletes on postoperative expectations. In addition, specific combined injuries, such as combined UCL/radial collateral ligament injuries, as seen in NFL athletes or with MCP joint dislocations, require further study and comparison to isolated UCL injuries.<sup>23,38</sup>

Although not clearly apparent from the included studies, recent data are encouraging for early motion after surgical treatment of

thumb UCL injuries. Biomechanical data suggest the safety of controlled active motion therapy after surgical repair of the thumb UCL.<sup>39</sup> Furthermore, several studies support better outcomes with early mobilization than with immobilization. Those with earlier motion protocols may have quicker return to work, similar or better ultimate ROM, better pinch strength, and fewer complications.<sup>40,41</sup> In concordance with the trend to earlier motion, fewer of the recent studies included in this review incorporated MCP joint immobilization with temporary Kirschner wires, although some authors continue to advocate for its use to provide stabilization for earlier RTP.<sup>5,16–18</sup> Earlier motion protocols are also facilitated by the use of suture anchors, which were more commonly used in the recent studies.

In addition to suture anchors with braided sutures, suture tape augmentation is gaining in popularity for thumb UCL repair.<sup>8,30,31,42–46</sup> Suture tape augmentation appears to provide superior biomechanical strength in terms of stiffness and load-to-failure than suture anchors or graft reconstructions.<sup>42,46</sup> The advantage of additional strength immediately after surgery is the provision of inherent stability before the effects of biological healing.<sup>46</sup> On the other hand, concerns have been raised regarding mechanical stress shielding and its effect on the ultimate strength of the ligament.<sup>47</sup> Thus far, studies on suture tape augmentation for thumb UCL injuries have all been favorable in terms of permitting early motion and, therefore, facilitating return to sports, and these findings appear similar to the early biomechanical and clinical results on the use of tape augmentation for injuries such as elbow UCL and ankle instability.<sup>8,30,31,42–46,48–52</sup> However, the current study included only two articles that employed suture tape augmentation because there remains a dearth of literature on the long-term outcomes for the suture tape technique. Therefore, more longitudinal studies are needed to determine whether suture tape augmentation will become the standard of operative care for high-level athletes. It is possible that thumb spica casting and bracing may increase the risk of nearby joint dislocations; hence, earlier motion may also prevent additional injury.<sup>29</sup>

Based on this review of extant data and recent trends in surgical technique in combination with our own experience with the treatment of thumb UCL injuries, we believe that primary repairs using suture anchors can be treated appropriately with 4–6 weeks of immobilization, with or without additional stabilization through MCP joint pinning, followed by hand therapy. If suture tape augmentation is additionally used as an internal brace, the authors typically recommend postoperative immobilization of the thumb for 2–3 days after surgery without the need for MCP joint transfixion and also followed by a course of hand therapy. In our experience, we allow athletes to RTP as soon as they are able if they can play with a cast or rigid protective brace. Otherwise, they can RTP when bracing is no longer required. A summary of the authors' treatment algorithm is demonstrated in Figure 2.

#### Limitations

There are multiple limitations to this review, many of which are inherent to the included articles. Although the data compiled here support high RTP rates, minimal performance detriments, and low complication rates, they are limited by a low level of evidence. All studies that met the inclusion criteria were retrospective case series or expert opinions. The low level of evidence of data on injuries to the thumb UCL has been previously noted.<sup>53,54</sup> Accordingly, we found the MINORS scores of the included studies to be poor. Future prospective studies comparing techniques would be beneficial to discerning the optimal ways to return to sport.

Additionally, because the data were heterogeneous among studies, aggregation of quantitative outcomes was limited. For example, the surgical techniques, sports, treatments, and

rehabilitation protocols all differed among articles. Moreover, the included studies were level IV or V evidence and noncomparative, limiting the ability to draw comparative conclusions. This review-aggregated data and recommendations only related to athletes and did not capture information for those seeking to return to work and not return to sport. Furthermore, we incorporated only studies that discussed surgical management of thumb UCL injuries; nonsurgical treatment still plays an important role in treatment and RTP, especially for lower-grade injuries or partial tears of the UCL. Finally, although many of the injuries included were described as acute, the chronicity of injuries treated varied by study.

Return-to-play rates after surgical treatment of thumb UCL injuries are high, with reassuring return to the preinjury level of play with few complications. Recommendations for surgical technique have trended toward suture anchors and, now, suture tape augmentation with earlier motion protocols, although rehabilitation guidelines vary by sport and author. Current information on thumb UCL surgery in athletes is limited by the low quality of evidence and expert recommendations.

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# Re-published Article

## THE STIFF PROXIMAL INTERPHALANGEAL- AN UNSOLVED PROBLEM? MARTIN RICHTER


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*Review Article*

### The stiff proximal interphalangeal joint – an unsolved problem?

Martin Richter

#### Abstract

The proximal interphalangeal joint is critical for good hand function. Its anatomical complexities often predispose it to stiffness, involving damage to one or more structures. Improving or resolving the stiffness and increasing the range of motion require an accurate assessment and understanding of the pathogenesis. The surgical strategy can then be tailored accordingly. In some cases, restoration to pre-injury level may not be possible and this condition still represents an unsolved problem in hand surgery.

**Level of evidence:** V

#### Keywords

Joint contracture, arthrolysis, tenolysis, proximal interphalangeal joint

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#### Introduction

Stiff finger joints, especially the proximal interphalangeal (PIP) joints, are challenging problems in hand surgery and may be considered as unsolved by hand surgeons. Many different reasons for stiff finger joints have been described. To begin solving (or improving) this problem, the crucial question is to properly define what constitutes the stiffness in the PIP joint. There are different degrees of restricted movement: a restriction of flexion, of extension or a completely stiff PIP joint lacking motion in both directions. The prognosis will vary depending on the extent of the contracture, which anatomical structures are involved and how long the movement restriction has existed. In this article, the different types of PIP joint stiffness will be explored, ranging from those with a predictably good prognosis after treatment to those whose prognosis remains poor no matter what treatment is given.

issue lies solely in the musculotendinous unit acting across the joint.

Two main types of contractures exist:

*Flexion contractures* (contracture in flexion with limited passive extension)

*Extension contractures* (contracture in extension with limited passive flexion)

A useful classification that will direct the best treatment is one that is based on the different structures that can be responsible for the contracture. The contribution of the skin, the joint capsule including the ligaments, the tendons and the bones with their joint surfaces must be determined, as each one alone or in combination can lead to a stiff joint. Contractures that affect only one anatomical structure are prognostically better than combinations. The situation is complicated by the fact that

#### Classification, anatomy and pathogenesis

It is important to distinguish a joint *contracture* (defined by a loss of passive motion) from a *lag* in motion where passive motion is largely intact but there is a deficit of active motion, implying that the

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the contracture caused by one structure can lead to secondary changes in other anatomical structures. For example, a restriction of motion caused primarily by a tendon adhesion can lead to secondary joint stiffness from capsular contracture, articular surface changes, and skin and soft tissue contracture owing to the absence of normal mobilization, loading and stretch [Akeson et al., 1987]. Flexion contractures can be secondarily caused by the adhesion and shortening of the palmar plate and collateral ligaments when the joint is held in flexion; similarly extension contractures can be the result of shortening of the dorsal part of the collateral ligaments and the dorsal joint capsule when the joint is held in extension.

Brüser [2004] differentiated between simple and complex periarticular contractures. Simple periarticular contractures involve the palmar plate and the associated check-rein ligaments, the collateral and accessory collateral ligaments, with additional adhesions of the flexor digitorum superficialis (FDS) tendon. In complex periarticular contractures, additional structures (skin, bone, joint surface or tendons other than the FDS) can all contribute to the contracture. Complex contractures are more difficult to treat, requiring more extensive exposure and release procedures, and have a poorer prognosis.

### Anatomy

The PIP joint is essentially a hinge joint whose degrees of freedom are limited by the palmar plate of the joint capsule with its lateral reinforcements, the check-rein ligaments, the collateral ligaments and the accessory collateral ligaments. The palmar plate is a fibrocartilaginous reinforcement of the joint capsule that has no elasticity of its own and normally slides proximally during flexion. The collateral ligaments are under tension in both flexion and extension and run from the dorsal portion of the proximal phalanx to the palmar middle phalanx. The accessory collateral ligaments are positioned between the anterior margin of the collateral ligaments and the palmar plate. A contracted palmar plate, check-rein ligaments and shortened accessory collateral ligaments are the common causes of PIP joint flexion contracture. Other anatomical structures that can contract and restrict joint motion include the cruciform ligaments of the flexor tendon sheath over the PIP joint (C1 and C2 pulleys) that, with the small A3 pulley, are positioned between the larger annular ligaments (the A2 and A4 pulleys) together, as well as the transverse and oblique ligaments of Landsmeer. Deformity of the PIP joint surfaces themselves can also limit the range of motion of

the joint by either altering the mechanics of the joint by subluxation, by creating a bony block to motion as a result of intra-articular deformity or by damage to the chondral surfaces creating adhesions and ultimately ankylosis. These articular changes can be post-traumatic, degenerative or even the consequence of congenital differences such as arthrogryposis, camptodactyly or symphalangism.

Extra-articular causes of joint contracture are most commonly adhesions of the FDS tendon to the proximal phalanx, anterior capsule or palmar plate or both, adhesions of the extensor tendon to either the skin or proximal phalanx or both, limiting joint flexion, increased tone or reduced excursion of the intrinsic and extrinsic muscles acting across the joint, or shortage of either the palmar or dorsal skin owing to scars or consequent to immobilization.

### Pathogenesis

The articular structures can be involved either by direct trauma to the joint or indirectly through injury to neighbouring structures, resulting in oedema and immobilization [Huffaker et al., 1979]. According to a meta-analysis by Strickland et al. [1982], the critical duration for immobilization of finger joints after phalangeal fracture is 3 weeks. Continued immobilization of the injured finger beyond this leads to contracture.

Trauma causes direct tissue injury or intra-articular haematoma or effusion. Tissue injury is followed by vascular sprouting, which leads to adhesions and the ingrowth of scar tissue with contracture of the collagen fibres within it. At the PIP joint, an intra-articular effusion forces the joint into flexion. In addition, swelling of the injured hand tightens the normally lax dorsal soft tissues and skin, pulling the metacarpophalangeal (MCP) joints into extension. Consequently, the PIP joints are pulled into flexion by the resting muscle tone of the forearm and hand. The natural turnover processes within the tissues are controlled by the tensile and compressive forces acting on the tissues. Loss of these natural stresses from immobilization after injury results in a disruption of tissue homeostasis. Loss of collagen fibre lubricity, intra-articular connective tissue proliferation, adhesions between synovial folds, capsulo-cartilaginous adhesions, cartilage atrophy and osteoporosis may occur. The end result of these processes is contracture. To avoid this contracture formation, immobilization of the hand should be in the so-called 'safe position', with MCP joints flexed and PIP joints in a straight position.

### Diagnosis and management strategy

In the patient with a stiff PIP joint, the preoperative examination and history is crucial to determine which structures are involved and which procedure is indicated. A history of traumatic injury should include whether the injury was open or closed, whether the joint was sprained or dislocated, whether tendons were injured and if so at what level and were they repaired, whether there was a fracture and if so what type and what treatment was given, and importantly was the joint immobilized and for how long. Establishing the status of the joint before injury is also important (e.g. was there pre-existing arthritis affecting the joint?), and also the condition of the joint after injury, including whether it was compromised by infection.

Examination should document the passive and active ranges of motion (ROM). In a flexion contracture, full passive range of flexion with limited extension with the same active ROM indicates there is only a simple periarticular contracture and a good prognosis. If the PIP has full passive flexion with limited extension and no or limited active flexion, flexor tendon adhesions are a contributing problem, and this is a complex periarticular contracture where flexor tenolysis will be necessary. In extension contractures, the passive flexion is limited, which makes it difficult to assess whether the flexor tendons are adherent in addition to the contracture of the dorsal capsule or extensor tendon adhesions or both. Although an assessment of flexor function can be made based on active motion within the available passive arcs of motion of the PIP joint and distal interphalangeal joint (DIP), often the extent of involvement is only clear after dorsal joint release and extensor tenolysis. It is mandatory to assess the joint surfaces with anteroposterior (AP) and true lateral radiographs to establish the prognosis.

### Management strategies

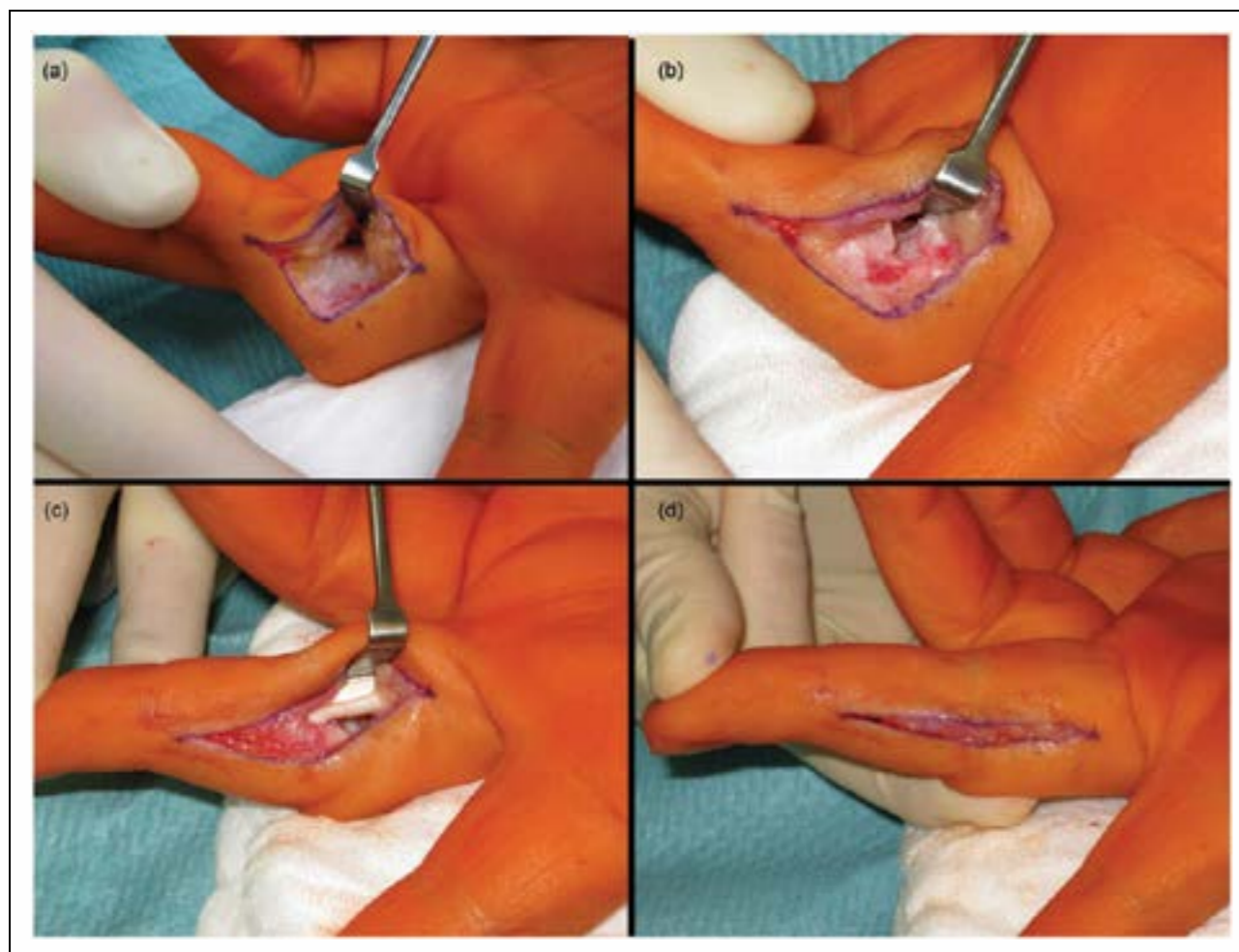
When considering outcomes, it is necessary to differentiate what type of contracture is being treated. Only if all involved structures and tissues are addressed during surgery can a satisfactory result be expected.

*PIP joint stiffness due to simple contracture.* The simple periarticular contracture is best treated by a mid-lateral approach. Using this approach allows immediate mobilization after arthrolysis and avoids tension on the palmar wound, which would be the case if an anterior Bruner approach was used.

Under tourniquet control, the skin is incised mid-laterally over the PIP joint and retracted

palmarwards with the neurovascular bundles (Figure 1). After cutting the transverse retinacular ligament, the flexor tendon sheath and the collateral ligaments of the PIP joint come into view. The cruciform flexor sheath pulleys between the A2 and A4 annular ligaments are incised, opening the flexor tendon sheath. In mild cases, the contracture may be adequately addressed by these steps alone. The next step is to check the excursion of the deep and superficial flexor tendons. The deep flexor tendon should slide freely, as this is a prerequisite for mid-lateral arthrolysis. If the superficial flexor tendon is contracted and adherent, it should be freed from the palmar joint capsule with a blunt tendon hook. At this stage, the palmar plate with the check rein ligaments can be seen and released at their proximal attachment to the phalanx. At this stage, if the finger still cannot be brought into an extended position, the accessory collateral ligaments must be incised from palmar to dorsal. Using retractors, the opposite accessory ligaments can also be released without an additional skin incision. If the PIP joint still cannot be extended and a contracted superficial flexor tendon is present, tenotomy of the superficial flexor tendon is indicated [Brüser et al., 1999]. If the flexor digitorum profundus tendon is intact, there should be no adverse consequences. If there is a snapping phenomenon with joint motion from extension to flexion, the remaining collateral ligaments are under too much tension and must be gradually incised from palmar to dorsal until smooth passive motion is restored. After careful haemostasis and wound closure, the finger is initially immobilized in the neutral position. If the joint is under tension in extension, it can be held with a 0.7–0.8 mm K-wire for 4–5 days. It is important in this situation to observe the perfusion in the finger closely because of the risk of vascular compromise, especially when significant soft tissue releases have been done.

The advantage of this stepwise technique is that potentially complex periarticular PIP flexion contractures, are converted into simple releases of periarticular PIP flexion contractures with tenotomy of the superficial flexor tendon, rather than using a more extensive palmar approach with flexor tendon tenolysis. Brüser et al. [1999] compared mid-lateral ( $n=26$ ) with palmar ( $n=19$ ) approaches for PIP joint arthrolysis and showed a significant difference in favour of the mid-lateral incision (Figure 2; supplementary online video 1). The mid-lateral group had no extension deficit after a median of 1.5 years, whereas the palmar arthrolysis group had a median extension deficit of 30° after 3 years.



**Figure 1.** The mid-lateral approach to a proximal interphalangeal joint contracture. (a) Mid-lateral incision with the palmar skin and soft tissue including neurovascular bundles retracted exposing the flexor tendon sheath. (b) The flexor sheath has been opened and the flexor tendons are retracted. The palmar plate and check-rein ligaments have been divided. (c) The flexor tendons exposed through the flexor sheath incision with the underlying palmar plate released and (d) Joint release has been completed and full extension achieved without tension on the wound.

Curtis (1954) reported the results of using a bilateral mid-lateral approach with complete excision of the collateral ligaments in 25 patients; in the long-term he achieved only half the intraoperative gain in motion. Similar results were reported by Sprague (1976). Using Curtis's technique, Diao and Eaton (1993) achieved an increase in range of motion from 38 to 78 in a series of 16 patients. Ghidella et al. (2002) reported an improvement in range of motion of only 0.5 in complex contractures ( $n=39$ ) and 17.2 in simple cases ( $n=29$ ) also using the Curtis technique. Abbiati et al. (1995) achieved full extension via a mid-lateral approach in 11 out of 19 patients and only a slight extension deficit of 10–15 in the remaining eight patients. Allieu et al. (1983) also described a maximum extension deficit of 10

in 11 of 19 patients and 30 in six others after arthrolysis alone.

The results of individual authors cannot be readily compared because of the small number of cases, and the variation in preoperative characteristics. However, there is a tendency for the arthrolyses of simple periarticular contractures to demonstrate better results than the complex cases that required more extensive tenolysis and soft tissue reconstruction. All authors confirm this indirectly by almost unanimously pointing out that their results get worse with the increasing number of structures responsible for the contracture. Furthermore, younger patients with good compliance have a better prognosis (Ghidella et al., 2002; Iselin and Revol, 1983).



**Figure 2.** Periarticular flexion contracture and results of mid-lateral arthrolysis. (a) Extension deficit before surgery and (b) Active flexion before surgery. (c) Active extension 4 weeks after surgery. (d) Active flexion 4 weeks after surgery.

*PIP joint stiffness after proximal phalangeal fracture.* Complex periarticular contractures occur after fracture of the proximal phalanx if the digit is splinted either in an incorrect position or for too long, or both. The risk of adhesions of the extensor tendons in Zones 3–5 dorsally and the FDS tendon on the palmar side is increased if surgery, particularly dorsal plating, is carried out for complicated fractures of the proximal phalanx. The fixed extensor tendon restricts active and passive flexion of the PIP joint and active extension. Often secondary contractures of the articular ligaments lead to an additional deficit of passive extension (Figure 3). In these stiff PIP joints, reconstructive surgery must address the following structures: the extensor tendons, dorsal PIP capsule, flexor tendon sheath, palmar plate, collateral ligaments and possibly the FDS tendon. For this type of contracture, the best approach is a mid-lateral incision over the proximal phalanx, curved dorsally over the middle phalanx

distally and MCP joint proximally. The skin and subcutaneous tissue is elevated from the extensor apparatus from Zones 3 to 5. The ulnar and radial border of the extensor tendon in Zone 4 is identified and adhesions between the bone and the tendon are incised. The lateral bands are dissected free from transverse and oblique retinacular ligaments on both sides and the adhesions between extensor tendon and the proximal phalanx are incised distally to the level of the PIP joint, carefully preserving the insertion of the central slip. When doing this, the dorsal joint capsule is opened and, if necessary, the collateral ligaments can be incised at their dorsal borders. It is important to free the extensor hood from adhesions to the proximal part of the proximal phalanx, including dissection of the lateral bands back to the musculotendinous junction of the intrinsic muscles. After these steps the PIP joint can be flexed passively. If a flexion contracture of PIP joint is still present, an arthrolysis becomes



**Figure 3.** Complex periarticular contracture after plating and plate removal for a fracture of the proximal phalanx. (a) Active extension before operation and (b) Active flexion before operation.

necessary, using the same technique described above as for simple periarticular contractures, including tenotomy of FDS tendon. With these steps, a passive range of motion should be restored. The active range of motion can be assessed either by a tenodesis test, traction on the extrinsic extensor proximal to the MCP joint while stabilizing the MCP joint in flexion to mimic the intrinsic function (Figure 4) or by activation of the hand, which is facilitated by carrying out the teno-arthrolysis under local anaesthetic without tourniquet (the WALANT technique); but one must bear in mind local anaesthesia at the metacarpal level often diminishes intrinsic muscle function, limiting active PIP joint extension. After haemostasis and skin suture, the finger should be splinted with the PIP and DIP joints extended with a gently applied compressive bandage, taking into account the propensity for swelling of the digit after extensive surgery such as this.

Even when good active motion of the PIP joint is seen in the first days after surgery, a deterioration of function between weeks 3 and 4 after surgery is not uncommon, even with diligent hand therapy (Figure 5; supplementary online video 2). The relatively limited extensor tendon excursion with PIP joint motion could lead to adhesions reforming,



**Figure 4.** Extended dorsal approach to a complex periarticular contracture. (a) Mid-lateral incision is extended over the dorsum of metacarpophalangeal joint proximally and the middle phalanx distally. The dorsal skin flap is elevated and permits tenolysis of the extensor tendon and arthrolysis of the proximal interphalangeal joint using the mid-lateral component of the exposure. (b) Full proximal interphalangeal joint extension with passive traction on the extensor tendon during surgery.

which then mature to restrict gliding and range of motion.

There is little meaningful published information about complex cases, perhaps because of the limited improvement in function. However, the few publications available are consistent with the experience of most hand surgeons. Creighton and Steichen (1994) found only a 50% improvement in extension deficit after tenolysis for joint contractures after phalangeal fractures. Hohendorff et al. (2020) also reported about only 50–60% improvement in the range of motion after extensor tendon tenolysis.

#### Postoperative care and rehabilitation

For both periarticular and complex periarticular contractures, the postoperative care and compliance of the patient is of the utmost importance. Close monitoring is necessary, especially in the first few days, in order to find the right balance between early mobilization and swelling or disturbance of wound healing. Since daily decisions about increasing or



**Figure 5.** Deterioration in active extension after combined extensor tenolysis and proximal interphalangeal joint release (the same case shown in Figures 4 and 5). (a) Day 1. (b) Day 3. (c) Day 8 and (d) Day 28.

decreasing mobilization is necessary during this period, no rigid post-treatment regimens have been reported. Over-active mobilization can lead to excessive swelling, which in turn mechanically impedes movement. Wound infection can also be associated with swelling, wound dehiscence and wound margin necrosis leading to increased fibrosis even after healing, with a correspondingly poor result. The fundamental principle of postoperative treatment is therefore to immobilize the arthrolysed joints in a favourable position and to increase the active and passive exercises from this position in a graduated manner without allowing excessive swelling or disruption of wound healing. Compression bandages can help control swelling after surgery, but they need to be applied carefully and monitored to avoid

compromising digital circulation. Adequate postoperative analgesia enables the patient to carry out the necessary exercises. Non-steroidal anti-inflammatory drugs, which also have a favourable effect on the inflammatory component, are used as a first-line therapy.

For PIP joint flexion contractures, the PIP joint should be immobilized immediately after operation on a finger splint in the extended position, with active flexion and extension exercises started on the first postoperative day. As soon as wound healing permits, a three-point transverse joint splint is applied, which keeps the finger in the extended position during the resting phases but allows active flexion. It is usually possible to do this after a mid-lateral arthrolysis in the early postoperative period given the position of the wound. If movement is not achieved with the splint in place because of discomfort or swelling, it can be removed for active exercises. If the contracture begins to recur during the course of therapy, static splints are used to stretch the joint. The joint should be splinted in extension at night to limit risk of recurrence caused by swelling of the digit overnight.

For PIP joint extension contractures, the finger is initially placed in a flexed position in the immediate postoperative period. In the early postoperative period, with the assistance of a hand therapist, the patient begins active and passive movement exercises, and at night the finger must again be placed in a flexed posture to maintain the gains of the release.

#### Conclusion


The stiff PIP joint encompasses a range of conditions in which careful assessment and patient selection are critical for solving this difficult problem. Surgery only makes sense if the articular surfaces of the PIP joint are intact. Even if this criterion is satisfied there are still some patients who will have a poor prognosis, depending on the number and pattern of the structures involved in the contracture. The surgeon should always be guarded when advising surgery and about the likely prognoses. In complex cases with extensor tendon adhesions in Zones 3–5, even after complete arthrolysis and tenolysis with good function achieved immediately after surgery, it is likely that long-term good results can only be expected in half of the cases, with an improvement in active extension of 50%. In this respect, PIP joint stiffness can be considered to be an unsolved problem, and the search continues for more optimal management strategies to treat this difficult problem. However, simple periarticular flexion



contractures have a good prognosis, particularly when treated with arthrolysis by a mid-lateral approach. In all cases, intensive hand therapy tailored to the individual is mandatory. As our anatomical and biomechanical knowledge of the PIP joint increases, perhaps we can begin to shed more light on this challenging problem.

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# Re-published Article

## MANAGEMENT OF SELF-HARM INJURIES: A REVIEW OF THE EVIDENCE AND GUIDANCE



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## Management of self-harm injuries: a review of the evidence and guidance

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### Introduction

Self-harm is a significant and increasing healthcare problem that is often met with prejudice and stigma, even by healthcare staff (Kilroy-Findley, 2015; MIND, 2016; NICE, 2022; Saunders et al., 2012). It is exceedingly common, with approximately one in ten adolescents reported as having self-harmed (NICE, 2022). Those who frequently self-harm require the input of hand surgery services, usually due to lacerations from self-cutting and foreign body soft tissue insertion (FBSTI) (Rogers et al., 2009).

Of those who self-harm, over 50% will repeatedly do so in the future. Self-harm also remains the strongest risk factor for a subsequent suicide attempt (Hawton et al., 2012; Madge et al., 2008) with a 19-fold increased risk of suicide and a 3.6 fold increased risk in all-cause mortality (Kapur et al., 2015). This is a significant burden of disease, estimated to cost health services from £200 up to £10,000 per patient, per year (Hunt, 2017; Rogers et al., 2009).

The management of patients who self-harm requires collaboration between the psychiatric and surgical services. Despite the integral role of the hand surgery team in the management of such patients, self-harm receives very little attention in the surgical literature and there are no clear guidelines nor consensus on the surgical management of these patients. This article aims to better equip hand surgeons when managing patients who have self-harmed by summarizing the available evidence and guidelines on both the nature of self-harm and its management.

### National guidance

National guidance has been released in the United Kingdom (UK), Australia and New Zealand (Carter et al., 2016; NICE, 2013; NICE, 2022). These guidelines are broad, covering many types of self-harm and are designed for use across many healthcare settings, and discussion of their entirety is outside the scope of this article. However, all of these advocate to prompt psychosocial assessment and

treatment of patients in addition to the management of the physical consequences of their actions.

### Psychological features

Self-harm is considered to be multifactorial in origin; the result of predisposing psychiatric and psychological factors combined with negative life events (Table 1) (Hawton et al., 2012). Although there is an increased risk of suicide, self-harm is often carried out without any suicidal intent (MIND, 2016) and represents a coping mechanism to deal with overwhelming emotional distress (Hunt, 2017; MIND, 2016). Patients usually follow a pattern of pent up negative emotions resulting in the act of self-harm followed by relaxation and relief of emotion (Hunt, 2017; MIND, 2016). The return of this compulsion after the period of initial relief results in further injury, giving rise to difficult clinical scenarios, such as repeated soft tissue trauma that may prevent wound healing.

It is estimated that up to 50% of patients admitted to a surgical ward following self-harm have not undergone a psychiatric assessment (Concannon et al., 2019; Rashid and Brennen, 2006). Early involvement of psychiatric services will aid surgical decision-making and the management of the patient by helping risk assess and optimize these patients prior to surgical intervention (Hold et al., 2010; NICE, 2022; Rashid and Brennen, 2006; Rogers et al., 2009). This will ensure patients are managed

**Table 1.** Factors pre-disposing to self-harm (Hawton et al., 2012).

| Negative life events                        | Psychiatric/psychological factors |
|---|-----------------------------------|
| Adverse childhood experiences               | Mental disorders                  |
| Abuse                                       | Drug & alcohol misuse             |
| Bullying                                    | Low self esteem                   |
| Social isolation                            | Feelings of hopelessness          |
| Exposure to suicide and self-harm by others | Impulsivity                       |
| Relationship difficulties                   | Low self-esteem                   |

in a safe environment and allow time for them to regain capacity and consent for a procedure should they not be able to do so at the time of presentation.

### Physical features

There are many forms of self-harm, but these can be broadly categorized into self-poisoning or self-injury (NICE, 2022). Paracetamol and anti-depressant overdose are the two most common forms of self-poisoning (NICE, 2022). Physical acts of self-harm range from skin cutting, burning, picking, excessive scratching, foreign body insertion and breaking bones by striking objects.

### Self-cutting

Self-cutting is the most common form of self-harm but commonly co-exists with self-poisoning and therefore it is important to specifically enquire about potential overdose as the medical management of poisoning takes priority over surgical management of the wound (Madge et al., 2008). The volar wrist and forearm is the most common site for self-cutting injuries (Cho and Choi, 2020). The current United Kingdom (UK) guidance recommends assessing the severity of the injury and how urgently treatment is required, but does not offer further guidance on how this should be assessed (NICE, 2022). Significant injury to a tendon or nerve can occur following self-harm, around 50% of self-inflicted wounds to the wrist are deep, with 33% injuring an anatomical structure (Cho and Choi, 2020; Fujioka et al., 2012). Those with multiple lacerations, fewer previous acts of self-harm and males are also more likely to have a deep injury (Fujioka et al., 2012). In any patient, the wound should be examined to exclude infection, gross contamination or underlying tendinous or neurovascular injury regardless of size or apparent depth.

The injury pattern in self-inflicted wounds differ from accidental or inflicted wounds (Kisch et al., 2019; Lee et al., 2016). Due to the mechanism of injury, wounds to the left volar wrist are sustained using the right hand leading to predominantly radial-sided or median injuries, most commonly injuring the palmaris longus (Kisch et al., 2019; Lee et al., 2016). In contrast, non-intentional wounds are more likely to involve ulnar structures (Lee et al., 2016). Self-cutting often normally results in transverse lacerations, increasing the risk of tendinous injury but reducing the risk of arterial injury in comparison with longitudinal wounds (Kisch et al., 2019). Wherever possible, it is recommended that wounds be closed with skin adhesive or steri-strips rather

than sutures, with the benefit of being less painful and avoiding a further attendance for suture removal. Moreover, there is currently no evidence that one form of wound closure is better in terms of complication rates or cosmetic outcomes (Esmailian et al., 2018).

Over 50% of patients will go on to injure themselves again, and unfortunately, one in 15 of these will be within 30 days of the initial injury (Arensman et al., 2014; Madge et al., 2008). The repeat trauma can present obstacles to wound healing, with the patient attempting to re-open the wound or use it as a site for foreign body insertion (Rogers et al., 2009). For this reason, some would advocate a conservative approach to wound management, favouring healing by secondary intention, and intervening only in cases where there is evidence of underlying structural injury or infection. However, this approach has been associated with an increased wound infection rate and patients continuing to present with episodes of self-harm (Rogers et al., 2009).

A reasonable surgical rationale would be to manage hand and wrist wounds initially in the emergency department (ED) with irrigation and haemostasis. Wounds without evidence of infection or underlying structural injury should be closed in the ED, where possible. In patients where there are deeper wounds with clinical evidence of underlying injury, it is still more appropriate to await psychiatric input and for the patient's mental state to recover before offering surgical intervention unless there is sepsis from wound infection or life-threatening bleeding needing emergent management, both of which are rare. This will ensure the patient is able to comply with the postoperative rehabilitation regime required to protect tendon and nerve repairs from failure or postoperative stiffness.

### Soft tissue foreign body insertion

This form of self-harm involves the insertion of objects into the soft tissues, more frequently in the upper limbs. Wounds from self-cutting are sometimes used as a point of access (Wraight et al., 2008) for their insertion. Definitive management varies depending on the site and presence of infection; foreign bodies can be left in-situ provided there is no evidence of neurovascular or tendon injury (Wraight et al., 2008). This is particularly so where there are multiple items or when the foreign bodies are in close proximity to vulnerable structures. Surgical removal remains the mainstay in many units. However, in centres with the available expertise, image-guided foreign body removal (IGFBR), is

an increasing popular treatment method (Bradley, 2012; Young et al., 2010). The technique typically involves the use of ultrasonography or fluoroscopy to detect the foreign body that facilitates its removal, usually performed under local anaesthetic.

There are few reports on the surgical management of self-inflicted foreign bodies in subcutaneous tissues. Given the number of reports of successful conservative management, a reasoned approach would be to remove foreign bodies only in cases of infection, structural injury or if the object is made of poisonous or harmful material.

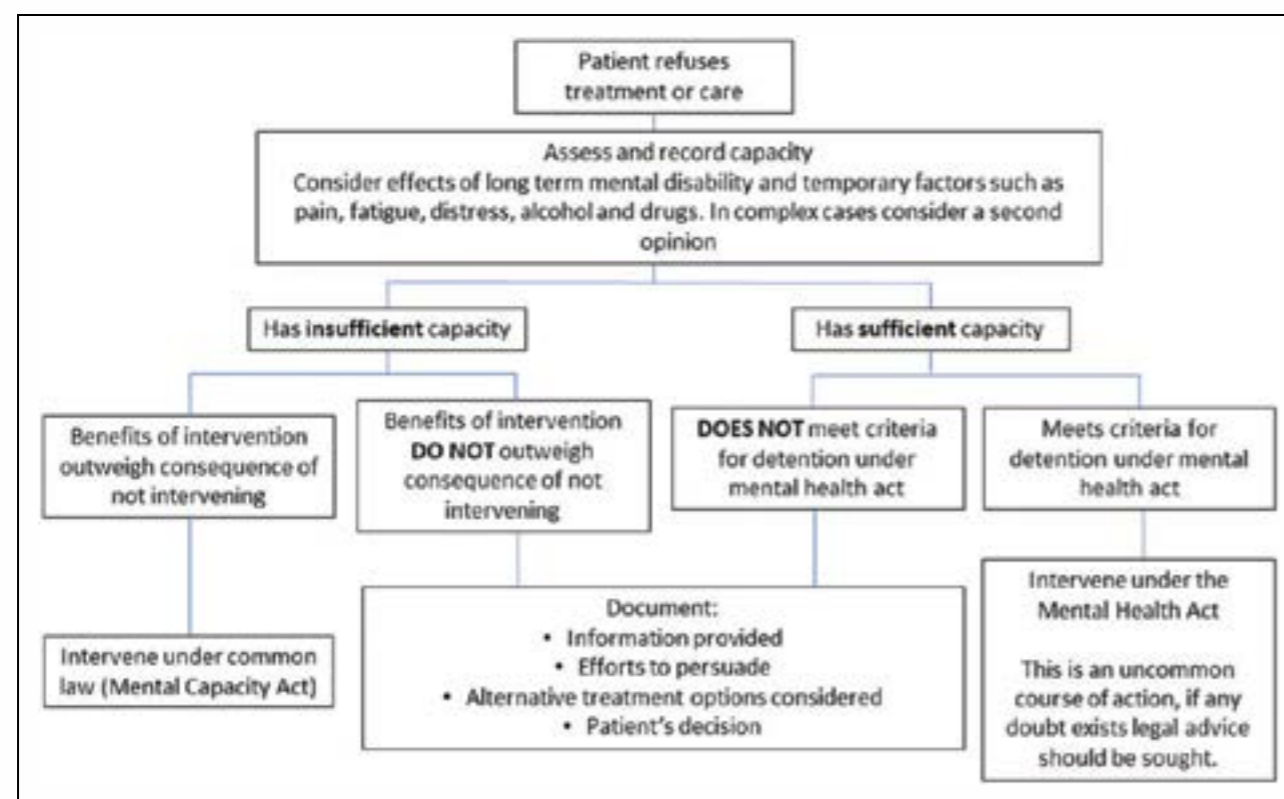
### Medicolegal considerations

It is not uncommon for patients who self-harm to refuse treatment, which raises several ethical and legal difficulties. Anyone over the age of 16 should be assumed to have capacity until proven otherwise, as per the Mental Capacity Act (Department of Health, 2005). Consequently, this may allow the patient to make unwise medical decisions putting them (but not others) at risk of harm. Both UK guidance and the Montgomery ruling specifies that all treatment options should be fully discussed with

patient and all efforts made for the patient to give informed consent (Montgomery vs Lanarkshire Health Authority, 2015; NICE, 2022).

Patients who lack capacity to consent should be treated in their best interests. Loss of capacity may be due to temporary factors, for example intoxication or acute psychiatric illness, in which case the surgical management of their injuries can be delayed until the effects of these have resolved. If they are actively refusing treatment or lacking capacity but treatment is required urgently, then it is permissible to proceed under the Mental Capacity Act. Alternatively, the patient can be detained under the Mental Health Act (Department of Health, 2007) if there is evidence of mental illness.

Both these legal powers should only be used if there are no less restrictive alternatives to treatment. Applying guidance into clinical practice can be challenging, highlighting the importance of combined decision-making and a sound understanding of the ethical issues surrounding treatment. Figure 1 outlines a decision-making algorithm adapted from previous NICE guidance to aid clinicians in managing patients who are refusing treatment.




**Figure 1.** Decision-making algorithm for patients refusing treatment. Adapted with permission from previous NICE guidance.

### Conclusion

Self-harm is a common and increasingly prevalent problem. It is important to improve the awareness of psychological factors and the medicolegal aspects of self-harm among those involved in caring for this group of patients. While most orthopaedic and plastic surgery departments have considerable experience in the management of these injuries, few have clear guidelines. Given the limited evidence in the surgical outcomes for these patients, early involvement by a psychiatry team will benefit subsequent surgical decision-making and treatment plans.

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