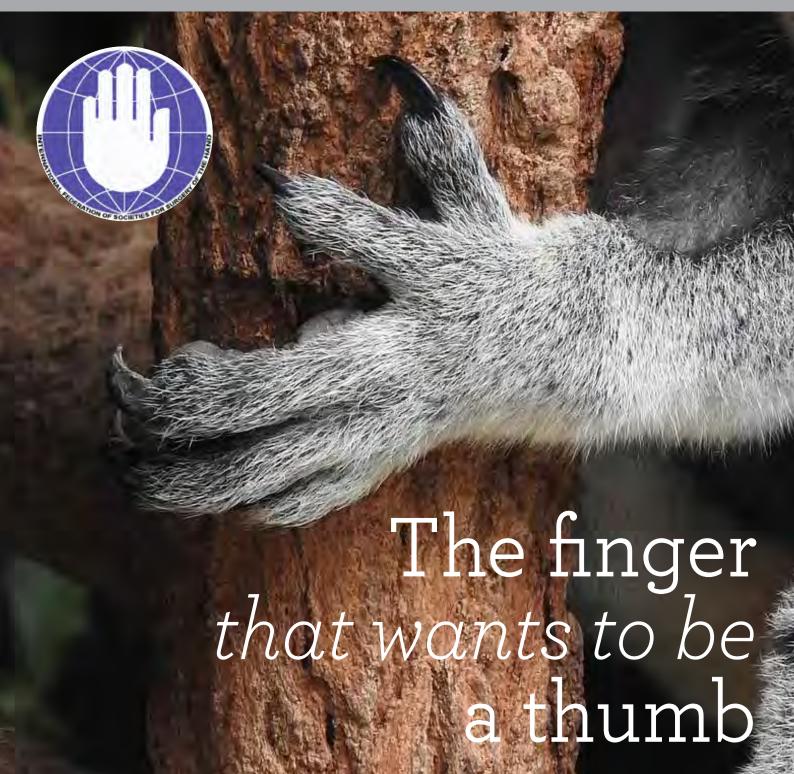


HAND THERAPY
MOBILIZATION ANALYTICAL
PROGRESSIVE AND SEQUENTIAL
(MAPS) THERAPY

SHARE SECTION





IFSSH Mid Term Course

Segundo Congreso Ecuatoriano de cirugía de la Mano



Guayaquil - Ecuador

Ene 31- Feb 3 2024

Hotel Hilton-Colón.





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EDITORIAL www.ifssh.info November 2022 PRESIDENT'S MESSAGE

"Challenging Current Wisdom in Hand Surgery"

This is the thought provoking title of the August 2022 edition of HAND CLINICS, edited by Jin Bo Tang and Grey Giddins. In eleven contributions from senior colleagues some long held 'truths' are being challenged (see pages 9-12).

In the Preface the Editors wrote:

"As clinicians and humans, we both favour tradition and embrace novelty, although not all to the same degree. We believe the "established" facts taught to us by our trainers, but also readily take on new treatments where we think they will improve the outcomes for our patients. Sometimes these "established" facts or new treatments are less proven than we realize yet we may struggle to resist their siren calls; undoubtedly there is an emotional as well as an intellectual content to our practices"

"The articles are not just about challenging new practices; rather they also introduce new ideas challenging older ways of practising"

"You will not necessarily accept all of them, but do try to keep an open mind, as the authors have all thought hard about their practices and are trying to improve them for the benefit of their patients. We would encourage you to keep challenging your own practices and especially your long-held beliefs, which may not be proven, but at the same time look with some

scepticism at new practices, which may not remain current throughout your career"

I found this particular issue very interesting because it is refreshing to revisit some hard and fast dogmas which we may hold very true, very dear and very absolute

It is the aim of the IFSSH to promote knowledge through honest and thoughtful dialogue. You may find these articles to do just that!

Happy hand surgery,

Ulrich



Ulrich Mennen Editor

President's message

Dear All,

The dust has finally settled after the London IFSSH Congress. The Executive Committee has already met virtually and is planning another virtual Executive Committee meeting on 3 December 2022. Yes, there is that much to do! Dr. David Warwick our Secretary General provides a high-level view of Executive Committee activities in his report contained in this Ezine. For my part, I would like to introduce our readers to a new IFSSH educational opportunity, namely the Mid-term Regional Hand Surgery Course.

The genesis of the Mid-term course stems from feedback received by the Executive Committee during the 2019 Berlin Triennial Congress. During that meeting, it became clear that many of our Member Societies wish to host a Triennial Congress. The Executive Committee responded to that desire by proposing biennial rather than triennial congresses.

This would have offered many more opportunities for member societies to host the IFSSH Triennial Congress. The IFSSH membership however, elected to retain the Triennial Congress schedule and in response to this, the Executive Committee (particularly Jin Bo Tang our Communications Director and Raja Sabapathy our President-elect) suggested the IFSSH support Midterm Regional Hand Surgery Courses. These courses would be scheduled halfway between the Triennial Congresses by a society other than those involved with the most recent and next Triennial Congresses. The courses are to be regional rather than global in scope and be organized around a specific theme. The regional host is expected to organize a three to four day course including regional and invited faculty. Also, in order to lessen the financial burden born by the regional host, the IFSSH will provide a grant of \$20,000 to underwrite the Mid-term Course.

This bold experiment has met with significant enthusiasm with several regions bidding during the London Congress for the opportunity to host the Midterm Course. Excellent presentations were provided by the hand surgery societies of Australia, Bolivia, Ecuador, and Thailand. The Delegates' Council, after carefully considering the candidates' speeches, elected Ecuador as the host of the inaugural IFSSH Midterm Course. The course is to be held in picturesque Guayaquil, Ecuador from 31 January to 3 February 2024.

We have received information from the organizing society that they are well on their way to developing a robust course with excellent content and a social program to match. We will of course keep you informed of their progress and provide more details regarding the Mid-term Course as they become available.

The Executive Committee once again wishes to thank the Societies that took the time to present their bid for the Mid-term course in London. And we are particularly indebted to the Ecuador Society for Surgery of the Hand for their willingness to host what will undoubtedly be a great course.



Daniel NaglePresident: IFSSH

SECRETARY-GENERAL REPORT www.ifssh.info November 2022 SECRETARY-GENERAL REPORT

Message from the Secretary-General



I thought that perhaps Hand Surgeons around the world might like to learn a bit more about the work of the team which keeps your IFSSH running - our administrator Belinda, the Executive Committee (ExCo), the Ezine Editor, Ulrich Mennen, and the Delegates.

A lot goes on behind the scenes to keep our organisation running smoothly and moving forwards. Every day our Administrator Belinda deals with enquiries, sorts out the finances, sends letters and generally keeps the Executive Committee (ExCo) informed and on top its tasks. There are at least weekly exchanges between the Officers (Communications Director Jin Bo Tang, President Elect Raja Sabapathy, Past President Marc Garcia Elias, President Dan Nagle and myself) to discuss and organise matters like educational awards, finances and bylaw changes. Every 3 or 4 weeks, Dan Nagle, Belinda and I meet on Zoom to run through all the ongoing administrative nitty gritty.

Professor Mennen has been part of IFSSH for so many years. His memory of the institution and his stewardship of the Ezine are central to the success of our IFSSH.

We welcome the involvement of each Society's Delegate, not only in the Annual Delegates' Council meeting but more and more in the daily running of our work and in our future growth.

In order to improve the involvement, inclusivity and diversity, as well as the effectiveness of your IFSSH, the Delegates approved the suggestion by the previous Executive Committee to increase the numbers of

Members-at-Large from one to five. This provides a wider reach of the ExCo from each region of the world, enabling the easier interaction of the IFSSH Societies and their membership. The new structure also creates more opportunities for more people to enter the ExCo and then perhaps become Secretary-General and thereafter President in due course.

For yet more inclusivity and involvement beyond the ExCo, the IFSSH Nominating Committee has two extra Members-at-Large - Peter Amadio and Ilse Degreef, who work with the two most recent Past Presidents and current President in procedures such as elections, Pioneer selection and so on.

Prior to the pandemic, the Executive Committee might only meet once or twice a year (rotating through the FESSH, ASSH and IFSSH meetings each triennium), but now that we are familiar with Zoom, we can have far more frequent ExCo meetings.



More regular meetings together with the new energy and expertise infused by the five Members-at-Large will produce a noticeable increase in the number of projects and reduction in the time to deliver. Here is a screenshot of the new ExCo coming together from all corners of the world at very different time zones on Sunday 21 August for a very enthusiastic meeting, the products of which I will expand upon more in my next newsletter.

Please all take care and if anyone anywhere has a suggestion or comment about how we run the IFSSH for you, please send me a personal email to davidwarwick@handsurgery.co.uk or a WhatsApp message to +447887651451.

2022 IFSSH Swanson Lecture. London

The Swanson lecture, first approved in 2004 as acknowledgement of Alfred Swanson's many contributions in the IFSSH, and inaugurated in 2007, is part of our IFSSH culture. We recognise the excellent Swanson Lecture "Current Concepts on the Management of Scaphoid Injuries", given in London by Professor Tim Davis, one of the world's leading researchers on this tiny enigmatic bone which causes us so many problems.

Professor Davis joins an eminent group of hand surgeons to have delivered the IFSSH Swanson Lecture, which is now a centrepiece of the IFSSH triennial congress programmes:

- Goran Lundborg, Sweden:
 "The intelligent hand and the plastic brain"
 (Sydney, 2007)
- Jesse Jupiter, USA:
 "Fracture of the distal radius: an historical perspective" (Seoul, 2010)
- Wayne Morrison, Australia:
 "Milestones in Reconstructive Hand Surgery"
 (Delhi, 2013)
- James Strickland, USA: "Moments in Time: Hand Surgery" (Buenos Aires,

2016)

Steven Hovius, The Netherlands
 "Challenges?!" (Berlin, 2019)

IFSSH Committee for Educational Sponsorship (CES) (See full report pp40-44)

The IFSSH CES has achieved a great milestone: in 2022 over US\$100,000 has been awarded to assist educational projects worldwide. This is by far the largest amount to be made available in the history of the IFSSH.

The IFSSH supports a wide range of educational programmes. The funds are awarded on a competitive basis, following application to the Committee for Educational Sponsorship (refer to https://www.ifssh.info/educational_sponsorship.php for full details).

Beyond general educational support, the IFSSH CES also administers funding to the IFSSH Harold Kleinert Visiting Professorship scheme, IFSSH Triennial Congress Assistance Grants, and Regional Courses in Hand Surgery. Reports from completed projects are published in the Ezine and on the website (https://www.ifssh.info/ifssh-sponsored-educational-projects.php).

The projects supported from the 2022 applications to date include:

- WALANT courses, workshops and meetings in Kenya - Kisumu, Eldoret, Nakuru, and Mombasa
- The combined Colombian-Venezuelan annual congress
- The 2023 World Symposium on Congenital Malformations of the Hand and Upper Limb
- Therapists' activities through contributions to the IFSHT Evelyn Mackin Award and IFSSH-IFSHT Triennial Travel Award
- Editorial grants towards the "Current Practice in Hand Surgery" textbook
- The London 2022 IFSSH Travelling Fellowship programme

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SECRETARY-GENERAL REPORT www.ifssh.info November 2022 RE-

 The IFSSH Harold Kleinert Visiting Professor - awarded to the Polish Hand Surgery Society and Professor Jin Bo Tang, involving an extensive programme of teaching at multiple Hand Surgery centres in Poland and the Polish Hand Surgery Society ASM.

The CES thanks all delegates and societies for encouraging applications from their membership. We look forward to receiving and granting further applications in the future.

Future Meetings:

1st IFSSH Mid-Term Course in Hand Surgery Guayaquil, Ecuador 31st January - 3rd February, 2024

XVIth IFSSH - XIIIth IFSHT Congress Washington D.C., USA 23rd - 28th March, 2025

XVIIth IFSSH – IVth IFSHT Congress Singapore 23rd – 27th October, 2028 (TBC)

IFSSH contact details:

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With very best wishes,



David Warwick Secretary-General, IFSSH



Hotel Hilton-Colon.





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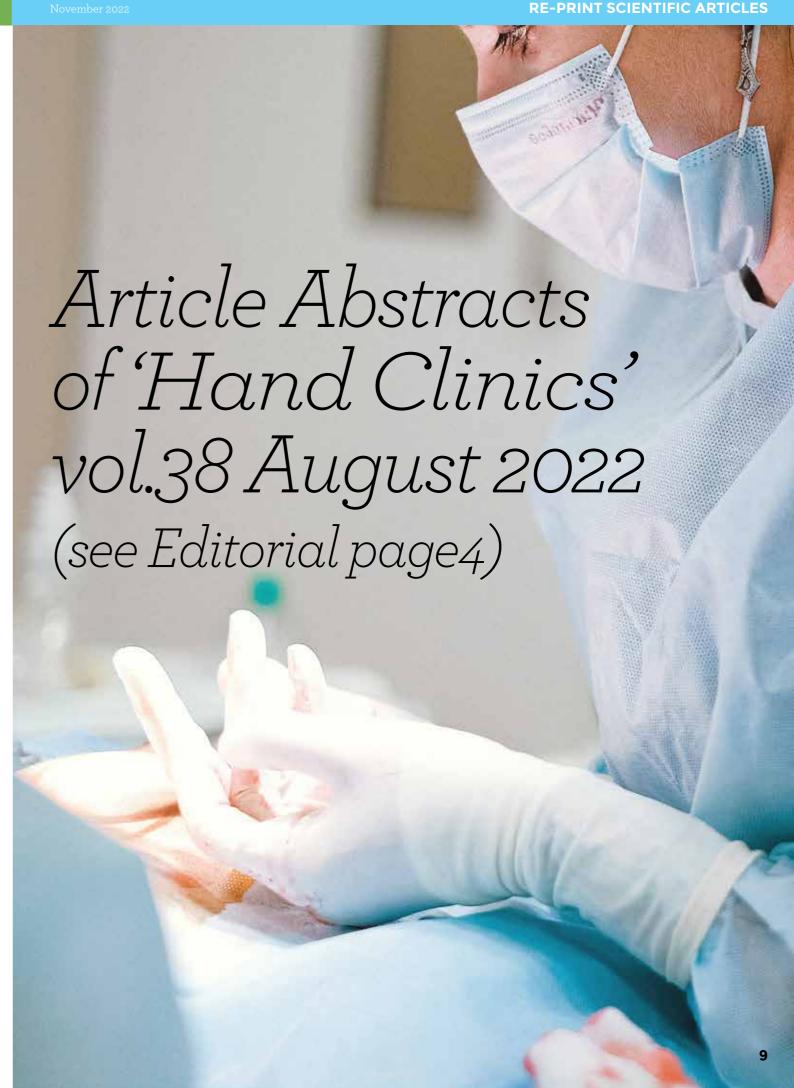
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Challenging Current Wisdom in Hand Surgery

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Grey Glddins

Preface: Challenge the Current Wisdom of Hand Surgery Jin Bo Tang and Grey Giddins Editorial: Evidence-Based, Eminence-Based, Hypothesis-Based, or Wrong Information-**Based Practice?** Jin Bo Tang Editorial: "Established" Rules or Teachings Are Less Proven than We Realize Jin Bo Tang Mallet Finger: Two Different Injuries 281

Mallet injuries, either tendinous or bony, are common. They are often studied together and typically treated in the same way with extension splintage for 6 to 8 weeks. Yet the evidence clearly shows there are different injuries that present in the same way. Tendinous mallet injuries present in older patients usually following a low energy injury; they are often painless. The commonly injured fingers are the middle and ring. The injuries are almost always single digit without concomitant injuries. There is an extensor lag of a mean of 310 (range 3 -590) in the patients treated in my unit. In contrast, bony mallet injuries occur at a younger age (mean 40 years) and are always due to high energy injuries. The injuries are always painful. The commonly injured fingers are the ring and little fingers. There are multiple injuries in 3% (range 2%-5%) and in 4% to 8% of cases, there are concomitant (nondigital) injuries according to data in my unit. Radiologically there is an appreciably smaller extensor lag; mean 130 (range 0 -400). In particular, bony mallet injuries are extension compression, not avulsion, fractures which should not logically be treated with an extension splint which will reproduce the direction of injury.

The Conservative Treatment of Some Hand and Carpal Fractures 289

Michel E.H. Boeckstyns

In recent decades, there has been a trend toward increased use of operative treatment of hand fractures. However, Internal stabilization with wires or open reduction and internal fixation of the phalanges and the metacarpals carries a risk of surgical complications that can be avoided by using appropriate conservative treatment. In this article, some hand fractures that can be managed safely without surgery are discussed. In conclusion, when facing a fracture in the hand, the first consideration is whether the fracture can be treated nonoperatively and not which operative treatment is most appropriate. This applies to both displaced and undisplaced

Internal Fixation of Finger Fractures: Field Sterility for Surgery and Earlier Removal of K-Wires Are Safe

Donald Lalonde and Colton Boudreau

Field sterility for K-wire insertion outside the main operating room is much cheaper and greener (ie, there is less waste). It permits increased access to more affordable surgery because unnecessary sedation and full sterility are eliminated. Early pain-guided

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protected movement of K-wired finger fractures at 3 to 5 days leads to less stiffness. It will not result in loss of reduction or infection around K-wires if patients avoid "pain" (ie., do not perform movements that hurt). Early protected movement and early removal of K-wires at 2 to 4 weeks contribute to less stiffness after operative hand/finger fracture

The Trapezium is Not Necessary: Logical Implications in Treating Basal Joint Arthritis and Pollicization

305

Ulrich Mennen

It has long been thought that the surgical treatment of osteoarthritis of the first carpometacarpal joint must replicate the normal anatomy. Common sense argues that biomechanical stability can be achieved by a simple ball-and-socket joint obviating complicated ligament reconstructions and trapezium replacements. Our argument is presented and the conclusions are based on the results of a very large series over a long period. A simple trapezium excision arthroplasty of the base of the thumb without ligamentous reconstructions is all that needs to be done to surgically solve painful osteparthritis of the first carpometacarpal joint. Anything more is overoperating.

Dynamic Rather than Static Procedures in Correcting Claw Deformities Due to Ulnar Nerve Palsy

313

Brian W. Starr and Kevin C. Chung

Video content accompanies this article at http://www.hand.theclinics.com.

The theoretic disadvantage of dynamic tendon transfers is the perception that they are "more complex" than static procedures. The latter may provide a simple solution to claw deformity in a subset of patients; however, they completely disregard the disability associated with loss of the intrinsic musculature. Dynamic procedures reconstruct in part the deficient intrinsic forces and are thus capable of correcting the deformity and some disabilities associated with ulnar nerve palsy. In our practice, we have consistently achieved reasonable correction of claw deformity and improvement in tendon synchrony and grip strength with a modified Stiles-Bunnell, flexor digitorum superficialis tendon transfer.

Some Misconceptions in the Treatment of Cubital Tunnel Syndrome, Radial Tunnel Syndrome, and Median Nerve Compression in the Forearm

321

Jin Bo Tang

This article discusses ulnar, median, and radial nerve compression in the proximal forearm and elbow and some possible common misconceptions. In particular, the ligament of Struthers' extremely rarely causes ulnar neuropathy. Lacertus syndrome and flexor superficialis-pronator syndrome can be diagnosed separately. Surgical release can be through a small incision. Acronyms for compression to radial nerve in proximal forearm can be simplified to radial tunnel syndrome, which includes a mild type (classical radial tunnel syndrome) and a severe type (posterior interosseous nerve (PIN) compression).

Discussions About Obstetric Brachial Plexus Injuries

329

Grey Giddins

Although patients with obstetric brachial plexus injuries (OBPI) have been recognized and treated for greater than 100 years there is much that is not understood or is mis-understood. I address 6 areas for discussion: the cause of OBPI and whether it matters to nerve surgeons; the value of the Narakas grading; whether surgeons should perform primary nerve surgery, especially in patients with incomplete OBPI; the cause and treatment of shoulder tightness; the cause and treatment of elbow contracture; and whether patients with OBPI need surgery in adulthood.

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Direct Repair of Flexor Tendons Close to Bony Insertion and Ruptured Collateral Ligaments

337

Jin Bo Tang

Lacerated flexor tendons close to bony junction are commonly repaired using a pullout suture. However, these injuries very close to the tendon-bone junction can be repaired with robust direct suture repair of the proximal tendon stump with the short residual tendon stump and any local tissues such as periosteum and joint volar plate. Subacute or chronic traumatic rupture at the midpart of the collateral ligaments can also be repaired by "refreshing" the divided ligament ends and repairing the ligament stumps to local tissues with multiple sutures often combined with tightening the elongated joint capsule.

Our Disagreement on "Iceberg View" on the Ulnar Wrist and Clinical Implications

343

Eduardo R. Zancolli III

The diagnosis of ulnar-sided wrist symptoms concentrates on distal radioulnar joint and triquetral-hamate joint pathology. I consider this is only looking at the "tip of the iceberg" and ignoring other possible pathologies. In particular, this ignores the role of triquetrohamate and pisotriquetral pathologies. I outline our approaches to these pathologies noting the important ligamentous structures, the clinical presentations, the relevant investigations, and the surgical treatments and outcomes that I have found to be reliable. I would encourage hand surgeons to think more widely about ulnar-sided wrist symptoms, in particular triquetrohamate and pisotriquetral joint instabilities.

Slight Elongation of the Scaphoid and Cancellous Bone Graft Without Compression for Treatment of Scaphoid Nonunions

351

Igor Golubev

In treating scaphoid nonunion, we have developed a technique of bone grafting and elongation of the scaphoid stabilizing the construct with K wires without compression. Bony union was achieved in the large majority of scaphoids as demonstrated on computed tomography (CT) scans. We advocate slight lengthening of the scaphoid with bone graft and K-wire fixation without compression of the grafted bone when treating scaphoid waist nonunion.

10 Hypotheses in Hand Surgery

357

Jin Bo Tang

I have put together 10 topics and labeled them as hypotheses, which outline my preferred practices. The topics relate to questionable nerve compression, double crush syndrome of nerves, motion therapy after surgery, delayed primary tendon repair, proximal pole fracture of the scaphoid, short splint, and indications for post-operative hand elevation. I found no proof whether my preferred methods are better than or inferior to alternative methods that others use. The 10 hypotheses are presented to stimulate thinking, clinical observation, or investigations and highlight several areas of research. Investigation into these hypotheses may avoid unnecessary treatment or improve postsurgical comfort for patients and long-term outcomes of treatment.

Acknowledgement: These Abstracts are reprinted with permission from, and thanks to the Publishers of "Hand Clinics" 38 (2022).



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The Trapezium is Not Necessary **Logical Implications in Treating Basal Joint Arthritis and Pollicization**



Ulrich Mennen, MBChB(Pret), FRCS(Glasq), FRCS(Edin), FCS(SA) Orth, MMed(Orth), FHMVS(DUMC), MD(Orth), D5c(Med)7

KEYWORDS

Trapezium Osteoarthritis First carpometacarpal loint Base of thumb arthritis Pollicization Thumb ligament reconstruction Ball-and-socket joint

KEY POINTS

A ball-and-socket joint is inherently stable. As the thumb needs to be stable in many directions, this mechanical type of joint is the most classic to provide both stability and mobility at the same time. Therefore, a simple excision of the trapezium for osteoarthritis of the base of thumb joint gives the ultimate functional stability and mobility.

Ligamentous reconstruction is thus also not necessary because of the obvious mechanical stability. If left undisturbed, the subperiosteal released ligaments will reattach themselves during the healing process and only act to limit excessive mobility of the thumb.

Any kind of material inserted into the socket created by removing the trapezium will interfere with the stability of the thumb. This is the most logical concept that has been stubbornly ignored! The same principles as above apply if a pollicization is performed.

INTRODUCTION

thumb carpometacarpal trapeziometacarpal-1 (TMC1) joint allows multidirectional movements, while being amazingly stable for the forces exerted on it in pinch and grip. Because this joint is subjected to large and constant mechanical demands, it is also prone to degeneration over time, commonly causing not only pain and functional loss but also an unacceptable cosmetic appearance. It has long been thought that the mechanics of this joint had to be replicated when diseased. Innumerable surgical and nonsurgical methods have been proposed, tried, published, and often abandoned relatively quickly. The literature is vast reporting various stabilizing methods, tissue and artificial prostheses, and serious complications attempting to mimic the impossibly complex biomechanics. Most of

these procedures have been discarded because of failures of the artificial reconstructions or complications because of the inherent lack of understanding the very complicated and intricate forces exerted on this joint.

The aim of this article is to discuss the outcomes of the author's practice in a large series of simple trapezium excision for the painful degenerative TMC1 joint. My outcomes indicate simple treatment method is sufficient and that any interposition and ligamentous reconstruction is unnecessary. This observation has previously been confirmed by many other researchers.

ANATOMY OF THE TRAPEZIOMETACARPAL-1 JOINT

The TMC1 joint allows the thumb to flex, extend. abduct, adduct, and rotate. A combination of

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> these movements enables thumb opposition for the most delicate prehension as well as the most robust handling and grabbing objects. This joint is powered effectively by the 10 muscles surrounding it: flexor pollicis longus, extensor pollicis longus, extensor pollicis brevis, abductor pollicis longus, abductor pollicis brevis, flexor pollicis brevis, opponens pollicis, adductor pollicis caput obliquum, adductor pollicis caput transversum, and the first dorsal interosseous. These muscles are supplied by 3 major hand nerves (radial, median, and ulnar).

> The stability of the unique double saddle joint is also aided by ligaments placed in a particular configuration. This is basic anatomic knowledge; it does not need to be repeated here. The forces exerted on this joint are more than 10 times the pinch force. This unique joint makes it possible for the thumb to be very mobile under all kinds of applied loads while giving it adequate stability.

PATHOMECHANICS

It is still not entirely understood why this joint becomes arthritic mostly in women, and not more often in heavy manual workers. Moreover, the level of pain reported by patients does not always correlate with the degree of destruction seen radiologically. It is for this reason that the wellknown Eaton classification of TMC1 joint osteoarthritis has very little clinical or practical value.

It is also our experience that the pinch strength of the thumb does not necessarily equate with the amount of destruction seen radiologically. The overwhelming complaint is pain, coupled with instability causing functional loss. Loss of dexterity and cosmetic abnormality, especially associated with a zig-zag collapse, are also

In 1949, Gervis described treating these symptoms surgically and suggested trapezium excision. In 1973, Eaton and Littler published on the treatment of osteoarthritis of this joint. Later, Burton and Pellegrini in 1986 popularized the concept of ligamentous reconstruction and tendon interposition (LRTI). Many surgeons have attempted to modify the LRTI operation. This has been followed by the development of numerous artificial prostheses to replace the TMC1 joint.

A recent count has shown that there are at least 40 stabilizing procedures (eg. ligament reconstructions) and more than 20 different prostheses. These facts alone indicate that many of these procedures are at best unreliable. Most of the proposed prostheses have been removed from the commercial market after only a few years because of their high failure rate.

THE QUESTION AND CLINICAL GOALS

The question that needs to be answered is: what are the requirements for this unique joint to function optimally? I consider the minimum ideal requirements for a surgical procedure is offered are:

- 1. The operation has to be simple and easy to
- 2. As osteoarthritis of TMC1 joint is very common, the surgery has to be affordable.
- 3. The operation should, if possible, not use any foreign material.
- 4. The procedure should be able to replicate much of the mechanical function of the TMC1.
- 5. The operation should address the main symptoms, that is, pain and loss of function.
- 6. After the surgical reconstruction, the "new" joint has to be stable enough to allow reasonable pinch and grip function.
- 7. The surgical procedure has to offer a long-term predictable result for the patient and the

A BALL-AND-SOCKET JOINT

From a biomechanical perspective, there can be no doubt that a ball-and-socket joint is inherently the most stable joint. It needs muscles to move it. The ligaments are therefore less important and contribute only a little to its stability and function mainly to limit its excursion (compare this to the hip joint when replaced by a prosthesis). The stability lies not in any ligament reconstruction, but in the shape of the new joint, that is, ball-and-

The proximal articular shape of the trapezium bone is V-shaped and fits perfectly into the space created by the scaphold head and the side of the trapezoid. The base of the thumb metacarpal (MC1) has a similar V-like shape (Fig. 1). Once the trapezium is removed, the 2 articular shapes fit quite nicely into each other in many cases, especially if the metacarpal (MC) is rotated a little into pronation, that is, the direction of opposition. As this is a "snug" fit (convex into concave shape), it can be regarded as a type of ball-and-socket

ADVANTAGES OF A SIMPLE TRAPEZIUM **EXCISION**

By removing the whole of the trapezium, without inserting any autologous or foreign material, and allowing the MC base to sit into this new space, a sort of ball-and-socket joint is created. Any material or object inside the socket, would make the

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Fig. 1. The shape of the proximal joint surface of the first metacarpal matches the shape of the gap left when the trapezium is removed.

ball-and-socket concept unstable, as if in pole vaulting where the pole would be very unstable if the pole tip was planted in a vault box full of "stuff."

A simple and total removal of the trapezium has the following advantages: The new ball-andsocket joint is reasonably stable in all directions.2 As the original ligaments are left intact (the trapezium is removed), new ligaments need not be made, such as soft tissue reconstruction or stabilizing procedures as the ligaments reattach through scar tissue to the base of the MC. The incision needed to perform this operation is small, no more than 15 to 20 mm long. No foreign material or artificial material is inserted, reducing the risk of a foreign material reaction.5 The operation is cheap because no expensive prosthesis is used.⁰ The operating time is short, on average shorter than 30 minutes in my experience. It follows logically from all the above that the complications should be much less than for larger/more complex procedures because there is less tissue damage.

Biomechanically, the narrow, adducted first web-space is relaxed because of the proximal "migration" of the MC. This releases the contracted tissues because of the longstanding abnormal position of the tissues surrounding the Basal Joint Arthritis and Pollicization

thumb, allowing it to regain a more normal thumb position.

Because of this relaxation of the tight tissues, the hyperextension of the metacarpophalangeal (MCP) joint of the thumb is reduced and often does not require further treatment (Fig. 2). As the fulcrum of the thumb is moved slightly proximal, the improved lever arm allows the thumb to regain some of its power. As described earlier, the slightly rotated MC allows better opposition of the thumb.

SURGICAL TECHNIQUES

The surgical technique that we have consistently used is very straightforward and does not need special skills. In essence, it is removing the trapezium and associated degenerative tissue, inserting the first MC into the created socket, rotating it slightly into opposition, fixing the position with a single thin K-wire (0.5–0.6 mm), and closing the soft tissues (capsule, ligaments, and skin).

- A bloodless field is made and maintained by an upper arm tourniquet. As WALANT has been popularized, this method may also be used.
- A 15 to 20 mm incision is made on the radial side over the trapezium, taking care not to damage the branches of the radial nerve and the radial artery in the "snuff box." This incision lies longitudinally between the extensor pollicis longus and extensor pollicis brevis tendons.
- The trapezium is fully removed piece-meal after releasing the ligaments from the trapezium.
 There is usually an osteophyte or a cartilaginous protrusion on the ulnar side at the base of the first MC, which must be removed to make it possible for the MC to subside into the new position (Fig. 3).
- 4. In cases of scaphotrapezoid joint arthritis, a 2 to 3 mm sliver of bone only is removed from the proximal part of the trapezoid. If this is not done, I consider that persistent residual pain may remain after surgery although the published research studies suggest this is not necessary (Fig. 4).

Fig. 2. The first web-space is restored, as well as the normal flexed position of the metacarpophalangeal joint after the trapeziectomy.

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Fig. 3. It is essential that the osteophyte at the ulnar side at the base of the first metacarpal is removed. This may not always be seen on x-ray imaging because it may be cartilaginous, or still in an earlier phase of "development," that is, fibrous tissue.

- The MC is now pushed into the hollow left by the removed trapezium, slightly rotated into opposition until the MC base settles into the "new" joint formed by the scaphoid head and the radial side of the trapezoid.
- A single, thin K-wire (0.5–0.6 mm) is used to fix this position of abduction and opposition. The wire is drilled through the base of MC and into the trapezoid (or scaphoid head). It is cut short, leaving it protruding through the skin for 1 to 2 mm, or alternatively subcutaneously.
- The exposed ligaments on the radial side including the capsule are sutured using only 1 or 2 absorbable 3/0 or 4/0 sutures. The skin is closed.
- A forearm plaster-of-Paris slab is applied, which includes the thumb to hold it in the fixed position of abduction and opposition for 2 weeks.
- At 2 weeks postoperatively, the K-wire is removed and a forearm cast is applied for another 3 weeks.

 Mobilization can proceed immediately after the cast removal. Scar massage is encouraged to reduce adhesions. Physiotherapy is not typically required.

PATIENTS, RESULTS, AND COMPLICATIONS

The demographics of the patients treated from 1992 to 2014 (23 years) by the author are presented in Table 1. Table 2 summarizes the results. The evaluations were recorded at varying times postoperatively, from a minimum of 2 years to 14 years postoperatively (Fig. 5).

DISCUSSION

Some authors have claimed that after simple trapezium excision-arthroplasty, the thumb ends up unacceptably short, that the pinch power is weak, that the first web-space becomes even narrower, that the thumb MCP joint remains in hyperextension, that the mobility of the thumb is compromised and that the thumb is unstable. I consider that these allegations are largely untrue and amount to perpetuated myths. The results presented earlier are based on a very large cohort over a relative long time and disproves these myths.

The slight overall shortening of the thumb of around 4 mm is usually of no significance. Only 3% of patients noted this slight shortening, for example, when holding a fork or writing with a pen. In this series, no patient reported this



Fig. 4. When the scaphotrapezoid joint is degenerate, it is recommended to remove a 2-3 mm sliver from the proximal articular surface of the trapezoid to prevent chronic postoperative pain.



Basal Joint Arthritis and Pollicization

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Table 1 Patient demographics		
Patients seen	2183	
Patients operated	1636 (75%)	
Hands affected	3075	
Both hands	1783 (58%)	
One hand	1292 (42%)	
Hands operated	2060 (67% of affected hands)	
Sides	Left and right equal	
Sex		
Female	86%	
Male	1496	
Age (22–86 y)	59 (mean)	
Duration symptoms (1–30 y)	3.17 y (mean)	
Main symptom		
Pain	93.7%	
Weakness	3.7%	
Other	2.6%	
Pathology		
Osteoarthritis	94.8%	
Trauma	3.7%	
Rheumatoid arthritis	1.5%	
Reoperations (referred): failed prostheses, failed arthrodesis, failed ligamentoplasties, etc.	44 Thumbs	

shortening to be troublesome. Any surgery that eliminates pain and gives stability to the thumb should improve pinch power. In this series, we recorded an improvement of pinch power of 1.8 kg.

When the first MC subluxes (or even dislocates) secondary to TMC1 arthritis, the first web-space becomes compromised, that is, adducted. By excising the trapezium and moving the thumb complex a few millimeters proximally, the contracted tissue around the thumb is relaxed in part. This opens up the first web-space, and consequently improves the normal position of the thumb vis-à-vis the fingers. The first web-space opening improved by a mean of 27 in our series.

The compensating mechanism to "keep" the thumb out of the palm is hyperextension of the thumb MCP joint. The tight contracted first webspace that has been relaxed, helps to reduce the deforming forces on the thumb MCP joint leading to a more normal flexed position; in this series by a mean of 30. In only 33 cases did we have to arthrodese the thumb MCP joint to provide MCP joint stability.

By virtue of the new "ball-and-socket-like joint," and the relaxation of the contracted tight tissue, the thumb is once again able to oppose to the other digits and function more normally. We have never seen the so-called metacarpal-scaphoid impingement. We can only conclude that this might be a theoretic possibility but of no clinical importance.

Two surgical points need to be emphasized. First, the almost ever-present osteophyte, chondrophyte, or fibrophyte on the ulnar side at the base of the first MC bone must be sought and removed with a rongeur. This is essential to allow a snug seating in the scaphotrapezoid space. Secondly, we believe that if the scaphotrapezoid joint is also degenerated, that is, osteoarthritic, a small portion (about 2–3 mm) of the proximal part of the trapezoid must be removed although published studies have not shown this. In our experience, if this is not addressed, the patient will most likely still complain of pain after surgery, even if the operation was regarded as a "success."

Experience over 50 years of practicing medicine has taught me that the more complicated an answer to a clinical problem is, the further we move away from solving the issue at hand. Solving a painful base of the thumb osteoarthritic joint is a very good example of this principle. A glaringly

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Table 2 Results					
Pain: (pain was ex	valuated on a 5-poir	nt "Pain Severity Scale")		
0—No pain			8.9%		
The second second second	th certain activities		47.2%		
2—Some pain du	ring daily activities	1	1.0%		
3—Intermittent s	pontaneous pain	2.0%			
4—Continuous pa		0).9%		
Pinch power: (Pin (overall improv on preoperative	ement of 1.8 kg	range 2-10 kg	3.6 kg		
First web-space: (overall improve preoperative ve	ement of 27 on	range 60 –85	75		
		flexion improved by 30			
			ovement in thumb stabi	lity	
Thumb shortening (only 3% of painoticed any shortening with enquiry!)	nout	e 2-6 mm		4 mm averagi	
Opposition: (mod Kapanji 1-5)	ified 5/5			98% of thum	
Patient satisfaction	n: (VAS 1-10)				
Worse	1	1.3%			
Same	3-4	2.9%			
Satisfied	5-6	4.9%			
Better	7-8	41.9%			
Much better	9-10	49.0%			
Complications:					
Subluxation of	"new" joint (when	pinching)	3 hands		
Stiffness (excess	sive scarring of skin	6 hands			
Infection woun	d (diabetic patient)	4 hands			
Deep		0			
Instability of th hypermobile	umb when pinching joints)	8 hands			
Scar tenderness		9 hands			
Cutaneous bran	iches of the radial r	3 hands			
Residual pain (3	3 and 4/5)	60 hands			
Complex region	nal pain syndrome	5 hands (3 men,	2 women)		

simple solution has been made very complicated by very "clever" ideas such as innovative ligamentous reconstructions and prostheses.

The same aforementioned logical explanation applies to one of the most challenging procedures in hand surgery, namely pollicization. In the congenital deficient thumb, when a pollicization of the index finger is contemplated, it is not necessary to perform the complicated step to "make a trapezium" from the epiphysis of MC2. This

making of a pseudotrapezium has always been part of various techniques described to "make a thumb." We have skipped this step in this operation, which not only reduced the operation time considerably but also reduced the manipulation of the delicate, small, and fragile tissue, and therefore reduced the potential for complications. The same reasoning and "myth-busting" arguments as pointed out earlier applies to a trapezium-less pollicization. The operative technique is even

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Fig. 5. Pollicization also does not need a trapezium. The pollicized finger is strong, stable, and looks cosmetically more like a thumb.

simpler than with the degenerative trapeziectomy. The MC of the intended finger to be pollicized is removed entirely, leaving a hollow where its base joined the carpus. The proximal phalanx is inserted into this gap, thus forming a ball-and-socket joint. The thumb is admittedly somewhat shorter, but looks cosmetically less like a finger, is inherently stable, can move in all the directions like a normal thumb, and is at least as powerful as a finger-like thumb⁹ (Fig. 6).

SUMMARY

In the quest to restore what is broken in a body, surgeons have tried to simulate the "normal" and have tried to copy the intricate and sophisticated TMC1 joint of the human hand. This notion has been accepted as essential, that is, as an absolute, without question, and was transmitted from textbook to textbook, article to article, and teacher to student so many times that it has become



Fig. 6. Right hand postoperative radiographic image 14 years after a simple trapeziectomy for osteoarthritis of the first carpometacarpal joint. The joint space is maintained, and no impingement is seen. The left hand has not been operated upon.

Basal Joint Arthritis and Pollicization

dogma without question. Most of us are therefore hesitant to even contemplate an alternative to such "fact set in stone."

This article challenges the idea that an artificial trapezium or reconstruction of new ligaments is necessary. Our large series followed over a long period shows very clearly that the results of a simple excision arthroplasty without any interposition or ligamentous "gymnastics" gives at least as good, if not better, results than any other proposed artificial procedure (see Fig. 5). We believe that any artificial prosthetic replacement of the trapezium is over operating and unnecessary.

CLINICS CARE POINTS

When making the small 15 to 20 mm skin incision over the trapezium on the radial side of the wrist, take care not to damage the branches of the radial nerve or the radial artery.

To protect the integrity of the ligaments, a subperiosteal release is done of the ligaments before the trapezium is removed piecemeal. These will attach to the base of the metacarpal during the healing phase.

It is imperative to ensure complete removal of the trapezium.

Always remove the osteophyte on the ulnar side at the base of the metacarpal. It may be cartilaginous or even only early excess fibrous tissue, which has not yet formed into an ossified osteophyte.

When inserting the base of the metacarpal into the clean "socket," the snug fit will be better if the thumb is rotated a few degrees into the opposition position.

If the trapezoid-scaphoid joint is degenerated, it is strongly advised to remove a small portion (2-3 mm) of the proximal articular joint surface of the trapezoid. This is an important step to prevent chronic pain or a "failed" operative procedure.

Only 1 or 2 tight sutures are needed to close the capsule and incision in the surrounding ligamentous complex. This will add to the stability of the new base-of-thumb joint.

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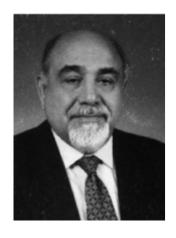
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Shoja-ad-Din Sheikholeslamzadeh (1931-2014)



Shoja-ad-Din
Sheikholeslamzadeh (later
affectionately known as Dr.
Sheikh) was born in1931 in
Tabriz, Iran. He graduated
from the Alborz High
School in 1951, then studied
medicine at the University
of Tehran and graduated as
general practitioner in 1957.

He then continued his education at the Akron City Hospital, Ohio, USA, first as an intern and later as an orthopaedic resident under the tutelage of Dr. Walter A. Hoyt. During these early days he showed an interest in rehabilitation which included the making of artificial limbs. In 1963 he graduated as an Orthopaedic Surgeon. In the same year he started private practice and worked in the Pars Hospital in Tehran. With some of his Orthopaedic colleagues he founded the Iranian Orthopaedic Association, also in 1963, and started to have regular academic meetings.

Soon after his arrival back from the USA, Dr. Sheikh established a technical workshop and training centre for the production of prostheses and orthotics, which was recognised by the United Nations as an international training centre. His interest and endeavour in the rehabilitation of disabled persons, including post-poliomyelitis cases, led to the formation of the Association of Rehabilitation in 1969 (which was affiliated with the Ministry of Labour in Iran) of which he became the first Director. The principle task of the Association was to train disabled individuals for job employment. The Shafa Yahyaian Hospital then

became the centre for all the various rehabilitation activities, including reconstructive surgery, physical-and occupational therapy, education of various medical professions, including Orthopaedic Residents, and technical workshops. He was the Chairman and Program Director from 1969 to 1979.

Dr. Sheikh was Counsellor for the World Health Organisation for Rehabilitation Affairs (1969-1979), and Vice-President of Rehabilitation International (1966-1975). During the second Arab-Israeli war in 1973, 400 wounded soldiers were evacuated to Iran and treated at the Shafa Yahyaian Hospital. Dr. Sheikh was honoured with the highest medal of the Egyptian Military for his involvement. On a visit to the hospital by the King of Jordan, the King ordered that a similar hospital facility be built in Amman, Jordan. In 1970 Dr. Sheikh organised the first International Congress of Orthopaedics and Rehabilitation in Tehran and Ramsar, Iran. He travelled to many Middle East countries as Consultant to establish rehabilitation centres and organisations for the musculoskeletal system, especially for hand and upper limb injuries. Dr. Sheikh became Minister of Social Welfare in 1975, and in February 1976 the two Ministries of Health and Social Welfare integrated into one as the Ministry of Health and Welfare of which he became the first Minister. Apart from being a teacher and mentor of note. he published extensively. The "Dr. Sheikh Orthopaedic Foundation" was established by his students in honour of him.

Shoja-ad-Din Sheikholeslamzadeh was honoured by the International Federation of Societies for Surgery of the Hand at its 10th Congress in Sydney, Australia on 11 March 2007.

William Alexander Souter (1933–2018)



William Alexander Souter was born in Cupar, Fife, in Scotland on 11 May 1933. He graduated as a medical doctor (MBChB) (with honours) from the University of Edinburgh in 1957, and obtained his post graduate surgical FRCS qualification from the Royal College of Surgeons

of Edinburgh in 1960. Souter furthered his training in Orthopaedic and Hand Surgery from 1961 to 1968 in Edinburgh under Douglas Saville, an eminent Rheumatoid Surgeon, and in Derby in the UK working with Guy Pulvertaft, and then in Seattle in the USA. He was appointed Consultant Orthopaedic Surgeon at the Royal Infirmary and the Princess Margaret Rose Orthopaedic Hospital in Edinburgh in 1968 until 1997. He was an ABC Fellow in 1972. After his retirement from the NHS, he continued in private practice until 2001.

Souter was Council Member of the British Society for Surgery of the Hand from 1976-1978 and again from 1992-1994, as well as its President in 1993, and then became an Honorary Member in 2000. He was a Founder Member of the European Rheumatoid Arthritis Surgery Society in 1979 and served as the Honorary Secretary from 1979-1983, and then the President from 1995-1999. From 1981-1984 he was on the Editorial Board of the Journal of Bone and Joint Surgery, and the Council of the British Orthopaedic Association during 1986-1988 and 1993-1995. He was Chairman of the Standing Committee on Surgery of Rheumatic Diseases of the European League Against Rheumatism

(EULAR) from 1987-1995. Souter was Member of Council of the Royal College of Surgeons of Edinburgh for 10 years (1988-1998). In 1988 he was elected the first President (1988-1990) of the newly formed British Elbow and Shoulder Society. He was Member of Council of the Federation of European Societies for Surgery of the Hand (FESSH) from 1992-1996, the Chairman of Accreditation from 1993 to 1996 and Joint Organiser of the first examination for the FESSH Diploma in Hand Surgery in Paris in April 1996.

William Souter presented the Guy Pulvertaft Memorial Lecture in 1989 at the Hand Surgery Unit in Derby, United Kingdom. His surgical practice was largely confined to the care and reconstruction of the rheumatoid hand and elbow. His particular interest was in developing an artificial elbow joint, which evolved in the widely used Souter-Strathclyde Elbow Arthroplasty in 1977.

Willie Souter was married to Kathleen and they had three children. He loved gardening as well as opera and ballet. He died on 1 June 2018.

At the Tenth Congress of the IFSSH, in Sydney, Australia, on 11 March 2007, William Alexander Souter was honoured a "Pioneer of Hand Surgery".

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MAPS Therapy

MOBILIZATION ANALYTICAL PROGRESSIVE AND SEQUENTIAL (MAPS) THERAPY

Loss of mobility and pain are two of the main complications of the injured hand (1,2). When stiffness is established, mobilization techniques are indicated to correct the deficiencies. These techniques must be focused on re-establishing normal kinematics and must be able to offer the necessary dose of therapy to modify the tissues, but should always respect the limits guided by pain. Mobilization techniques require a high degree of precision in order to focus the specific movement on the involved anatomical structure/s. The dose can be adapted by increasing the time and intensity (3,4,5). Increasing the dose through intensity has the risk of exceeding the physiological limits of the tissue and may cause damage (6, 7), which is why therapists prefer to increase the doses over time (3,5). However, the use of splinting allows us to increase the dose over time, but it does not always allow us the precision that manual therapy gives. But then, manual therapy can be applied with precision, but hardly allows the application of forces for prolonged periods.

Having adjustable intensity techniques which have the precision of manual therapy, and which can be applied for extended periods would be a clear benefit since it would give more therapeutic possibilities for the hand therapist (8-13).

What is MAPS Therapy?

MAPS stands for Mobilization Analytical Progressive and Sequential. It is a method for treating hands which combines the knowledge and art of hand therapy with the design of a hand therapy exercise device.

MAPS therapy devices are based on the modification of an old hand therapy device called the "hand pegboard" (also known as the "Canadian plateau")

(14). This pegboard consists of a board with multiple holes. A range of pegs of different sizes and shapes are secured to the pegboard to create personalized mobilization exercises.



Figure 1: Precision area

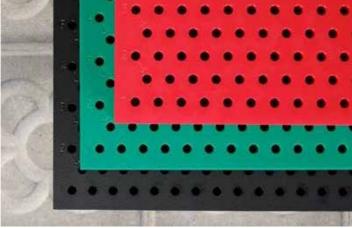


Figure 2: Hole code system

The modifications of the original hand pegboard include an increased density of holes in the center of the pegboard creating a precision area (Fig. 1), a new hole-code system that helps the therapist and the patient replicate the same therapy session, grade the session and chart the progress (Fig. 2), and a variety of accessories that can be used in two- or three-dimensional pegboards (Fig 3).



Figure 3: Accessories to work in two and three dimensions



Figure 4: Elastic tension swinging technique with lever type 1 for extension of the PIPJ

This further enables the therapist to deliver a large repertoire of exercises and fosters creativity in treatment sessions. If the restriction is in the flexion and extension plane, exercises in this plane generally suffice. For example visco-elastic lengthening of the volar plate of the PIP joint is shown in Figure 4.

However when joints work in a transverse plane or on two different planes or between them, the basic pegboard is not enough. For example, specific structures which tighten between different movement planes, such as the radial collateral ligament of the wrist which tightens in extension and ulnar deviation (Fig. 5) as well as in supination of the forearm (Fig. 6). In cases like these, stiffness can be treated using the 3D accessories, working simultaneously in different planes.



Figure 5: Tightening of the radial collateral ligament of the wrist



Figure 6: Supination

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Figure 7: Patient at the clinic using MAPS

Why we developed MAPS Therapy

With increasing demands on health services, time is a precious resource that needs to be directed as much as possible to patient care. The MAPS therapy device evolved as a method to protect this precious resource by ensuring sufficient treatment time to treat several patients simultaneously with a high quality of mobilization techniques. The therapist will do a comprehensive assessment of each patient and establish specific treatment goals. Once completed, the therapist can construct exercises on the pegboard within a few minutes enabling the patient to continue with self-assisted exercises under supervision. In situations where the patient suffers from fear-avoidance, this can be effectively managed because the exercise intensity, as suggested by the therapist, is however controlled by the patient. In this way the patient can work independently freeing the therapist to attend to other patients. In our experience this is a win-win situation for both patient and therapist (Fig.7).

Treatment Structure

Treatment should begin with a 'clinical reasoning process' to determine:

- 1. What is the movement dysfunction (e.g. PIPJ extension)?
- 2. What structures are potentially contributing to the movement dysfunction? Therapists should test these structures to ascertain or

- confirm the cause of this deformity (e.g. volar plate shortening, fibrosis of the volar recess of PIPJ, collateral ligament fibrosis, flexor tendon adhesions and muscle contracture).
- A treatment protocol prioritizing the treatment of all the involved key structures and to treat them one by one (distal gliding of flexor tendons, increased flexibility of capsular elements, proximal gliding of extensors).

Treatment should be applied in the following order:

- 1. Passive mobilization techniques are applied first. These techniques can involve swinging movements or accessory movements; they can also use self-range exercises or use external devices such as elastic or plastic bands to apply forces on the hand. The goal is to obtain softer scar tissue before commencing active exercises (e.g. elastic tension exercise for volar translation of the head of P1 on P2). The therapist then evaluates the result obtained and will know if the dose and/or the direction needs any modification. Dose parameters are related to intensity and time. We suggest intensities inside the tightness and outside pain (we recommend an intensity of between 0 and 3 on a 10 numerical rating pain scale). Time dosage is usually 20 minutes but it can be increased depending on the goals and patient tolerance.
- 2. Once passive movement has improved, the patient then progresses to actively move the joint and to integrate their hand into functional use.
- 3. If the patient is not able to actively use the new motion obtained then the therapist can introduce more intensive active exercises with the same device or use an orthotic device to help in the progression of treatment. If these goals cannot be achieved because of weakness or tendon lag then this therapy is not indicated.

Types of Mobilization Techniques

Active or passive mobilization techniques are applied depending on which structures needs

addressing. Passive mobilization is used when a passive restriction is present. Techniques are precise following biomechanical approaches (e.g. Katernborn). The therapist can focus on global swinging techniques (Fig. 4) or more specific techniques related to accessory movements like rolling or gliding exercises (Fig. 8).



Figure 8: Elastic tension exercise for volar translation of the head of P1 on P2



Figure 9: Deep flexor tendon proximal gliding

When active mobilization is used, one should consider the need to improve muscle function or proximal tendon gliding first (Fig. 9). If the muscle is affected, then progressive active exercises can be used progressing from active assisted to full active range of motion, or active-intensive contraction when strength is required (Fig. 10).

Passive mobilization is applied first to make any scar tissue and soft tissue supple, before progressing to active mobilization to avoid fatigue. As soon as active motion improves, more function-based exercises are introduced (Fig. 11). This program is individualized for each patient depending on the cause of their movement dysfunction and treatment goals.



Figure 10: Finger flexion plus wrist extension



Figure 11: Functional exercise

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Educating Patients in MAPS Therapy

When using the MAPS therapy device, the therapist creates the exercise, but it is the patient who manages the dose. Intensity and duration can be combined in multiple ways. All exercises should be inside the limits imposed by pain while respecting the biological processes of tissue healing. The patient must be educated to understand their symptoms, the pathology and the reasoning behind the treatment protocol (II, I3).

Indications and Contraindications

The MAPS therapy device can be applied to any movement impairment of the wrist, hand and elbow. It is especially indicated when there are movement restrictions relating to various conditions emanating from orthopedic, traumatic, rheumatoid or neurological conditions. It is a versatile hand exerciser which is dependent on the therapist's creativity.

In order to achieve measurement consistency, the hand should always be stabilized in the same position using the hole-code system. Evaluating passive or active motion can easily be done using a goniometer or a camera. In this way any improvement can be detected and recorded immediately (Fig. 12).

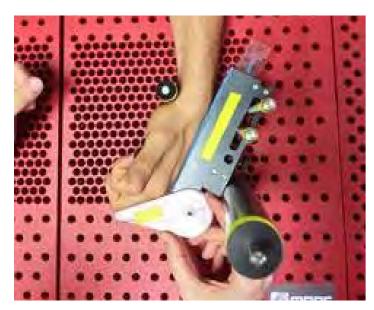


Figure 12: Measuring with MAPS

While this device is used mainly in a Hand Therapy Clinic, some patients may not be able to attend therapy regularly. In such a scenario, the patient is taught how to use the pegboard with illustrations and instructions. The patient reproduces the same session at home as many times as required while waiting for the next session with the therapist (Fig. 13). This could also be achieved via video call (Fig. 14).

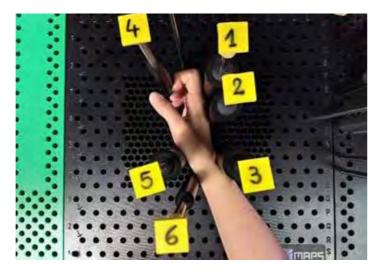


Figure 13: Recording a session

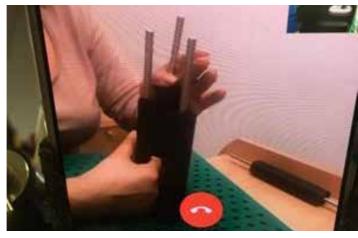


Figure 14: Online treatment

Conclusion

The MAPS therapy device does not replace established mobilization techniques. Instead, it is a new modality in the therapist's toolbox. Tool-assisted mobilization can treat many structures of the hand with precision.

The techniques allow progressive loading with prolonged stretching with the dose of each adapted to the patient's needs. It is an accessible treatment which can be used in the clinic or at home with the therapist providing guidance virtually.

Understanding anatomy and biomechanics is a necessity for administering this technique. MAPS exercises are the final part of a clinical reasoning process. The therapist should have clinical experience, with a good knowledge of physiology, the healing process and the cause of the dysfunction. They should be skilled to test all the involved structures in all movement restricted directions.

Also, the therapist needs to be able to set up a personalized exercise program with a sequence of passive, active and functional exercises involving the restricted structures. And finally, the therapist should not only be able to administer the treatment, but be able to explain understandable information to the patient.

For more information on the MAPS Therapy and related training: info@mapstherapy.com

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IFSHT November 2022

IFSHT NEWSLETTER REACH VOLUME 2, NO. 2



The IFSHT is excited to present the second issue of the second volume of the IFSHT newsletter which is available here: https://ifsht.org/publications/2022reach-newsletter-vol2no2

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

This is a special edition of REACH which features highlights from the joint IFSSH-IFSHT-FESSH Congress in London (June 2022). It includes a day by day diary of some of the key highlights of the event from therapists on the ground or who attended virtually. Within this issue we again feature our Levels of Evidence section, research highlights and clinical pearls. The Spotlight On! Section features the Swedish Society for Hand Rehabilitation (SFH). The issue also features recipients of the prestigious Lifetime Achievement Awards at the Congress and also the winner of the Christina Allegri Award, Hayley Fay.

We call on hand and upper limb therapy clinicians and researcher to submit any contributions for consideration to informationofficer@ifsht.org.



The legendary triennial IFSHT Silent Auction was held on Thursday 9 June 2022 at the Congress in London. This is a very important event in the IFSHT diary because it is used to raise funds to enable IFSHT to support speakers to attend the next triennial Congress in Washington. The Silent Auction was yet again a success raising \$8,326.

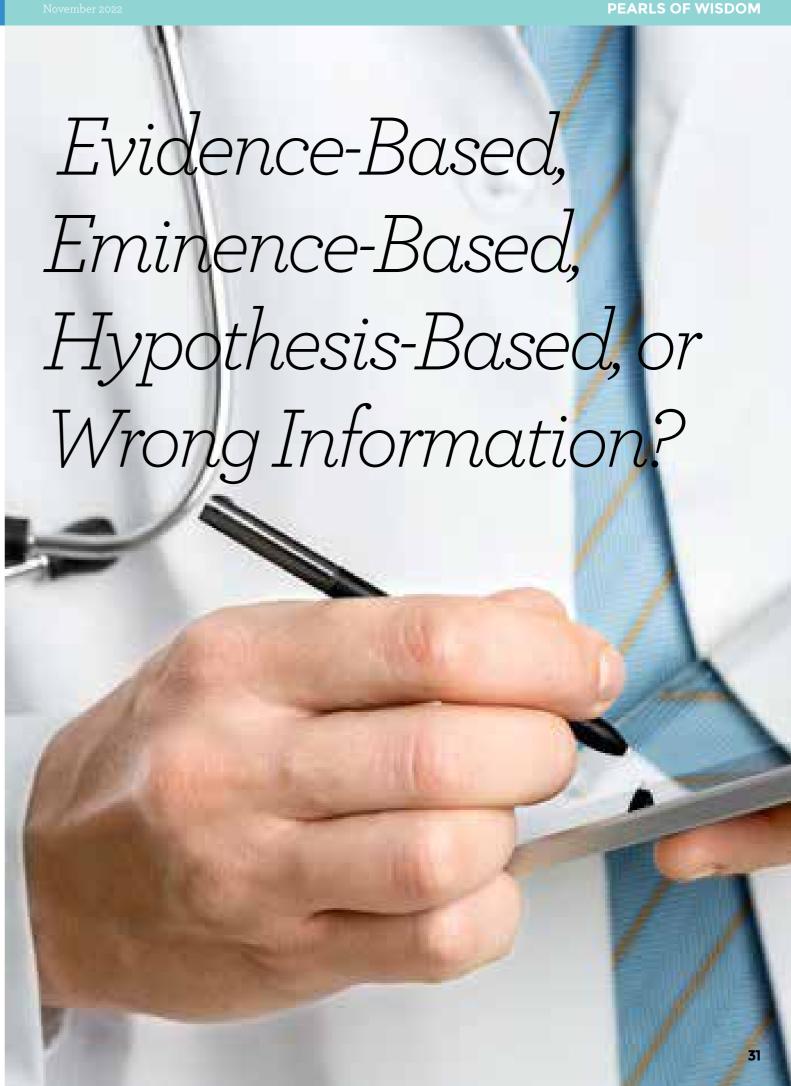
OTHER RECENT NATIONAL & INTERNATIONAL EVENTS & CONGRESSES.

The 9th Annual National Conference of the Indian Society for Hand Therapy, was held in Jaipar on 7-8 October 2022.

In the USA, the 2022 ASHT Annual Conference (Hybrid) was held from 13-16 October.

More details can be found below:

https://isshcon2022.com/index.php https://asht.org/education/annual-meeting



Challenging Current Wisdom in Hand Surgery

Editorial

Evidence-Based, Eminence-Based, Hypothesis-Based, or Wrong Information-Based Practice?



Healthcare givers—including those in hand surgery—are commonly considered to deliver their clinical treatment to patients based on evidence, eminence, or a combination of both, in order to obtain the best possible diagnoses and treatments. Therefore, correct clinical practice is often described as evidence- or eminence-based practice. I consider that two other categories of clinical practice exist but have not drawn sufficient attention. They are hypothesis-based practice and wrong information-based practice.

Hypothesis-based practice, using surgery as an example, is seen in two situations. The first is when treating rare and relatively uncommon disorders. The caregivers have no evidence or no reliable evidence to base treatment, even in consultation with senior colleagues, who also have neither evidence nor experience to support the practice they will give. They have to decide a treatment based on rationales or guesses and hypothesize that their treatment is the best according to the doctor's understanding, knowledge, and reasoning. The expertise level of even senior caregivers on these particular clinical problems can only be level II according to classification of Tang and Giddins. There are no experts or experienced specialists. The second situation is when the treatment method is new and therefore experimental without evidence or eminence to support.

Wrong information-based practice exists more commonly than we recognize. The caregivers decide to use a clinical treatment based on published clinical data or conclusions, which are wrong in reality. The most detrimental are published false or largely unreliable clinical data and outcomes. Caregivers have no way to know that the information is false. These false reports are ideally caught before publication or retracted after the problems are exposed. In reality, detection of such problems is difficult, and sometimes even with solid facts of major misconducts of the authors, some journals do not act to retract or correct the published papers. This problem is worsened by emergence of a large number of journals of low quality or predatory in nature, which publish

articles after loose peer-review and lenient editorial processes. Some of these journals are included in search engines, which makes suspicious data weigh similarly with those published in authoritative or serious journals. This is an emerging serious issue in the recent decade with expansion of literature, because not many colleagues look into or realize stringency of different journals.

Systematic reviews are often subject to journal stringency. The criteria for inclusion or exclusion of articles under systematic review do not include whether a journal is authoritative or predatory. A systematic review is itself a secondary analysis of original data with an inherent weakness: errors in interpretation of the original data are doubled. This weakness copied with uncertainties in selection criteria often makes such reviews too weak. I would trust and rely on those reports of trusted journals and trusted author teams more than on systematic reviews on the same topics. There appears to be a need to revise criteria for systematic reviews.

The above concerns might not be problems in the early 1990s when evidence-based medicine was advocated by Eddy. With increases in the sources of evidence, issues of seriously analyzing the sources are critical. General practitioners often rely on "evidence" in the reports but have little insight to the information sources. Even caregivers in an academic institute may not be able to discern or easily suspect false information because of general trust on academic journals and the belief that they are strict.

As journals grow in number markedly, I see two other types of journals positioned between what are called authoritative (serious) journals and predatory journals. One includes those with excellent peer reviews and editorial process, but they lack rigorous measures to minimize publication of wrong information. Another are journals bearing some features of the predatory ones and which are run by less-trained editors; these journals have little or no capability of preventing, correcting, or retracting misinformation. I consider above

II Editorial

4 groups of journals of varying stringency exist nowadays, which are serious, dependable, lenient, or predatory journals. The latter two may have a high risk of misinformation.

Besides, clinical outcome reports may make improper or imprecise final conclusions based on correct data and correct study process. The problems often lie in the interpretation of findings and data and the wordings used. Whether these improper or imprecise conclusions are finally published depends on the quality of the editorial review process. In my experience as an editor, I have to raise questions to the authors for the wordings of conclusions or revise them myself after rounds of peer review and revisions. Sometimes the authors are ones who are quite senior. frequently published, or both. I can see that if I had not questioned or revised these conclusions. errors would be published and affect the selection of clinical methods by the readers. Clinical evidence in these reports is valid, but the interpretation of the evidence is imprecise or improper.

The best way to decrease wrong information relating to data interpretation in a report is to place much attention on checking the final conclusions. This is important because most readers would only read the conclusions, not sensibly check whether the data actually led to the conclusions. Therefore, before publication, the scope of the conclusions should be carefully scaled without overgeneralization, and limitations should be clearly presented before making any final conclusions. If expert peer-reviewers and editors fail to revise the conclusions, general readers are unlikely to do so. I have encountered several occasions in which I found that the data led to almost entirely opposite conclusions from those made by the authors. I wrote so to the authors, and they changed the conclusions.

To clearly recognize the imperfect sites where wrong information may be introduced would cause providers to be more careful in adopting "evidence" reported. Among "evidence" they read and use, some may be false at the data collection and reporting levels at the worst, which may be a small part of the literature. Some are from reliable and correct studies, but misinterpretation causes problems. Recognition would

highlight the potential problems in the literature and alert the readers.

Recognition of these problems does not undermine the importance of the medical literature and the collective efforts of all involved. Rather it raises: awareness of the need to clean the literature overall and to provide correct interpretation and conclusions in individual reports, a task of authors, reviewers, editors, and postpublication commenting. This is essential to preventing wrong information. Once a wrong conclusion is printed, it is hard to change, which is often cited to argue against the authentic evidence and weaken its impact on clinical decision making. The peer review and editorial process are not perfect and will never be. It is best to let junior colleagues know very clearly about the process' fallibility. Once printed, these articles carry a degree of authority, especially to the junior caregivers. It is often easier to critique a paper with senior academic practitioners because they examine and have insight themselves. Junior ones rely more heavily on what is printed, and consequently, the impact on them is not easily changed.

In summary, I bring hypothesis-based practice and wrong information-based practice to wide attention, and I group journals by 4 different levels of stringency. I urge colleagues to recognize these when seeking or applying evidence in delivering patient care.

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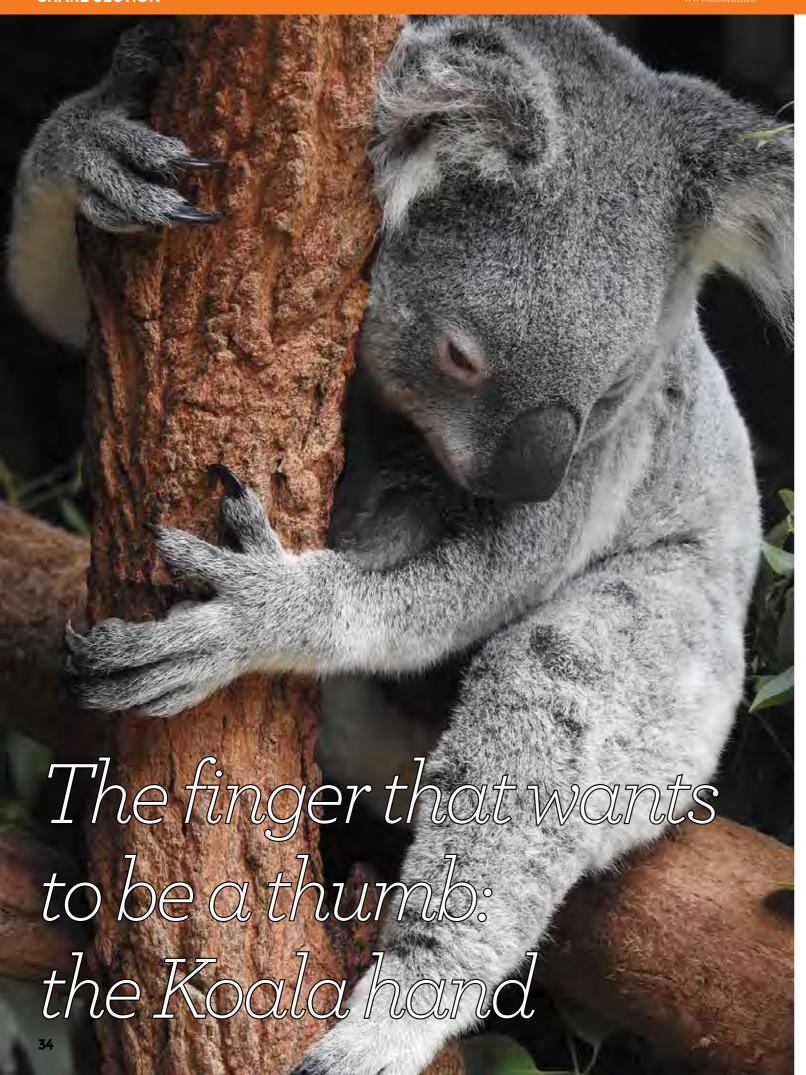
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I was asked by a friend and colleague, Kerby Oberg,
Anatomical Pathologist at Loma Linda University,
California, whether the koala forelimb 'second' thumb
was a thumb or an index finger. I didn't know
but ventured to say that I thought it to be a thumb
(Figure 1).



The koala is not a bear though it is often referred to as the 'Koala Bear'; rather it is an Australian marsupial. The young (joeys) are born underdeveloped and mature in the female pouch for six months or so (Figure 2).

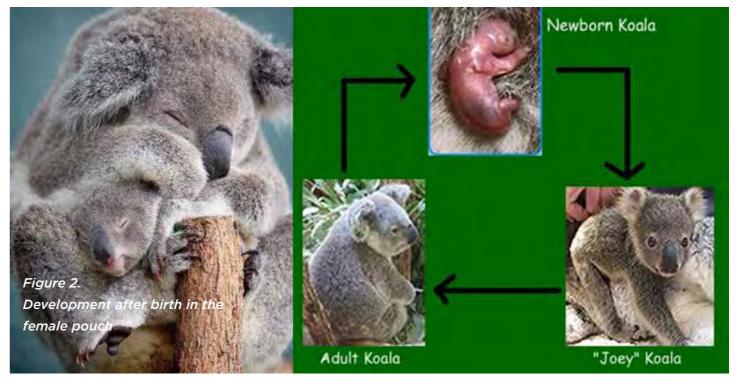
KINGDOM Animalia
PHYLUS Chordata
CLASS Mammalia
ORDER Diprotodontia

FAMILY Phascolarctidae. (Vombatidae)

GENUS Phascolarctos. (Vombatus; Lasiorhinus) SCIENTIFIC NAME Phascolarctos Cinereus -Koala. (Vombatus Ursinus; Lasiorhinus Latifrons; Lasiorhinus Krefftii – Wombat)

The koala is most closely related to the Australian wombat (The Family, Genera and the three species of the wombat are shown above in brackets).

The koala sleeps about 20 hours each day, moves as necessary and eats for two to four hours. It has amongst the smallest brain size per body weight of most animals, likened to two shrivelled prunes with no connecting corpus callosum; it needs little energy for brain activity or motion.



Perhaps because of this limited need, the koala diet provides little energy, and is mainly if not entirely restricted to eucalyptus leaves but only from 30 of over 650 eucalyptus species. In the main, the leaves provide the koala with water. Eucalypt toxins, lethal to other animals, are treated in the gut.

In older age, loss of teeth through grinding leaves, leads to death.







The koala is an endangered species. It was eaten but respected by the Australian indigenous race; subsequently hunted for its fur in the 1900s, an activity since banned; and hunted by dogs and cats. Human deforestation, fires and drought have threatened its environment in the forests of the east and south-east coasts of Australia (Figures 3, 4a+b, 5a+b, 6a+b). Chlamydia and Koala Retrovirus are major killers.





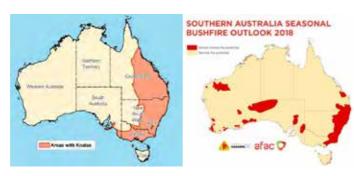


Figure 6. a. Distribution of koalas in Australia. b. Note the distribution of anticipated fires in 2018.

The koala forelimbs have two 'thumbs' which oppose the other three digits. The hind-limbs have an abducted big toe without a nail and a syndactyly of the second and third toes with separate nails for grooming (Figure 7). Both limbs are adapted for climbing. I acknowledge the Veterinary officers of Sydney's Taronga Park Zoo and Belinda Smith, Research Officer from our Department of Hand Surgery, for the provision of specimens for examination and dissection of the limbs of animals which have passed away.



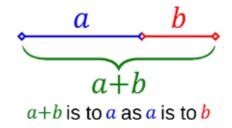
A radiological examination of the forelimb digits and wrist revealed the answer to Kerby Oberg's question.



Figure 8. X-ray of koala hand. Three phalanges of second 'thumb'/index finger.
Absence of lunate.

Figure 9. X-ray of koala hand. Separate thumb/trapezium and finger/trapezoid articulations.

The second 'thumb' has the radiological characteristics of a finger, with three phalanges and a metacarpal



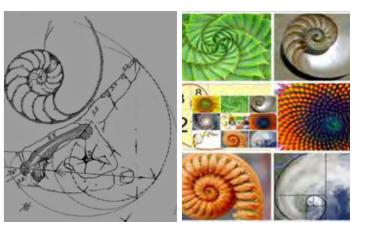


Figure 10. The Fibonacci ratio.

Figure 11. a. Functional finger lengths in the human hand conforming with the Fibonacci ratio. The Fibonacci spiral of human fist formation (From J William Littler). b. The spiral in nature.

articulation with a trapezoid bone (Figures 8 & 9).

The bone lengths in the koala thumb and fingers do not comply with Fibonacci numbers or ratio (the Golden ratio or Divine Proportion of Euclid, the endless ratio of 1.618...) (Figure 10).

Nor do they do so in the human hand, but J William (Bill) Littler referred to functional lengths complying with the Fibonacci ratio when flexing the human digits into the spiral of fist formation rather than true bone lengths. The Fibonacci spiral is found often in nature; and in some unnatural circumstances (Figure 11 a+b).

A dissection of the soft tissues of the koala thumb and index finger compared these and the koala bone characteristics with those of the human hand.

These dissections are shown in the figures (Figures 12 to 17- the koala figures are identified by a K and the

SHARE SECTION Www.ifssh.info November 2022 SHARE SECTION

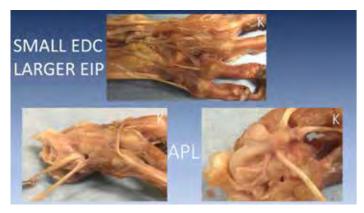


Figure 12. Small EDC and larger EIP to index (top row). Absence of EPB (top and bottom rows).



Figure 13. Minimal independence of FPL and FDP (right). Small FDS to middle finger (right).

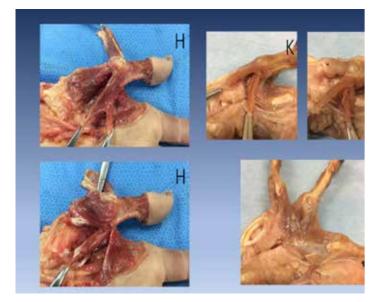


Figure 14. Absent Opponens Pollicis (top row, middle and right). The forceps are attached to APB and FPB. Common origin of Adductor Pollicis and Adductor Indicis from tendinous raphe (bottom row, right).



Figure 15. Koala First Dorsal Interosseous (Abductor Indicis) (top row, middle). Detached common adductor origin (bottom row, left).

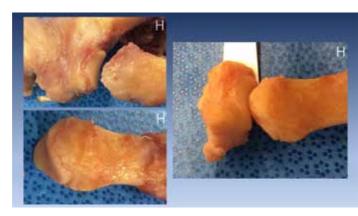


Figure 16. Human thumb CMC joint.



Figure 17. Koala thumb CMC joint.

human figures by an H).

In summary, the koala hands are characterised by:

- There is an EIP and a small EDC to the index finger (Figure 12- top row).
- 2. The thumb has no EPB tendon (Figure 12- top row and bottom row, left).

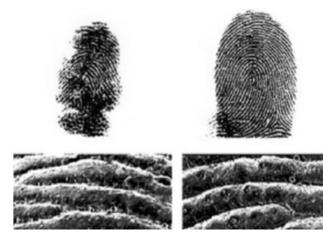
- 3. There is minimal independence of thumb and finger deep flexor tendons (Figure 13, right).
- 4. FDS tendons to the fingers are small (Figure 13-see middle digit, right).
- 5. There is a dual insertion of APL to the trapezium and thumb metacarpal base (Figure 12- bottom row)
- 6. The thumb Opponens Pollicis is absent (Figure 14top row, middle and right. The forceps are attached to APB and FPB).
- 7. The origin of the Adductor Pollicis between the thumb and index finger is continuous with that of a muscle between index and middle fingers (Adductor Indicis) with origin from a mid-line tendinous raphe on the palmar side of the third metacarpal (Figure 14- bottom row, right and Figure 15- bottom row, left). The index finger has a Flexor Indicis Brevis with two heads, one with origin from the deep surface of the tendinous raphe and base of the second metacarpal and the other from the base of the third metacarpal. The First Dorsal Interosseous to the index finger may also be considered as an Abductor Indicis (Figure 15- top row, middle).
- 8. The CMC joint is underdeveloped (Figures 16 & 17).
- 9. The koala wrist has no separate lunate (Figure 8).

So, the koala 'second thumb' is an index finger which has rotated into the position of an opposable digit over time to aid in climbing. Although the bone characteristics are those of a finger, the intrinsic muscles share some similarities with those of the thumb.

Michael Sandow, from Adelaide, Australia, believes that this adaptation of position is to protect the true thumb CMC joint against the abduction forces of climbing. The koala thumb is too important a component of koala survival to allow injury.

References:

I have not compiled a list of references but acknowledge all who have previously written on this subject.



The Koala, which evolved separately from Homo sapiens for some 70 million years, has developed fingerprints very similar to those of humans!

Abbreviations:

- EIP Extensor Indicis Proprius
- **EDC Extensor Digitorum Communis**
- EPB Extensor Pollicis Brevis
- FPL Flexor Pollicis Longus
- FDP Flexor Digitorum Profundus
- FDS Flexor Digitorum Superficialis
- APL Abductor Pollicis Longus
- APB Abductor Pollicis Brevis
- FPB Flexor Pollicis Brevis
- CMC Carpometacarpal



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Past President IFSSH
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IFSSH SPONSORSHIPS www.ifssh.info November 2022 IFSSH SPONSORSHIPS

Assisting Hand Surgery Worldwide

The IFSSH has long held the view that educational sponsorship is essential to furthering the field of hand surgery. In our international community we have inspiring hand surgeons, dedicated teachers, enthusiastic students, clinical topics that range from widely utilised to incredibly niche, and wonderfully diverse settings that each need tailored programmes to advance. The IFSSH plays a role in enabling these ideas and intentions with financial support.

The IFSSH Committee for Educational Sponsorship (CES) was formed in 2011 to ensure the IFSSH treasury was used efficiently to support worthy educational projects and programmes. The CES is composed of the IFSSH President-Elect (Chair), the Communications Director and one of the IFSSH Executive Committee Members-at-Large. These are currently S. Raja Sabapathy, Jin Bo Tang and Greg Bain respectively. The CES is responsible for receiving and assessing applications and providing recommendations to the IFSSH Executive Committee. The Executive Committee then ratifies the CES endorsements after reviewing the IFSSH treasury.

IN 2022 WE ARE PROUD TO HAVE SPONSORED THE HIGHEST NUMBER OF APPLICATIONS TO DATE WITH OVER US\$100,000.

Who can apply?

At present, there are 62 member societies in the IFSSH. All are eligible to submit applications for financial assistance for educational activities.

Projects with international reach and benefit are encouraged - these may be instigated by individuals and groups rather than societies, but all applications must come from the society (with their endorsement).

Many more hand surgeons practise in areas of the world not covered by an official hand surgery society. Recognising this, in recent years the IFSSH introduced a method by which these could also apply for IFSSH financial assistance - the same application process applies, with one additional requirement of the application needing endorsement by any current IFSSH member society.

What are the categories?

There are four main pathways under which the IFSSH provides educational support:

- 1. General sponsorships: The scope is limited only by the imagination. This may be for assistance to run a niche course with international appeal, to encourage priority groups to register for an otherwise out-of-reach symposium, to provide an outreach programme, to prepare a platform to distribute education programmes, to hold a workshop to improve techniques that are lacking at a local level, or to in any way further hand surgery as a specialty. Please note that the IFSSH cannot fund the purchase of infrastructure (e.g. microscopes, clinic facilities) it is charged with supporting education rather than goods.
- Specific Sponsorship Regional Courses in Hand Surgery: A Regional Course in Hand Surgery is an educational activity organised by

a Hand Surgery Society and/or local institution with the assistance and sponsorship of IFSSH. This specific sponsorship applies to a society approaching the IFSSH with the desire to establish a one-off regional course on a topic of their choice, with the course fulfilling the relevant IFSSH guidelines. If approved, the IFSSH provides up to US\$20,000 of seed funding to the organisers to assist with the course conduct. This category of sponsorship does not apply to a course already in existence that requires some additional funding (this would be a "General sponsorship" application) or a group of surgeons wishing to travel to a course, and it is not related to the recently introduced "IFSSH Mid-Term Course in Hand Surgery" (the Mid-Term Course has an international basis and the hosting rights are decided through a bid to the IFSSH Delegates' Council).

Assistance Grants: The IFSSH provides up to US\$20,000 to the local organizing committee of each triennial congress, specifically to assist priority individuals to attend the congress. The local committee administers the application and selection systems, distributing the funds to a large number of applicants in the form or gratis/reduced registrations and travel assistance.

These schemes are advertised in the lead up to

each IFSSH triennial congress.

3. Specific Sponsorship - IFSSH Congress

4. IFSSH Harold Kleinert Visiting Professorship:

This initiative aims to promote international exchange of hand surgery knowledge by sponsoring a visiting professorship to an appropriate hand surgery education programme. The local society is to plan an extensive programme with participants of all levels, incorporating a number of teaching formats and broad geographic involvement. The local society may approach the CES to request a proposed Professor or to ask for recommendations. The IFSSH then assists with the expenses of the

How do I apply?

There are four main pathways under which the IFSSH provides educational support:

Further information, including the application processes, is available on the IFSSH website: https://www.ifssh.info/educational_sponsorship.php

To apply for educational grants, please follow the link to the IFSSH Educational Sponsorship Guidelines

- The process for General sponsorship is outlined within pages 1-3.
- For Sponsorship Regional Courses in Hand Surgery, please follow the instructions on pages 4-5.
- The Specific Sponsorship IFSSH Congress
 Assistance Grant schemes is advertised in the lead up to each IFSSH triennial congress.

A specific link to the **IFSSH Harold Kleinert Visiting Professorship guidelines** is available on the same webpage.

Any educational proposal related to hand surgery may be considered if it originates or is endorsed by an IFSSH member society - please ensure this endorsement is included with the application.

Grants are awarded on a competitive basis. Projects and activities with international impact, broad reach, and those inclusive of priority groups are looked upon favourably.

Supported programmes

Full descriptions and reports of the supported programmes are available on the IFSSH website: https://www.ifssh.info/ifssh-sponsored-educational-projects.php

The IFSSH assistance has reached all areas of the globe, supported various groups of colleagues, and covered numerous topics:

ancial assistance for educational activities. Surgery is an educational activity organised by Professor and provides an honorarium. covered numerous topics:

IFSSH SPONSORSHIPS www.ifssh.info November 2022 IFSSH SPONSORSHIPS

General sponsorship

- 2023 World Symposium on Congenital Malformations of the Hand and Upper Limb: registration assistance
- Current Practice of Hand Surgery textbook
- WALANT course series, Kenya
- Combined Colombian Venezuelan Hand Surgery Congress
- IFSHT Triennial Grants (recurring)
- International Course on Complex Wrist Reconstruction - Addressing an unmet need for the Romanian Hand Surgeons (Figure 1)



Figure 1: Faculty and Romanian surgeons attending the Wrist Reconstruction Course in Groningen



Figure 2: Dr Don Lalonde presenting to the Hand Surgery Workshop, Kenya, January 2020

- 2nd International Symposium on Surgery of the Spastic Upper Limb, Venice
- Hand Surgery fellowship programme establishment, West Africa
- APFSSH Congress, Melbourne, 2020: Developing Country Registration Grant

- Hand Surgery Workshop, Kenya (Figure 2)
- Esser Master Class Series and Educational Platform, Rotterdam
- International Consortium for Health Outcomes Measurement (ICHOM) - Adult Hand and Wrist Set (two grants)
- · Fellowship Assistance Dr Abdelrahman, Sudan
- International Symposium on Surgery of the Spastic Upper Limb, Paris
- Outreach Programme in Phnom Penh, Cambodia
 Prof G Gumley, Australia (Figure 3)
- Travelling Fellowship Bursary Dr Piotr Czarnecki, Poland
- American Association for Hand Surgery -Mongolia Project
- · Baragwanath Hand Fellowship (three grants)
- "Making a Thumb: The Story of Pollicization" DVD (Figure 4)
- IFSSH Terminology for Hand Surgery book



Figure 3: The Australian outreach team assist in Phonm Penh, Cambodia



Figure 4: Making A Thumb: The story of Pollicization - DVD

Specific Sponsorship - Regional Courses in Hand Surgery

- South Asian Regional Education Course (India):
 Management of common hand conditions
- Eastern European Regional Educational Course (Hungary): Hand Reconstruction in Trauma and Rheumatoid Arthritis
- Eastern European Regional Educational Course (Hungary): Hand Surgery and Cadaveric Demonstration (Figure 5)

Eastern European Hand Surgery Course

September 201

the straing of knowledge is one of the legi aims of the IFSDF and IESSP Felthis reach, IFSSF Sectionary General, frotherior Sold Salbo recruited an enthissestic and well known faculty from access Europe, Turkey, and South Africa, to teach over 120 surgeon. Inon Eastern Europe The version was the spa sown of Hasharabousdo in the Homobalgy region of Eastern Hungary, about two and a half hours drive from Bustance.

The course was designed to be in cost-effective as possible for the designers (costing just 6 300) helped by very generius apontarishig from everal companies and by the body yet onese understreet in the top prepare the fectures and felicity the toward was fought been bacthed a testament to the quality and what of the programme. Audistress is, the Hungarian management firm which which provides make although a TISS1, give flavings logicial autisance throughout the three day course.

The first day compiled several limitates on topics such as Displayters and what arthroscopy. The less bind day involved a 30 minute box line across the year hangarian plains to the Miscolal School or Debeccen University, Hims, the faculty provided 12 surgical demonstrations on sudawms on techniques south a tiendon transfers. dissections and surgical techniques is the projected at high definition into a localer half from where the delegate could ask questions. The third day we book in the localer reduction after ectures on broader reductional fear into as the basics of congestal francisingers; the financial fearing and surgers, the financial fearing surgers and operations that should no longs see performed.

Itam-of-the-art IT system allowed th

The other aspect of the course way, of course, social. The way a great opportunity for the delegates and faculty from as many countries to meet sect! wifer and develop friendly and profinularias commants. The first



Figure 5: The Eastern European Regional Course in Hand Surgery

Specific Sponsorship - IFSSH Congress Assistance Grant

- London 2022 (IFSSH Travelling Fellows) (Figure 6)
- Berlin 2019
- · Buenos Aires 2016
- Delhi 2013
- Seoul 2010



Figure 6: The 2022 Travelling Fellows, London IFSSH triennial congress

IFSSH Harold Kleinert Visiting Professorships

- Jin Bo Tang: Poland, September 2023
- Steven Moran: Australia, March 2020 (Figure 7)



Figure 7: Dr Steven Moran, the inaugural IFSSH Harold Kleinert Visiting Professor, with Dr Marc Garcia-Elias (IFSSH President), Melbourne 2020

IFSSH SPONSORSHIPS www.ifssh.info November 2022

Educational resources

In addition to providing financial assistance, the CES also acts as a conduit to share educational resources, both internally and externally generated, free of charge to the international hand surgery community via the IFSSH website (Figure 8).

These include:

- Hand Surgery Resource
- · Evidence Based Hand Surgery
- · Wrist Basecamp
- OMT App: the Classification of Congenital Anomalies of the Hand and Upper Limb
- · Terminology for Hand Surgery
- Hand Surgery Worldwide Textbook of Hand Surgery
- · IFSSH Scientific Committee reports
- the quarterly IFSSH Ezine

We are keen to ensure that the member nations have an opportunity to utilise these valuable resources.



Figure 8: Education Resources available on IFSSH website

Questions?

Please approach the CES with any questions via administration@ifssh.info.

We look forward to supporting many more activities and projects over the coming years, as well as continuing to build the library of educational resources.

Yours sincerely, Committee for Educational Sponsorship



S. RAJA SABAPATHY
President Elect (Chair)



JIN BO TANG
Communications Director



GREGORY BAINMember-at-Large



Art Exibit #18

Pensive Bodhisattva

Culture/Period Three Kingdoms
Period | Materials Metal - Giltbronze | Dimensions H. 83.2cm
| Designation Korea's National
Treasure #78

This statue strikes a classic contemplative pose: one leg perched up on the other knee, with fingers raised up against the cheek. This pose is quite common in Buddhist sculpture, and it was derived from the young Indian Prince, Siddhartha Gautama, contemplating the nature of human life. In China, such pensive statues were most common in the 5th and 6th centuries, while in Korea they are usually from the 6th and 7th centuries. This Buddhist statue (designated as Korea's National Treasure No.78) sports a tall crown decorated with a sun and moon. This type of crown originated in the Sassanid Persian Empire, but it was transmitted east via the Silk Road and was adapted as a crown for bodhisattvas. The statue is relatively tall, but the bronze layer is exceptionally thinas thin as 2 mm-showing that the artisans of the period had developed advanced metal craft techniques. The sophistication of the artistic style and technique is further exemplified by several lifelike details: the benign, delicate smile, the amazingly natural sitting posture, the gentle expression of the hands, the organic harmony between the body parts, and the dynamic flow of the veil robe and waist rope.

MEMBER SOCIETY NEWS www.ifssh.info November 2022 MEMBER SOCIETY NEWS

Member Society

COLOMBIAN ASSOCIATION OF HAND SURGERY

The Colombian Association of Hand Surgery carried out a humanitarian mission called "Manos a la Obra". Forty five children from low-income households who had congenital deformities of their hands or the upper limb were selected for surgery.

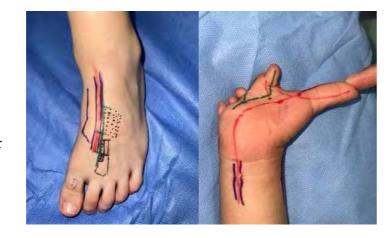
With the surgeons from Colombia, we sincerely appreciate the kind participation of surgeons from a number of other countries: from Brazil, Dr. Rui Ferreira, from Spain, Dr. Francisco Soldado and from Germany Dr. Heinz Homman, Dr. Eva Baur, Dr. Frauke Deneken and Dr. Marcela Jimenez Frohn.



Banner made by the patients of the day



Happy patients after surgery



Toe to hand transfer



Hand surgeons



Surgeon: Dr. Rui Ferrer and Dra. Aida García



Congenital hand deformity

It was immensely satisfying to help these children of our country to better the function of their hands, the essential tools for life, to express themselves, to see them play and to see the smiles on their faces!

To have made this mission possible, we are grateful for the support of the Government of Risaralda, thefinancial support of Interplast, the Soldado Foundation and the Tienken Company.

Our dream is to reach all of Latin America with the "Manos a la Obra Mission"!



HELLENIC SOCIETY FOR SURGERY OF THE HAND AND UPPER LIMB

It's been a very interesting year for all and especially for our Society. Things have been far better since the covid pandemic has started fading away, with the most prominent event of the year being the IFSSH, IFSHT & FESSH Combined Congress in London, 6-10 June 2022.

It was a great opportunity for all of us to communicate with others, learn, exchange information, socialise and meet new and old friends. It was really a great and very successful event in every way, and in a fantastic venue. At the Delegates' IFSSH Council Meeting, we had a very stimulating time being informed on various issues and on future events.

Our Society continued this year with several virtual events and eventually proceeded with the yearly national event. The 27th Combined Meeting of the Hellenic Society for Surgery of the Hand and Upper Limb & the Hellenic Society of Reconstructive Microsurgery, will be held at Thessaloniki, 10-12 November 2022. It is the first in-person meeting after the covid period, and we expect to have high attendance numbers and organisational success. You are all invited to experience the wonderful city of Thessaloniki!

Information can be found on the following link, https://preview.mailerlite.com/s9z8d9h2b6

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ECUADOR SOCIETY FOR SURGERY OF THE HAND (ECUMANO)

IFSSH Mid-term Course

Four months have passed since the IFSSH Congress in June 2022 in London when ECUMANO was elected to organize the first IFSSH Mid-term Course. Much has been done so-far to prepare for this new and important activity by the IFSSH.



We will meet in Guayaquil, Ecuador, at the Hilton Hotel from 31January to 3 February 2024.

It will be a hand surgery meeting which brings together the two hemispheres of our globe at the equator, the very centre of the planet!

Ecuador is not only known throughout the world for having the best cocoa, but also wonderful tourist sites such as the Galapagos Islands.

Guayaquil, the main port of Ecuador, is a cosmopolitan city of approximately 3 million inhabitants and also boasts a "monument to the equator"!

We have also put much effort in soliciting the international commercial companies to exhibit their products which are such an integral part of such an international meeting.

The topics to be discussed will include all aspects of the traumatised hand, microsurgery, brachial plexus surgery and wrist arthroscopy.

Please visit JorgeAlejanDroo - Own work, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=62813983 for more information.

Call for paper presentations will open beginning of 2023.

ECUMANO is excited to host this very first Mid-term IFSSH Couse, and invites all Hand Surgeons from all over the word to join us in Guayaquil, Ecuador!



Instagram: @ecumano_org Facebook: @ecumano Web: www.ecumano.org secretaria@ecumano.



FINNISH SOCIETY FOR THE SURGERY OF THE HAND

The Finnish Society for the Surgery of the Hand was proud that Professor Timo Raatikainen was honoured as Pioneer of Hand Surgery at the IFSSH Congress in London, UK in June 2022.

Prof. Raatikainen has made an outstanding contribution to hand surgery in Finland and internationally. During his long career he played a pivotal role in establishing a nationwide hand surgery service in Finland.



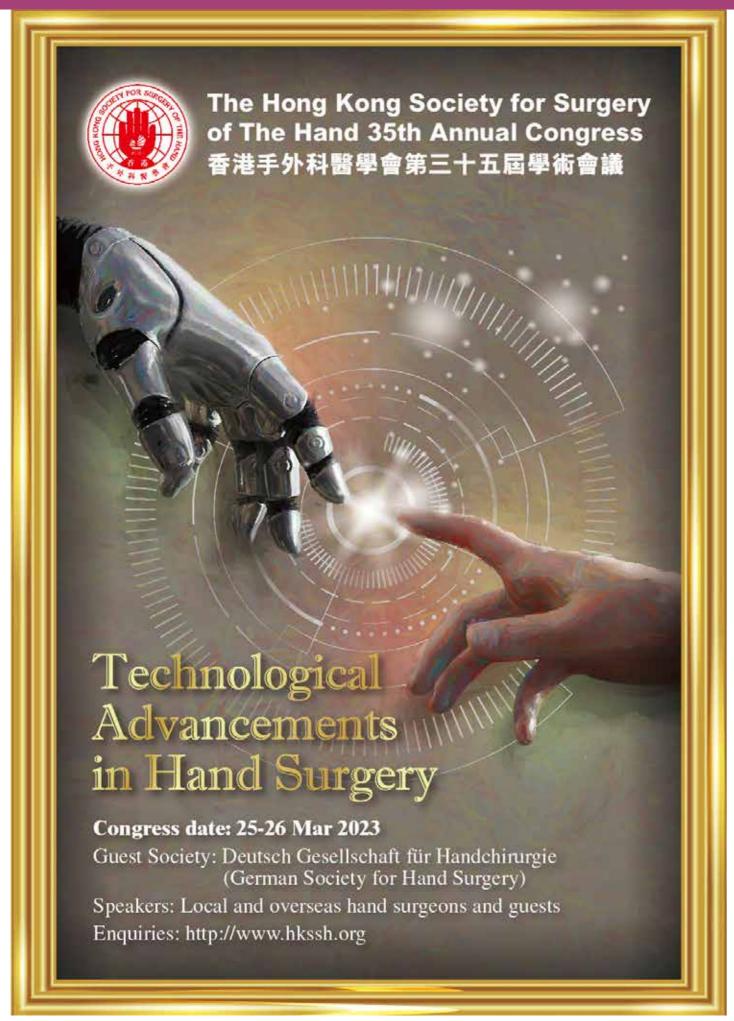
After specialization under the guidance of the legendary professor and IFSSH Pioneer Kauko Solonen, Timo Raatikainen settled in northern Finland in Oulu. There, as the only surgeon capable of performing limb replantations, he managed on his own at that time to offer a hand surgery service to the entire Lapland and the surrounding provinces, an area twice the size of Ireland!

During the last 20 years of his career Prof. Raatikainen worked as head of the Hand Surgery Clinic in Helsinki – the largest hand unit in Finland. A large part of hand surgeons who are now part of the Finnish hand surgery community were trained under his supervision.

In addition to proliferative international scientific writing, he had a major role in editing a Finnish language hand surgery textbook – the only one of its kind.

Raatikainen is actively engaged with the European Union of Medical Specialists (UEMS) (Surgery section) to recognize hand surgery as an independent specialty. Finland is one of the few countries in the world which recognizes Hand Surgery as an independent surgical specialty.

The Finnish Society for the Surgery of the Hand congratulates Prof. Raatikainen for this achievement and acknowledges the great contribution of this pioneer to the Finnish hand surgery community.









13TH APFSSH, 9TH APFSHT & 8TH APWA CONGRESS

DIVERSE & INCLUSIVE

31st May - 3rd June 2023 • Singapore

Early Bird Registration Opens 15th Nov. 2022

Dine in the Gardens

Gala Dinner

Spend an enchanted evening dining under the world's largest green house at The Flower Dome, Gardens by the Bay. Network against a beautiful setting and be awed by the Flower Dome's beauty and it's sheer size, literally bringing the world's flora under one roof.

Book your gala dinner ticket now as limited seats are available. Ticket includes a scrumptious set dinner and admission to the Flower Dome.



31st May - 3rd June 2023, Singapore www.apfssh2023.org





GENERAL ORGANIZATION



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