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PRESERVATION OF SKELETAL
HEALTH IN THE LONG TERM
GLUCOCORTICOID PATIENT

HAND THERAPY
MINDFULNESS, HEALTH COACHING
AND HAND THERAPY







# THE JOURNAL OF HAND SURGERY

(Asian-Pacific Volume)

An International Journal Devoted to Hand and Upper Limb Surgery and Related Research

Journal of the Asia-Pacific Federation of Societies for Surgery of the Hand

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#### Latest Articles: Volume 24, Issue 03 (Sep 2019)

#### **Research Papers**

Evolution of the Ring Concept for the Forearm and Its Implication on Treatment: From Galeazzi, Monteggia, Essex-Lopresti, and Darrach to the Current Era

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Association between Functional Outcomes and Radiographic Reduction Following Surgery for Distal Radius Fractures

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Long-Term Results of Surgically Treated Radial Polydactyly – An Outcome Correlation Study Ching Man Yeung, Alexander Kai Yiu Choi, Jennifer Wing Sze Tong, Winnie Fok, Yat Fai Chan and Yuk Yin Chow

Percutaneous A1 Pulley Release Combined with Finger Splint for Trigger Finger with Proximal Interphalangeal Joint Flexion Contracture Tzu-Cheng Yang, Duretti Fufa, Hui-Kuang Huang, Yi-Chao Huang, Ming-Chau Chang and Jung-Pan Wang

Metaphyseal Core Decompression of the Distal Radius for Early Lunate Necrosis Christoph U. Schulz

Minimum Ten-Year Outcomes of Partial Ulnar Nerve Transfer for Restoration of Elbow Flexion in Patients with Upper Brachial Plexus Injury Yusuke Nagano, Daisuke Kawamura, Alaa Terkawi, Atsushi Urita, Yuichiro Matsui

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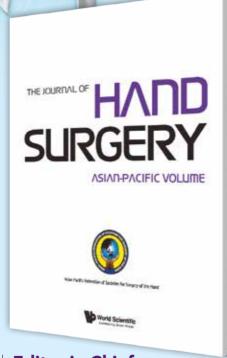
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A known saying may reveal more insight than meets the eye.

Three things need to be considered when facing decision making:

- 1. The known facts.
- 2. The known unknown facts.
- 3. The unknown unknown facts.

It would be prudent to consider this advice even for us as clinicians.

Before embarking on a course of action, ie treatment, we have to ensure that our investigative conclusion, ie diagnosis, is correct.

We have been trained to consider known facts. Blood pressure, temperature, biochemical tests, special investigations, etc. can be regarded as known facts.

However, do we consider the known unknown facts which may be just as important, and which may influence the diagnostic outcome? The physiological response to our prescriptions by the patient's unique genetic make-up, or the unpredictable connective tissue reaction during the healing process after surgery may be examples.

But even more daunting is what influence the unknown unknown facts which still have to be discovered might play in diagnosis making. Our intricate and complicated bodies are still to a large extent a mystery. New revelations are regularly made which changes our understanding and approach all the time. Many so-called facts which we have accepted as facts have been replaced over the years. Should this not be taken into account as well?

Suggesting a diagnosis and a treatment plan for a patient should be a very careful and considered process. Multiple pieces of information, the known, partially known and awareness of the possible yet to be discovered, should form part of our mindset when being confronted with a clinical problem.

The question therefore is:

Am I absolutely sure about my diagnosis, which will dictate the treatment options and ultimate best result?

Sincere regards, Ulrich



Ulrich Mennen
Editor: IFSSH Ezine
Past President: IFSSH

# President Report

#### FROM THE IFSSH PRESIDENT

Dear Colleagues,

Three months ago, I took up the presidency of the International Federation of Societies for Surgery of the Hand (IFSSH) after a successful meeting in Berlin. After these three months we are still basking in the glow of a capital considered by some the "greatest cultural extravaganza one could imagine" (David Bowie 1970). After all what we saw, and enjoyed, our gratitude to the organizers is endless. Indeed, the way they handled the many obstacles that such complex organization involved was impressive. Thanks a lot!

Also, only three months, and yet, I am glad to say that the renewed Executive Committee has worked hard, aware of the important commitment we have accepted at this year's IFSSH Delegates Meeting. We are striving to find ways to improve our bylaws. By reviewing our membership performance and achievements, we are trying to set new objectives: how to get younger, more energetic surgeons involved. Why are women under represented in our Federation? How do we make the Membership more aware of the goals and expectations of the IFSSH Charter? To this end, we are evaluating the history and structure of the current set of bylaws. Yes, it is brainstorming time, and we take it very seriously.

As we stated in Berlin, aside from redefining our future, we also should build on the projects of our predecessors. In this respect, we have assigned specific missions and tasks to the members of the Executive Council. We want to see the IFSSH grow by bringing new partners to the Federation.

We wish to engage with developing countries who

have small hand surgery societies to find ways to assist them. In those countries that do not have any such societies, we are looking at ways for those individual colleagues to also become part of our Federation. The concept of "orphan hand specialists" may not be ideal, but at least it helps us to be aware of the problem and seek ways to enable them to officially also become members of the IFSSH.

As it was more than 53 years ago, our main objective remains education and promotion of hand surgery world wide. We will do our best to fulfill this mandate which we have accepted as your Exco.

After Berlin, I am sure that you all will agree with me that amongst the IFSSH members there are many experts and many colleagues with much experience, and that we all need to share our knowledge.

I wish you a successful 2020, full of health and happiness in your personal life.

Best regards



Marc Garcia-Elias
President of IFSSH

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LETTER TO THE EDITOR www.ifssh.info November 2019 LETTER TO THE EDITOR

# Letters to the Editor

Dear Paco,

I have read your recent contribution about CRPS in the IFSSH Ezine (August 2019 #35) very carefully, and I appreciate your input as much as your editorial in the JHSE. I agree with you on most points, but think that your explanations do not cover all aspects of CRPS.

As I am myself committed to the "difficult pain problems" in the upper limb now for almost 25 years, beginning during my hand surgical training at Aachen University Hospital. My consultations rapidly became the difficult, chronic pain cases, because I never give up and I take time for all the patients, so I perfectly understand your concerns.

Within my training time, two facts influenced me a lot:

- In a controlled animal experimentation in rabbits, I
  was unsuccessful in reproducing CRPS in hint limb
  by nerve and /or vascular irritation, although the
  scintigraphic examination showed postoperatively
  inconstant changes of limb perfusion and bone
  tracer fixation (unpublished data, due to the lack of
  "conclusion").
- 2. I met Albrecht Wilhelm in 1995, a real pioneer in German hand surgery. He has worked for years on pain issues in the hand and upper limb, did his PhD on the joint innervation of the upper limb (Wilhelm 1958) (giving raise to the "denervation" surgery- Wilhelm 1966); and analysed how an unrecognized thoracic outlet syndrome could together with a more peripheral trigger, like a little trauma or surgery, start a CRPS (Wilhelm 1985). He also published about nerve fascicle torsion giving sudden pain and palsy (Wilhelm 1970) This last condition becomes actually very interesting when one tries to understand Parsonage-Turner or TOS syndromes (Aranyi et al. 2015). Wilhelm during his time published mostly in German, and his articles are not Pubmed-rated: a pity, as today only English written medical science matters.

Later on, I focused myself on brachial plexus surgery, especially in children, and more generally on peripheral nerve surgery and the treatment of neuropathic pain (my strategy is summarized in a recent paper written together with Winkel and Zyluk in 2018).

I totally agree when you state that CRPS is a dustbin (and it is up to us surgeons to sort out things), that there is a lot of mal-doctoring and that pain clinics are like graveyards.

But your hypothesis of an "irritated" median nerve and its decompression does not solve all aspects and may be misleading. Sometimes we definitely do not find the magic key in a given patient, especially in the chronic pain patient, as the pain memory and whole sociopsycho-biological adaptation initiated a new adaptive behaviour and "fake" limb integration.

I actually still claim that a syndrome (sum of symptoms) like CRPS does exist, that nerves are frequently affected (and we should find out how, by compression, torsion (Vispo Seara et al 1994), metabolic changes seen in the huge field of neuropathies, etc.) and that research and care for these people must progress.

Yes, we need to listen very carefully to their complaints, especially how they describe their pain.

Yes, we should care much more about them (Bahm et al 2018).

In Germany, we actually have an in-patient strategy called "hand surgical complex therapy" allowing us to admit those complex patients for two to three weeks in the hospital and to treat them by an interdisciplinary team (the anaesthetist performs a scalene block to make them pain-free, ergo- and physiotherapists work on sensory and motor

rehabilitation, and a psychologist analyses the general background- all of this under the supervision and guidance of a qualified hand surgeon).

I come to my last point: education. Especially our FESSH and IFSSH congresses are big events, supposed to cover all aspects of our discipline. But look how poorly nerves and pain issues are represented. Either we talk for hours about carpal or ulnar tunnel surgery, or we organize panels for brachial plexus surgery, where always the same twenty or thirty colleagues talk and listen to themselves. We all know of course colleagues who investigated CRPS for years, like you and Andrzej Zyluk from Poland (Goebel et al 2019). Even other specialists contribute much on CRPS (have a look at the CRPS type I Guidelines from 2006, issued by both the Netherlands Society of Rehabilitation Specialists and Anaesthesiologists). But you obviously raise an issue where most of our colleagues are not really interested in, unless it concerns one of their own patients, or one of their family members.

Thank you in anticipation for your response, and thank you for taking these patients into your surgeon's heart.

Yours sincerely

#### Jörg Bahm

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HISTORIAN AND SOCIAL MEDIA REPORT Www.ifssh.info November 2019 HISTORIAN AND SOCIAL MEDIA REPORT

# Historian & Social Media Report

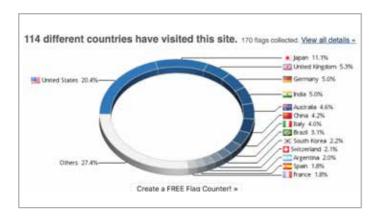
#### **IFSSH- PAST AND FUTURE**

IFSSH is proud of its roots and its heritage; the IFSSH Historian preserves that heritage. But as we move into the future, Social Media must be embraced by the IFSSH, combining the past and the future.

#### WEBSITE

Take a look at the new website www.ifssh.info

By 8th October 2019, people from 114 countries have visited the website, an average of 19 visits each day.

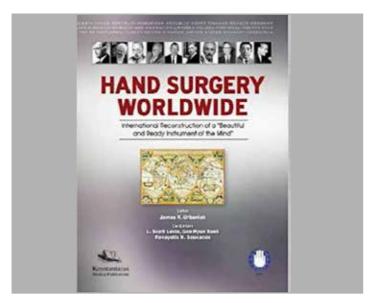


There is a new Archive Tab with 4 sections relevant to the history of our Federation: Delegates Meetings; Giants of Hand Surgery; Pioneers of Hand Surgery and the Swanson Lecture.

Under the Member Nations Tab you can find a list of all the Member Societies and their histories. If your national history is missing- please send it to me – davidwarwick@handsurgery.co.uk or tweet@handwrist.



The Hand Surgery Worldwide book is available as a download for anyone to read.



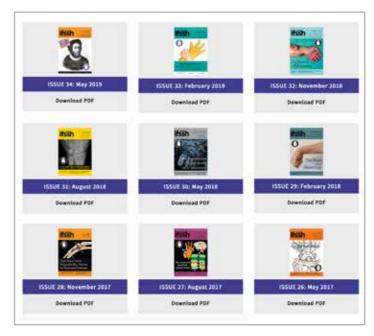
Another new feature is the EVIDENCED BASED

HAND SURGERY UPDATE link- an initiative from the
University of Nottingham with a monthly update of all
systematic reviews in hand Surgery- just click on the
link....



The **EZINE** is also available on the website- every single past edition is available as a pdf download. So you can see the past news, histories, scientific articles, and much more.





#### TWITTER

A twitter account was opened in May 2018 @IFSSHand. By 8th October 2018, it has gained 700 followers and has sent out 170 tweets. Within an hour of a post on either Twitter or Instagram, usually 200 people have viewed the post, and by 24 hours over 500 people!

#### **INSTAGRAM**

This opened on 10th July 2019 @IFSSHand. and by 12th August had already gained 690 followers. It has a particularly strong following in South America and Spain.



#### Finally

Use the Website- it is a great resource. Have a look at the History tab, learn about the Pioneers who got hand surgery to where we are today, follow IFSSH on Instagram and Twitter and spread the IFFSH news.



**David Warwick** Historian: IFSSH

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OBITUARY www.ifssh.info November 2019 OBITUARY

# Giorgio Brunelli (1925-2018)



Giorgio Brunelli was an eclectic surgeon being a great orthopaedic surgeon, a world pioneer in microsurgery and hand surgery, a passionate researcher in many fields especially in the peripheral and central nervous system and it's plasticity. He is considered the father of Microsurgery in Italy.

Brunelli was born in 1925. The choice of studying Medicine came as a consequence and inspiration following serving in the Army during the war when he worked in a small field hospital.

He graduated in Medicine at the University of Parma in 1949.

Giorgio Brunelli had a very successful surgical and academic career. He became the Director of an Orthopaedic Surgery Unit at the age of 35, and became the University Chair in Orthopaedics in Brescia in 1971.

Brunelli's achievements were many in his pioneering work, such as the first total hip joint replacement in Italy in 1963 and the introduction of microsurgical techniques in Italy in 1965. In 1972 he was the first to perform brachial plexus surgery in Italy and the first to replant a total limb amputation In 1973. He earned a Honoris Cause Degree from the University of Wroclaw, and in the Eighties he focused on Experimental Research on the treatment of spinal cord lesions. He founded the Spinal Cord Foundation collecting money to support laborious researches on the anatomy and

physiology of the spinal cord and its chances to be healed after a lesion.

He was the ideal follower of the thoughts and teachings of his Italian and foreign Masters: Poli from Milan, Merle D'Aubignè from Paris, Bunnel from the U.S.A. as well as Böhler from Wien and Möberg from Göteborg. He also continued the contact and friendship with many other pioneers of hand surgery and microsurgery: Buck-Gramko, Chen-Zhong-Wei, Gilbert, Hunter, Meyer, Merle, Millesi, Morrison, Pho, Santos Palazzi, Soukakos, Sunderland, Tubiana, Tamai, Terzis, Urbaniak and many others.

He developed many innovative techniques in hand surgery and microsurgery. Among the leading ones: prostheses of various joints, metal and plastic materials for surgical use, microsurgical reconstructions of nerves and limbs, robotics and a closer relationship between orthopaedics and all the new scientific discoveries. Many of his techniques are still in use to this day: motor and sensory nerve transfers, ligament reconstruction of wrist instabilities, direct muscle neurotization, hyponeurotization in spasticity, CMC thumb instability and arthritis treatment, a novel technique for wrist fusion, muscle in vein combined grafts for short nerve gap repair, original brachial plexus neurotizations, ulnar nerve transfer to help tetraplegic patients stand up, etc.

In Brunelli's professional life, teaching was always a very important endeavor. As the head of the Orthopaedic Department at the University of Brescia from 1971 to 1997, he introduced the practical microsurgical courses which are still the basis of our present day educational activity in the Italian Society for Microsurgery. Brunelli also advised young doctors

to spend some time abroad in Fellowships to broaden their educational exposure.

He founded the Italian Society for Microsurgery in 1981 and was still the honorary President until his passing.

He was the President of the International Society of Microsurgery in 1984 and President of the International Federation of Societies for Surgery of the Hand from 1995 to 1998 and was nominated IFSSH "Pioneer of Hand Surgery" in 1998.

Giorgio Brunelli has performed over 25,000 surgical procedures, 3,500 of which with microsurgical techniques. He was the author of 466 papers in peer-reviewed journals, 30 book chapters and 10 scientific texts.

Besides his scientific and surgical work, Giorgio Brunelli was a successful athlete in various disciplines: fencing, swimming, and was the regional university champion of cross-country skiing in 1948. He loved vintage cars and as a gentleman driver he took part in various races and several MilleMiglia car races.

Brunelli loved nature in all its expressions which he used to portray with his Nikon camera. He also loved to paint, and calling him an amateur-painter is highly out of scope. Several exhibitions of his paintings and photos were organized in Italy throughout the years. He also published several historical novels and, by virtue of his intellectual passion for neuroscience, scientific essays were published, such as "From Neurons to the Self" and "Conscious Ego".

Profits from all his different passions were all channeled to his Foundation and research projects, which will continue following the path he has set.

Brunelli's work has been acknowledged and praised internationally.

He gained recognition from Nobel Prize laureates, such as Rita Levi

Montalcini who sponsored his candidacy for the Nobel Prize for Medicine
for his contributions to Basic and Applied Research and knowledge of the

C.N.S.

#### **Bruno Battiston**

President of the Italian Society for Surgery of the Hand (SICM)

#### Pierluigi Tos

International IFSSH Delegate for SICM



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# Secretary-General Report

At the opening ceremony of the 14 th Triennial Congress of the International Federation of Societies for Surgery of the Hand and the 11 th Triennial Congress of the International Federation of Societies for Hand Therapy which were held in the Berlin from June 17 through June 21, 2019, 37 surgeons from 19 member societies were honoured as 'IFSSH Pioneers of Hand Surgery'.

Dr David Shewring from the organizing committee of the 15 th IFSSH Congress and 12 th IFSHT Congress which will be held in London from 27 th June to 1 st July, 2022, reported that the Queen Elizabeth II centre (Westminster) has been booked as the congress venue — capacity of 3,000. This is convenient for central hotels within walking distance and an easy commute from cheaper hotels. The website is active - https://www.ifssh-ifsht2022.co.uk/

#### IFSSH Pioneers of Hand Surgery, 2019

37 surgeons from 19 societies were honoured in Berlin at the triennial IFSSH Congress for their exceptional contributions to Hand Surgery:

- · Govindasamy Balakrishnan Indian Society for Surgery of the Hand
- Claudio Henrique Barbieri Brazilian Society for Surgery of the Hand
- Alexandros E. Beris Hellenic Society for Surgery of the Hand
- Peter Burge British Society for Surgery of the Hand
- · Edie Benedito Caetano Brazilian Society for Surgery of the Hand
- İsmail Hakki Çalli Turkish Society for Surgery of the Hand
- Robert A.Chase American Society for Surgery of the Hand
- · David Chwei-Chin Chuang Taiwanese Society for Surgery of the Hand
- Felipe Coiffman Colombian Association for Surgery of the Hand
- · William P. Cooney American Society for Surgery of the Hand
- Kazuteru Doi Japanese Society for Surgery of the Hand
- · Diego Fernandez Swiss Society of Hand Surgery
- · Richard H. Gelberman American Society for Surgery of the Hand
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- Ahmet Karaog z Turkish Society for Surgery of the Hand
- Johan M. G. Kauer Dutch Society for Surgery of the Hand
- · Kwang Suk Lee Korean Society for Surgery of the Hand

- · Yih Liu Taiwanese Society for Surgery of the Hand
- · Alain Charles Masquelet French Society for Surgery of the Hand
- Roberto Melendez Escobar Colombian Association for Surgery of the Hand
- · Ulrich Mennen South African Society for Surgery of the Hand
- · Akio Minami Japanese Society for Surgery of the Hand
- Nash Naam Egyptian Society for Surgery of the Hand and Microsurgery
- Oğuz Polatkan- Turkish Society for Surgery of the Hand
- Jaime León Restrepo Espinal Colombian Association for Surgery of the Hand
- Nelson Enrique Socorro Medina Venezuelan Society for Surgery of the Hand and Reconstruction of the Upper Limb
- Peter J. Stern American Society for Surgery of the Hand
- Lam-Chuan Teoh Singapore Society for Hand Surgery
- Maggali Pastora Torrealba Marin Venezuelan Society for Surgery of the Hand and Reconstruction of the Upper Limb
- Joseph Upton, III American Society for Surgery of the Hand
- · IrinaVisa Romanian Society for Surgery of the Hand
- · Fu-Chan Wei Taiwanese Society for Surgery of the Hand
- · Andrew J. Weiland American Society for Surgery of the Hand

The 2019 Pioneer booklet details their careers and achievements: https://ifssh.info/pioneers\_hand\_surgery.php. We congratulate these surgeons and thank them for inspiring future generations of hand surgeons.

#### **IFSSH Educational Sponsorship**

The IFSSH website has been updated to include details of the educational pursuits sponsored over the years - https://ifssh.info/ifssh-sponsored-educational-projects.php. The projects demonstrate a wide range of ideas undertaken through many different methods across numerous locations worldwide.

If your society is planning education programmes and needs support to fulfil the goals, please consider if it may be appropriate to submit a request to the IFSSH. The full guidelines are available via https://ifssh.info/educational\_sponsorship.php.

#### **Future Meetings**

A detailed list of national and regional hand surgery meetings is available on the IFSSH website. The triennial IFSSH Congresses are as follows:

XVth IFSSH – XIIth IFSHT Congress – London, United Kingdrom 27th June - 1st July, 2022

XVIth IFSSH - XIIIth IFSHT Congress - Washington D.C., USA 29th March - 3rd April, 2025



**Goo Hyun Baek**Secretary-General, IFSSH
Email: secretary@ifssh.info

PIONEER PROFILES www.ifssh.info November 2019 PIONEER PROFILES

# Harold Bolton

### Britain (1918 - 2015)



Harold Bolton was born in Blackpool in Britain, on 15 August 1918. His father, Alexander Black Bolton, was the managing director of a confectionary company; his mother, Nina Bolton née Houldsworth, was also a director of the company. He attended Hutton Grammar

School and then King Edward VII School in Lytham St Annes, and went on to study medicine at Manchester Medical School. He gained a BSc in anatomy and physiology in 1939 and qualified as a doctor in July 1942 with the Butterworth medical prize and the John Henry Agnew prize in children's diseases.

He was a house surgeon at Manchester Royal Infirmary to Sir Harry Platt. From 1942 to 1946 he served in the RAMC, in India, Burma and Palestine. He left the Army with the rank of acting lieutenant colonel.

Following his demobilisation, he returned to Manchester as a registrar at the Royal Infirmary. He gained his FRCS in 1948 and from 1948 to 1951 was a senior registrar at the Royal Infirmary under Platt, David Griffiths and John Charnley. He then spent a year as a surgical fellow in Chicago working with Sumner L Koch.

In 1952, he was appointed as a consultant orthopaedic surgeon to the north Manchester group of hospitals. Two years later, he became a consultant orthopaedic surgeon for the Stockport and Buxton group. In 1960, he established the Manchester region hand surgery centre at the Devonshire Royal Hospital in Buxton. In June 1967, he dealt with casualties from the Stockport air

crash, when an aeroplane carrying holidaymakers from Mallorca to Manchester airport crashed into an area close to the Stockport town centre. Bolton was a member of the Second Hand Club the forerunner of the British Society for Surgery of the Hand, and Assistant Editor to Graham Stack from 1969 to 1986 for "The Hand" and later as it was renamed "The Journal of Hand Surgery" He was a consultant hand surgeon in Stockport and Buxton from 1980 to 1985, when he retired from the NHS. He carried on in private practice until 1987 and as a member of the Medical Appeals Tribunal until 1991.

Harold Bolton published on aspects of the rheumatoid hand, joint replacements in the rheumatoid hand and primary tendon repair.

He was president of the British Society for Surgery of the Hand in 1983. He was a council member of the British Orthopaedic Association and a fellow of Manchester Medical Society.

At university he played tennis, fives and hockey. He later enjoyed fishing and golf, and was president of Romiley Golf Club in 1983.

In 1949, he married Barbara. They had two sons – Martin Alexander and Robert Andrew.

Harold Bolton died on 10 December 2015. He was 97.

Harold Bolton was bestowed the honour "Pioneer of Hand Surgery" at the Eighth Congress of the International Federation of Societies for Surgery of the Hand in Istanbul, Turkey in June 2001.

(Addapted from The Royal College of Surgeons of England, Plarr's Lives of the Fellows)

# Isidor Kessler

### Israel (1926 - 2007)



Isidor Kessler was born in Bulgaria on 19 August 1926, obtained his medical degree at the University of Sofia in 1951, and immigrated in the same year to Israel.

He completed his General and Orthopaedic Surgery training in 1959, and worked

in the Department of Traumatology at the Tel Aviv Central Clinic until 1965. During this time he developed a special interest in surgery of the hand. This led him becoming a Sterling Bunnell Fellow in Hand Surgery at the Presbyterian Medical Centre in San Francisco, California as well as at the Stanford University in Palo Alto, California, USA from 1965 to 1966.

Upon his return to Israel, he organised the first independent Department of Hand Surgery at the Kaplan Hospital, Rehoboth in 1971 and was its head until 1991.

Kessler was the founder of the Israel Society for Surgery of the Hand, and became the second President.

He was Associate Professor of Surgery at the Hebrew University-Hadassah Medical School in Jerusalem.

He was Corresponding Member of the American Society for Surgery of the Hand since 1980, a Honorary Member of the Bulgarian Society for Surgery of the Hand since 1996, and participated and lectured in numerous medical events all over the world.

Isidor Kessler published about 100 articles. His research included the development of new surgical techniques,

silastic digital joint implants, several distracting devices for bone lengthening and a "grasping suture" for tendon repair which bears his name.

He retired in 1991 from active work.

Isidor was married to Elena, a clinical pathologist, and they had two children, a son Michael and a daughter Galia.

At the Eighth Congress of the International Federation of Societies for Surgery of the Hand, held in Istanbul, Turkey in June 2001, Isidor Kessler was honoured as "Pioneer of Hand Surgery"

SPECIAL FEATURE www.ifssh.info November 2019 SPECIAL FEATURE

# Preservation of skeletal health in the long term glucocorticoid patient



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#### Introduction:

The therapeutic indications of glucocorticoids (GCs) were unknown until Hench, Reichstein and Calvin from the Mayo Clinic received the coveted Nobel Prize in Medicine and Physiology in 1950 for discovering their dramatic effect on rheumatoid arthritis. Due to the potent immunosuppressive action, GCs remain the choice of treatment for chronic inflammatory disorders such as arthritis, asthma and allergic reactions. A significant percentage of patients with rheumatoid arthritis are on long term GC therapeutic regimes. It is estimated that 1% of the US population receives GCs 1 and about 10 million prescriptions for GCs are issued annually in the US despite conservative recommendations on the indications for their clinical use. Prolonged GC administration impacts on several tissue types and metabolic processes resulting in atrophy of muscles, skin and mucosal linings, depression, insulin resistanc e and skeletal catabolism. Bone is the only tissue actively degraded during long term GC administration and the preventative management of fractures in this cohort of patients is often neglected in clinical practice. The aim of this paper is to provide quidelines for the preservation of skeletal health in patients on long term GCs.

#### Skeletal complications of long term GC therapy

Physiological release of endogenous GCs promotes bone and cartilage health which is ironically the opposite effect of long term exogenous administration. The hormone is the primary mediator of the circadian rhythm and stress response which is linked to amongst other actions its capacity to induce rapid metabolism of glucose. During malnutrition and Cushing's syndrome, endogenous concentration of GC increases and the skeletal impact is similar to what occurs during long term exogenous GC administration. <sup>2</sup>

#### **Effect on cartilage**

Long term GC therapy impairs skeletal growth through direct and indirect influences on the cartilage of the growth plates. <sup>3</sup> The clinical benefit of administration to children with juvenile rheumatoid arthritis should therefore be carefully weighed against the potential impact on skeletal growth. Although the mechanism is not clear, there are indications that suspension of GC administration may result in accelerated activity in the growth plates with catch-up growth.<sup>4</sup>

#### **Effect on bone**

Skeletal fractures are particularly prevalent in long term GC patients who are at high risk for osteoporosis.<sup>56</sup> It has been estimated that long term GC therapy is implicated in more than one quarter of vertebral fractures in patients with secondary osteoporosis.<sup>7</sup> Chronologically the impact of long term GC therapy on the skeleton is generally divided in early rapid- and late protracted phases. The classical explanation for the action of GCs on the skeleton relates to the reduction of calcium uptake from the GIT and renal tubules and suppression of gonadal- and other anabolic hormones. In order to replenish the blood calcium which results from the negative impact on calcium resorption, hyperparathyroidism with skeletal anabolism is induced. Although this biochemical pathway plays a role in accelerated skeletal breakdown during long term GC therapy, recent studies on genetically modified mice unlocked a plethora of information on the direct and indirect effects of GC's on the cells involved in bone metabolism and provides an explanation for two phases of skeletal anabolism.

During the early phase, which lasts for approximately 6 months, rapid bone loss is the result of increased osteoclast activity with bone resorption.  $^{8,9}$  The mechanism is related to GC's ability to upregulate the expression of the receptor activator of nuclear factor kappa  $\beta$  ligand (or RANKL) released by osteocytes which through paracrine action, stimulate osteoclast activity with subsequent accelerated bone catabolism (Figure 1). The gradual decline of bone resorption towards the end of the rapid phase of bone loss is probably linked to the lifespan of osteoclasts, which is significantly shorter than that of osteocytes. The initial phase of rapid bone loss is followed by a protracted phase during which the GCs exert a negative impact on osteoblast differentiation, proliferation, functions and survival. The differentiation of the bone forming cell line is inhibited through a redirection of the differentiation pathway of stem cells towards fat cells and chondrocytes (Figure 2).  $^{11}$ 

In addition, GCs supress the elaboration of osteoprotegerin (OPG) by osteocytes. Under physiological circumstances, OPG acts as a decoy receptor for the osteoclast activator, RANKL, thereby inhibiting osteoclast stimulation through the RANKL pathway. GC's also stimulate the elaboration of sklerostin by osteocytes, a potent autocrine inhibitor of bone formation. The mapping of these pathways not only clarifies some of the mechanisms involved in GC induced bone catabolism, but also provides a scientific basis for the development of therapeutic regimes directed at the modulation of cell signalling in patients on long term GC therapy. It is important to note that the influence of GCs on the skeleton is not only through direct interaction with the cells involved in bone metabolism, but also through the modulation of white blood cells which play a profound role in bone metabolism. This field of research is expanding rapidly through the characterization of cell bound glucocorticoid receptors and the growing understanding of the molecular patterns of ligand induced genomic transcription of cells. With the large number of patients on long term GCs, pharmaceutical companies are certain to invest in research aimed at developing effective drugs with the efficacy of GCs and without their skeletal shortcomings.

#### **Recommendations for fracture risk assessment**

The fracture risk of patients on long term GCs is substantially influenced by the dose, patient demography, race, age, gender, history of falls and fractures and co-factors for osteoporosis such as immobility, muscle weakness, frailty, old age, diet, tobacco use, alcohol consumption and gonadal atrophy. Current knowledge indicates that addressing these factors form the mainstay of the preventative management regime of patients on long term GCs.

The American College of Rheumatology published the first in a series of recommendations for the prevention and treatment of GC induced osteoporosis in 1996. The most recent guidelines<sup>12</sup> follow a scientific cumulative assessment of the literature published before 2017 and include therapies for the management of osteoporosis which were approved by the American Food and Drug Administration before 2015. Based on clinical trials,<sup>13,14</sup> the dose of GCs administered to patients is separated in low (< than 7.5 mg per day) or high (> than 7.5 mg per day).

Fracture risk assessment should be performed at initiation of long term GC therapy. The literature lacks pertinent data for the prediction of fractures in children and individuals younger than 40 years of age. For adults older than 40 years, the fracture risk should be estimated by using the FRAX tool developed by the University of Sheffield<sup>15</sup> with adjustments for the bone mineral density (BMD) and GC dose prescribed. The risk of osteoporotic fractures calculated for a patient receiving long term GC therapy with this tool should be increased by 1. 15 and if the GC dose is above 7.5 mg/day by a factor of 1.2. 12 Table 1 summarizes the steps which are presently regarded as best practice in the initial risk assessment of the GC patient, stratified according to the age of the patient. Due to the preferential use of oral bisphosphonates (BPs) in GC patients with moderate and high fracture risks, a thorough history of a reaction against the drugs in the BP group must be obtained before onset of therapy. Readers are referred to the product information provided by the manufacturers and recent review articles for more information on the pharmaceutical actions and complications of BP administration.

Table 1: Initial risk assessment (Adapted from Buckley, Guyatt, Fink et al 2017)12

CHILDREN A	ADULTS < 40 YEARS	ADULTS > 40 YEARS	
Physical examination*, obtain history and dosage of GC administration, determine secondary risk factors for osteoporosis			
No further initial assessment	History of fractures or other significant osteoporosis risk factors	FRAX with GC dose correction, bone mineral density test	
	If no: no further testing If yes: bone mineral density test		

The physical examination should include parameters such as the patients' weight, height, muscle strength, spinal tenderness, skeletal deformity and space between the lower rib and upper pelvis (which if reduced indicates undiagnosed spinal fractures).

The fracture risk assessment should be repeated every 13 years for patients on continuous GC therapy and who receive no osteoporosis medication other than vitamin D (vit D) and calcium. Less frequent testing is advised for patients older than 40 years of age, those who are on specific osteoporosis therapy in addition to vit D and

calcium supplementat ion, are in the low dosage range of GC administration and without a history of fractures. More detail is provided in the report from which the recommendations were sourced. <sup>12</sup>

#### **Recommendations for preventative management**

It is of fundamental importance for the maintenance of skeletal health in patients on long term GCs to address the diet and lifestyle factors mentioned previously. Irrespective of the outcome of the fracture risk assessment, correction of the risks through counselling and lifestyle manag ement forms the mainstay of skeletal preservation in the long term GC patient. Calcium intake should be between 1000 1200 mg and vit D 600 800 IU per day. In addition to lifestyle changes, the recommendations for the prevention of GC induced osteoporosis reflected in Table 2 are advised as best clinical practice. <sup>12</sup>

Table 2: Recommendations in addition to lifestyle changes for the prevention of fractures in patients on long term GC therapy (adapted from Buckley, Guyatt, Fink et al 2017). 12

CLINICAL	RECOMMENDED PREVENTATIVE STEPS
Children 4-17 yrs taking > 0.1 mg/kg GC's/day for 3 months and with osteoporotic fractures	Oral BP, calcium & vit D
Children 4-17 yrs treated for > 3 months with GC's	Life style modifications, calcium & vit D
Adults with organ transplants and glomerular	Consult with nephrologist; consider
filtration rate > 30ml/min	denosumab in place of BP
Adults > 30 yrs receiving very high dosages GC's	Oral BP, calcium & vit D
Women of child bearing age, on effective cont raceptives and in moderate and high fracture risk categories	Oral BP, calcium & vit D
All adults taking > 2.5 mg CG's per day	Calcium & vit D
Adults < 40 yrs, low fracture risk	Calcium & vit D
Adults < 40 yrs, moderate to high fracture risk	Oral BP, calcium & vit D
Adults > 40 yrs, low fracture risk*	Calcium & vit D
Adults > 40 yrs, moderate to high fracture risk*	Oral BP, calcium & vit D

<sup>\*</sup> determined with FRAX analyses 15 with correction for GC dose

The choice for supplemental medication in most medium- and high risk patients is oral administration of one of the second or third generation BPs, also referred to as the nitrogen- containing BPs. This category of anti-osteoporotic drugs is selected due to their lower costcompared to alternate drugs, convenience of administration and lack of evidence of a superior result achieved by another pharmaceutical product.

The nitrogen containing BPs (alendronate, risedronate and pamidronate) bind reversibly to bone surfaces, suspend osteoclast stimulation and induce their apoptosis through the inhibition of enzyme pathways responsible for cytoplasmic fibre assembly and membrane ruffling. <sup>17</sup> This reduces the efficiency of attachment of osteoclasts to bone surfaces thereby counteracting the induction of rapid bone loss by GCs during the first

6 months of long term therapy. There are indications that BPs also preserve osteoblast survival, <sup>18,19</sup> offsetting the second phase of skeletal anabolism induced by long term GC therapy. Besides esophageal irritation and erosions the nitrogen-containing oral administered BPs are relatively complication free. Esophageal irritation can be minimized by swallowing the drug with water and remaining in an upright position for an hour after administration. Patients on oral BPs should not take aluminium and magnesium containing medications such as anti-acids simultaneously due to their chelating action and subsequent neutralization of the BP.

BP alternatives should only be considered if the benefits outweigh the potential complications. If BPs are contraindicated for medical reasons, teriparatide (inconvenient due to cost and daily injections), denosumab (no data on safety in patients on immunosuppressive therapy) and raloxifene (particularly in women where bisphosphonates are contra indicated) could be considered. Readers are referred to the product information of the manufacturers and recent reviews on the alternative drugs used in the prevention of osteoporosis for more information. On the product information.

#### Follow-up treatment

The selected preventative management regime should be followed throughout the duration of GC administration. A different class of osteoporosis drug may be considered in adults older than 40 years and who either had a fracture more than 18 months after initiation of BP therapy or who maintain a significant decline in bone mineral density despite BP therapy.<sup>12</sup> The intra venous (IV) route of administration of one of the nitrogen-containing BPs (zoledronic acid or pamidronate) is indicated in cases where a lack of patient compliance is the cause of the poor response. Clinicians should be aware of the acute phase reaction, potential kidney damage and other complications associated with the IV route of BP administration.

Patients older than 40 years who have completed 5 years of BP therapy and persist in the moderate and high fracture risk categories, should continue the oral BP regime with calcium and vit D supplementation for 7-10 years. If patient adherence to the regime is a problem, the bone mineral density further decreases or new fractures develop, the alternate drugs mentioned above are recommended with IV BPs as the first choice.

There is substantial evidence that when GC therapy is terminated, the fracture risk of most cases declines.<sup>7,9</sup> This is most likely due to a suspension of the direct and indirect influences of GCs on bone which were briefly mentioned previously. It is strongly recommended to continue with BP administration if the patient remains in the high fracture risk category upon termination of GC therapy.<sup>12</sup> In patients receiving oral BPs and who are in the low risk fracture category, BP administration could be suspended after cessation of GC therapy.

#### Conclusion

Bone is the only tissue type actively catabolized during long term GC therapy and the slumbering process of the skeletal breakdown only manifests at a late stage when a debilitating pathological fracture focusses attention on the preventable complication. The accumulation of data in the literature indicates that the fracture risk can be predicted at onset of GC therapy and an effective patient-tailored preventative management program instituted. As knowledge on the pathways of the action of GCs on bone unfolds, more targeted preventative management regimes will certainly reach clinical practice in the near future.

#### **Acknowledgement**

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**ART** 

### Triennial International Hand Surgery & Therapy Congress



# CONGRESS REPORT 14th IFSSH and 11th IFSHT Triennial Congress and combined FESSH Congress 2019

More than 4,000 surgeons and therapists representing 92nations experienced trulyfantastic summer week in Berlin, Germany. We built bridges-together hand in hand and we made history: The Triennial Congress was the largest meeting of hand expert sever recorded!

One day before the start of the official congress programme, 800participants enjoyed the Educational Monday. Designed for the next generation of hand surgeons, and compiled by the scientific congress chairs in cooperation with our sponsoring partners the full day programme ensured highly educational but also innovative and state-of-the-art mixture of content.

On Monday evening the congress officially kicked off with the Opening Ceremony, during which the IFSSH Pioneers of Hand Surgery were awarded. As special treat, the pioneers met again on Tuesday for joint lunch. Following the Opening Ceremony, the congress presidents invited everyone to the Welcome Cocktail, an informal get together directly at the congress venue, the City Cube Berlin. With drinks, snacks andlive performances the first nightwas danced away.

For the congress programme starting on Tuesday, an amazing number of 1,812 surgery and therapy abstracts was submitted with the most submissions from mthe USA, Japan, China, Great Britain, Germany, Korea, Italy, Brazil, Spain and Switzerland. The submissions were allocated in the programme either as oral presentations (65%) or as ePosters (35%).

From the 1,503 oral presentations, one quarter consisted of invited lectures. One highlight was the Swanson Lecture "Challenges!?" held by Professor Steven Hovius, MD, PhD. In addition to his academic accomplishments, he is passionate about sharing his knowledge, as was noticeable during his lecture.

In line with the congress motto "Building bridges - together hand in hand", two combined IFSSH-IFSHT sessions brought together the experts of both fields of surgery and therapy. The great response spoke for the quality of the format

A full session on women in hand surgery and several lectures on hand surgery in difficult environments further completed the high-class scientific insights.

The best part? Recordings of the Swanson lecture, the combined sessions, the presidential guest lecture and many more exciting sessions are available on demand via the congress website!

To foster networking and exchange, not only between young talents and experienced colleagues, but also across cultures, the "Berlin Night" took place on Tuesday evening at the Kühlhaus, fancy industrial building and old warehouse with several floors. With special lights, live-music and DJ sounds it was truly unique networking and party evening with more than 1 200

participants - Berlin clubbing at its best.

Around 700 guests were welcomed at the Ritz Carlton Hotel on Thursday evening for the Congress Dinner and Party. A three-course menu, great music and lots of dancing concluded the evening events.

The innovation of offering A reduced congress fee for doctors-in-training was well received. Over 500 young surgeons made use of the discount.

The industrial support was unparalleled with a diverse exhibition from 95 international companies on over 930 sqm and 17 lunch workshops.

Another innovation was the pavilion in the exhibition area. From Tuesday to Thursday, several associations hosted special events during the congress breaks starting with the Chinese Society for Surgery of the Hand (CSSH), the German Society for Hand Surgery (DGH) and the Federation of European Societies for Surgery of the Hand (FESSH).

In short, the 14th IFSSH and 11th IFSHT Triennial Congress and combined FESSH and DGH (German Society for Hand Surgery) Congress made for great networking possibilities and extensive scientific knowledge transferdefinitely a congress to remember!

Pictures, recordings, factsfigures are available via ifssh-ifsht 2019.com

# Art Exibit # 9



Pen Box | Carved wood | Tanzania

 $\mathbf{22}$ 

HAND THERAPY www.ifssh.info November 2019 HAND THERAPY

# Mindfulness, Health Coaching and Hand Therapy



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Psychosocial risk factors correlate highly with patient reported pain and functional outcome following hand surgery. Despite this, hand therapists and hand surgeons are not trained to support patients with psychosocial challenges. Although easy to blame a "non-compliant" patient for a lack of progress, it is of greater value to develop our skills to support patients with complex needs.

There are some risk factors that suggest a patient may benefit from a more supportive approach instead of standard treatment alone. These signs include:

- Multiple pain sites
- · Pain for more than one year
- Anxiety and/or depression
- High functional disability
- A lack of confidence in performing activities (low selfefficacy)

It is reasonable to assume a significant proportion of patients attending a hand clinic will have some of the above risk factors and are at risk of a reduced self-reported functional outcome.
25% of the UK adult population experience some form of a mental health problem each year and 10-14% of UK adults have a moderate to severely disabling chronic pain condition.

An awareness of these factors can allow for a psychologically enhanced approach with the view of achieving a better outcome for the patient.

#### **Health Coaching**

Health Coaching is used increasingly in primary care to support patients with chronic conditions to develop healthy behaviours to improve their prognosis. Health coaching acknowledges the challenges patients face in introducing new behaviours and empowers them to make changes that are practical for them. With greater awareness that many patients present with challenging health and social circumstances, health coaching

can be a valuable skill for hand surgeons and hand therapists.

Health coaching offers an entirely different way of interacting with patients with complex needs. It emphasizes the need to develop a recovery plan that is realistic and achievable and to not expect strict adherence to a generic programme. Crucially, this plan is developed by the patient with support from the clinician. It is essential the rehabilitation plan has meaning for the patient.

This is achieved through functional goal setting, a health coaching skill any clinician can implement. Functional goal attainment or goal setting becomes the focus of therapy sessions, not improvement in impairment such as range of motion and strength.



Patient led functional goal setting with support from the hand therapist

Functional goal setting is a transformational process for many patients. Fear and avoidance of functional tasks is necessary, and actively encouraged, in the acute phase of recovery to protect the injured limb. However, when

# Health coaching recognizes that a therapy programme is far more effective if it is meaningful to the patient?

pain persists, many patients still believe it is damaging to participate in painful activity. This leads to reduced independence with a negative impact on mood that perpetuates the fear-avoidance cycle. The simple act of asking a patient what activities they would like to perform better can provide a shift in thinking. It is no longer dangerous to function in the presence of pain. It is healthy and necessary.

Grading the goals with a tool such as the Patient Specific Functional Scale can also be a revelation.

Tasks that previously seemed overwhelming for the patient, can feel more achievable when measured in increments. The clinician can reassure the patient that small increases in discomfort are to be expected when a new activity is introduced.

Further reassurance can be provided by helping the patient develop a plan to manage the pain if it becomes distressing.

Motivation is provided by reviewing the goals at each appointment and celebrating small improvements.

This builds the essential skill of

confidence in performing a task in the presence of pain (self-efficacy). Self-efficacy has been shown to be one of the most important factors in achieving a good functional outcome when recovering from a musculoskeletal condition.

A Word of Caution- A well-meaning clinician may spot fear-avoidance behaviour in a patient and wish to help them overcome this. A typical impulse is to tell the patient they are fine and it is safe to return to normal tasks. This can help some patients but can have a negative impact on more vulnerable patients. This statement can be too generic, unachievable and dismissive of their very real pain.

It can lower their mood and motivation even further. If time is short, it is more helpful to ask if there is one thing the patient would like to do better. Ask them what a first step towards achieving this could be, reassure them a slight increase in discomfort is normal and help them formulate a plan if they become too uncomfortable.

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Health coaching recognizes that a therapy programme is far more effective if it is meaningful to the patient. A time-pressured clinician may expect all patients to adhere to a generic programme, however there are many patients who are not capable of this. With a little awareness and flexibility, we can engage more patients through an individualised health coaching approach.

### Mindfulness-Based Cognitive Therapy



Learning to practise mindfulness in week one of the 8-week mindfulness-based cognitive therapy course.

Health coaching can be helpful however even this can be too challenging for a more vulnerable patient. Their difficulties are overwhelming them and a psychological approach is indicated.

Although some hand clinics have access to a specialist psychologist, it is becoming increasingly important that all clinicians have the skills to deal with mental health problems. It has been shown that physiotherapists who have received basic training in cognitive behavioural therapy (CBT) can help patients with psychosocial risk factors overcome low back pain better than standard treatment alone. Psychologically enhanced care has not yet been widely adopted by the hand surgery and therapy community but it has the promise of being an essential skill.

CBT helps people notice and change problematic thoughts or behaviours so a patient can feel better. In acute care, it can be difficult to convince someone that changing their thoughts and behaviour will improve their condition when there has been tissue damage. Another approach may be warranted. Evidence has emerged that mindfulness based interventions (MBI) are equivalent to CBT in helping patients to manage low back pain. MBI acknowledges and accepts challenges are present. It can provide a viable way forward for a distressed patient who has experienced an injury, received all appropriate treatment, and is no longer progressing.

MBI sits under the umbrella of Acceptance and Commitment Therapy. Accepting difficulty without striving for change reduces the physical and mental stress response and thus can reduce suffering. Patients learn to accept thoughts, feelings and sensations around pain and disability and to shift their focus to their present moment experience without judgement or striving for it to be different than it is.

With practice, this reduces their distress and enables them to gain a calmer and more balanced perspective on their health. From this point, they can begin to engage in meaningful activities that give them a sense of pleasure and accomplishment. This can result in an improvement in mood and function and a reduction in pain and anxiety facilitating a greater sense of wellbeing.

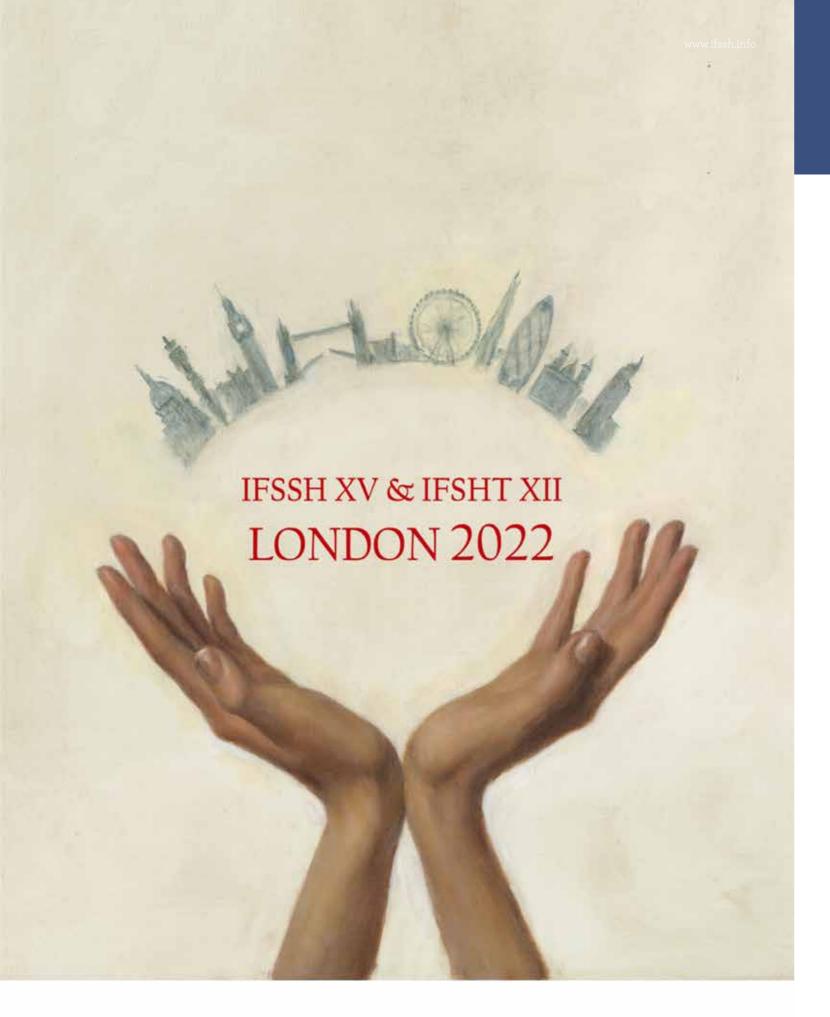
Teaching mindfulness in a clinical environment requires training. It is not intuitive for hand surgeons and therapists to help a patient accept their condition. We are trained to fix them, especially in acute care. It can be difficult for a patient to engage with accepting their current state and this needs to be approached with sensitivity and skill. The first step in learning how to incorporate mindfulness into clinical practice is to complete an 8-week mindfulness course for oneself. Only by learning and practising these techniques will one be able to support patients through the transition from fixing their difficulties to accepting them.

I am now able to offer patients hand therapy, health coaching and one to one 8-week mindfulnessbased cognitive therapy courses depending on what they need. There are still some patients I'm not able to help, but I can certainly support a greater number than I could with just my hand therapy skills. Whether someone needs an exercise programme, health coaching to achieve functional goals or to learn MBCT to accept difficulty, I hope I'm helping more people to live a more fulfilling life. It has certainly made my job more rewarding.

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27th June - 1st July 2022

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## UPDATE

www.ifsht.org | info@ifsht.org

VOL 13 NO 4 | SEPT 2019

#### SPOTLIGHT ON SOUTH AFRICAN **SOCIETY OF HAND THERAPISTS**

The South African Society of Hand Therapists (SASHT) was established in November 1988. Corrianne van Velze and Prof Ulrich Mennen were both instrumental in bringing SASHT to fruition 31 years ago. We are proud that they were recipients of awards for their contributions to the field presented at the IFSSH and IFSHT congress in Berlin, Germany, 2019. SASHT currently has 134 members, mostly occupational therapists with seven physiotherapy members. We have three regional groups, active in the major cities of



South Africa, and plans for a fourth regional group in the Free State. Courses are offered on a regular basis. The current executive committee is planning towards making courses accessible to the large number of therapists serving persons with hand injuries in rural SOUTH AFRICAN SOCIETY OF areas through exploring HAND THERAPISTS life streaming platforms. SASHT maintains a close

relationship with the South African Society of Hand Surgery (SASSH) and attend and present at the annual SASSH refresher course and conference. SASHT offers members a research grant to support research endeavours within the field. The SASHT website is www.sasht.org.za.

#### MESSAGE FROM IFSHT PRESIDENT NICOLA GOLDSMITH

It is with honour that I accepted the role of President of IFSHT in Berlin 2019. Through my term, I hope to ensure IFSHT continues its mission to join hand therapists across the world. I aim to encourage new member countries and support the corresponding and associate members that we have to build the



hand therapy infrastructure in their country. I look forward to working with you all. Start planning your visit to London for the 2022 Congress!

#### SCANDINAVIAN HAND SOCIETY **CONGRESS**

Almost 400 hand surgeons and therapists met in Tallinn, Estonia from 22nd - 24th August 2019 for the

Scandinavian Hand Society Congress with guest society, Singapore. The programme was varied and interesting and drew professionals from all Baltic and Scandinavian countries. The



Statue with outstretched hands, Tallinn, Estonia



Conference venue, Tallinn, Estonia

surgeons and therapists combined in several sessions including topics such as management of wrist pathologies and management of CMCJ OA of. Tallinn is a stunning city and the Estonian hosts arranged a array of activities to enable participants to appreciate it. The congress took place in a converted power station providing innovative and incredible environments for

lectures and networking. It is recommended to put this meeting into your annual congress schedule!

#### **IFSSH EZINE**

If you want to know what the IFSHT does, read the IFSHT President's Report in the recent edition of the IF-**SSH Ezine** electronic publication. Hand therapy contributions to the Ezine are welcome; send your contribution to: informationofficer@ifsht.



For hand therapy educational events, go to "National/ International Education Events" under "Education" at www.ifsht.org.

12th Triennial IFSHT Congress London, England June 27-July 1, 2022

www.ifssh-ifsht2022.co.uk

MEMBER SOCIETY NEWS www.ifssh.info November 2019 MEMBER SOCIETY NEWS

# Member Society News

### ISRAELI SOCIETY FOR SURGERY OF THE HAND

#### The Israeli Society Crosses the Atlantic

The Israeli Society (ISSH) was the guest society at the recent 39th Brazilian Hand Society conference held in Gramado, during 1-3 of August. The resort town in the south of Brazil was the perfect setting for a fruitful meeting and a great chance for the society members to study differences in hand surgery practice and plan further collaborations. The delegation of surgeons and therapists, headed by the chairman of the Israeli Society, Dr. Shai Luria, discussed a large spectrum of subjects including novel treatment options for burns, thumb basal joint arthritis and carpal tunnel release, geographic diversity in hand trauma and implications of smart phone use on upper extremities. Other topics included treatment of high-energy gunshot wounds, scaphoid fracture malunion and wrist biomechanics.

The Israeli delegates participated in international panels discussing scapholunate injuries, ulnar sided wrist pain and congenital deformities.

Dr. Yafi Levanon participated in the hand therapy sessions as a representative of the ISSH group for hand therapy and discussed the evaluation of ADL after trauma and novel technology in the service of rehabilitation.

### 30 year anniversary of the Israeli Society for Surgery of the Hand

During the summer meeting of the Israeli Society, the 30th anniversary of the society was celebrated in Hertzlia. Dr. Richard Gelberman from the US was the society guest, in addition to the president of the Israeli Medical Association and president of the Israeli Orthopedic Society and several other international guests.

During this meeting, the future of hand surgery in Israel was discussed and the efforts made by the society to advance the status of our profession.

Although Hand Surgery was recognized as an independent profession 30 years ago by the Israeli authorities, there is still work to be done. Several hospital lack official units, some do not have full call service for emergency cases and the independent status of the profession is not recognized by others. Several steps have been taken to advance these goals —

- Upgrading training in Israel, including the revision of criteria for training centers and syllabus.
- Active participation in educational and research activities in the European community – FESSH research committee, Journal of Hand Surgery (Eur. Vol.) and the FESSH academy.
- Promoting excellence the Israeli Society
   offers two annual grants for the best results
   on the national board exams and for best study
   presented at an international meeting.
- Studying the impact of hand trauma and exposing the medical community to the magnitude of this problem and methods to promote injury prevention.
- 5. Exposing hospitals and health care providers with suboptimal service due to lack of resources and demanding the upgrading of these services.
- 6. Placing hand surgery in line with other surgery subspecialties such as pediatric surgery, cardiothoracic and vascular surgery, which have achieved a more independent status in Israel.

 Public relations – exposing the impact and diversity of our work to the public as well as policy makers in the health care community and administration.



The Israeli Delegation to the Brazilian hand society meeting with the Brazilian colleagues



Dr. Milton Pignataro of Porto Alegre (right) and Dr. Shai Luria of Jerusalm (left)



Dr. Yafi Levanon of the Israel group for hand therapy at the therapist meeting in Brazil



The 30th anniversary of the Israeli Hand Society celebrated with an ISSH history Kahoot! session



The 30th anniversary of the Israeli Hand Society celebrated with Dr. Richard Gelberman of the US and Dr. Stephane Romano of France.

MEMBER SOCIETY NEWS www.ifssh.info November 2019 MEMBER SOCIETY NEWS

### INDIAN SOCIETY FOR SURGERY OF THE HAND (ISSH)

(established 1973)

Indian Society for Surgery of the Hand conducted its 43rd Annual meeting, ISSHCON 2019, at Puri, in the state of Odisha from 13th to 15th September 2019. Although the city had been ravaged by cyclone Fani, a few weeks earlier, the organizers put up a good effort to provide the delegates with a great meeting.

ISSH has two eponymous orations named after the doyens, Prof R Venkataswami and Prof B B Joshi. Prof R Venkataswami oration was delivered by Dr Hidehiko Kawabata of Japan and the Prof B B Joshi oration was delivered by Dr Scott Oishi from the USA.



Dr Scott Oishi at ISSHCON, 2019



Dr Hidehiko Kawabata at ISSHCON, 2019

The next annual meeting of the ISSH will be held at the historic coastal city of Mahabalipuram, off Chennai from 11th to 13th September, 2020. British Society for Surgery of the Hand will be the Guest Society for this meeting.

The orators for this meeting are Mr Simon Kay and Mr Gregory Packer.



The Indian Society has an International Traveling Fellowship named after Dr Robert Acland, which was set up based on the sale proceeds of his great red manual of Microsurgery. Now it is in its 10th year and it provides a sum of Rs100,000 as a midcareer award for a member to travel overseas to centers of excellence in Hand Surgery. Further we have 2 Inland Traveling Fellowships. From this year, through the sponsorship of Dr Venkata Bodavula, from St Louis, USA, five microsurgery lab training fellowships have been instituted for trainees in Hand Surgery and they will take the course at the Ganga Microsurgery Lab at Coimbatore.

ISSH Conducts Basic Hand Surgery Courses to propagate Hand Surgery in smaller towns.

A Mid Term CME is conducted every year with the aim to keep the Plastic and Orthopaedic Surgeons updated on the latest trends in Hand Surgery.

Apart from these, the ISSH endorses a number of other courses in Surgery of the Hand, Surgery of Peripheral Nerves and Surgery of the Wrist.
ISSH has begun a unique program called 'Holding Hands', in which it funds a visit of a senior Hand Surgeon to a young Hand Surgeon, who is setting up a new hand surgery practice. The motto is to take learning to the learner.

ISSH will increase its international exposure by being the Guest Society for the American Society for Surgery of the Hand meeting at San Antonio, Texas in October 2020.

Dr Ravi Mahajan President, ISSH www.issh.org Dr Pankaj Ahire Hon Secretary, ISSH secretary@issh.org



### COLOMBIAN SOCIETY FOR SURGERY OF THE HAND

On the 23 and 24 November 2018, the Colombo-Venezuelan Binational Meeting of Hand Surgery was held in the city of Cúcuta. 100 people signed up for the event with the participation of 15 speakers from Colombia, Ecuador, Chile and Venezuela.

The recent social and economic situation in Venezuela has made the realization of academic activities very difficult. Because of this, the Venezuelan and Colombian Hand Surgery Societies joined together to organize this meeting in the Colombian city of Cúcuta, near the Venezuelan border.

Registration for the event was completely free and the financial support was provided by the Colombian Society for Surgery of the Hand. Also, the speakers from Chile and Ecuador paid their own travel costs.





We hope that this activity of integration between neighbouring countries will continue to be biennial. This is why we have scheduled the next Binational meeting for 20-21 November 2020.



MEMBER SOCIETY NEWS www.ifssh.info

### AMERICAN SOCIETY FOR SURGERY OF THE HAND

Become a Member of the American Society for Surgery of the Hand Apply by 3 February 2020

ASSH is pleased to invite all surgeons trained in the hand and upper extremity to apply to be an ASSH International or Young International member.

As an International Member, you will receive:

- · a subscription to The Journal of Hand Surgery;
- access to Hand-e (the ASSH education website with hundreds of carefully curated recorded lectures, technique videos and more);
- discounts on books, courses, and our Annual Meeting:
- wonderful opportunities for networking and collaboration including the physicians-only listsery;
- subscriptions to all ASSH newsletters; and more!

International Member applications must be received by 3 February 2020.

International Membership Dues are \$350 US per year. Apply Now at http://www.assh.org/About-ASSH/Join-ASSH/Become-a-Member/International-Member!

The ASSH Young International Membership category is open to international surgeons who have completed a post-graduate program in disorders of the upper limb within the last 5 years.

You will enjoy benefits like:

- · a subscription to The Journal of Hand Surgery;
- access to Hand-e (the ASSH education website with hundreds of carefully curated recorded lectures, technique videos and more);
- discounts on books, courses, and our Annual Meeting:
- · wonderful opportunities for networking and

collaboration including the physicians-only listsery;

· subscriptions to all ASSH newsletters; and more!

Young International Membership dues are \$200 US per year and applications are accepted any time throughout the year. To learn more and apply, visit http://www.assh.org/About-ASSH/Join-ASSH/Become-a-Member/Young-International-Member!

If you have questions or need assistance completing an application or obtaining supporting materials, please contact Mary McCarthy at mmccarthy@assh.



'Nation First Hand Transplantation in Korea'

by Dream Team of W Hospital on Feb 2<sup>nd</sup> 2017



**Major surgeries**: Nerve compression syndrome, Congenital anomalies of hand&foot, Replantation, Variety free flaps, Perforator flaps, Endoscopy of wrist & shoulder, Sports injury, Fractures, Knee Arthroscopy & TKA, Hip Arthroplasty, Foot&Ankle Disease, Deformity, Trauma





Provides Dormitory & Meals

10 Hand surgery specialists, 13 Orthopedic surgeons, 4 Plastic surgeons



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International Consortium for Health Outcomes Measurement

#### **ICHOM Hand and Wrist Standard Set**

#### ICHOM: work and vision

The International Consortium for Health Outcomes Measurement, ICHOM (www.ichom.org), is a non-for-profit organization with the mission to unlock the potential of value-based health care by: defining global Standard Sets of outcome measures that really matter to patients for important

medical conditions and by driving adoption and reporting of these measures worldwide.

We are currently developing a Hand and Wrist Standard Set, with the aim of identifying health care outcomes that are relevant for Adult (≥ 18 years) patients with Hand and Wrist conditions. We seek to balance a comprehensive view of measurements for evaluating hand and wrist conditions with a feasible recommendation that providers can reliably implement. Our aim is that this Standard Set will help to improve health outcomes and standardise the measurement of patient centered outcomes for hand and wrist Figure 1 Scope of ICHOM Hand and Wrist Standard Set conditions across the world.



#### **Project Process**

ICHOM facilitates and organizes teleconference meetings with the Working Group members to work through the development of the Standard Set in a structured way. Additionally, ICHOM facilitates patient engagement activities to gather patient feedback to inform the working group process. The Chair of this Standard Set is Dr. Steven Hovius of Radboud University Medical Center, Netherlands. The ICHOM Hand and Wrist Set Working Group Figure 2 Geographical distribution and composition of the working group



comprises of 19 international leaders with broad expertise including: researchers in PROMs, registry leaders, quality improvement and data scientists, and clinical leaders.

During the Working Group process, a series of systematic reviews of literature are performed and patient surveys are distributed to identify outcomes, outcomes measures, and important case-mix variables. Through a modified-Delphi process, outcomes and outcome measures are voted for inclusion in the Set based on working group and patient representative consensus. At the completion of the working group process, the working group will have defined a core list of outcome domains and associated measures that assess success in managing hand and wrist conditions from the patient's perspective. Also, a set of baseline case-mix adjustment variables and standardised

timepoints for outcomes measurement will be defined, to allow for meaningful comparisons and global benchmarking. Lastly, a peer-reviewed journal article detailing the development of the Set will be published and Reference Guide describing instruments that should be used and technical details for implementing the Standard Set will be provided and accessible to interested parties worldwide.

#### **Progress Check**

As of May 2019, there have been 12 International Working Group videoconference calls and 6

breakout sessions. The working group has reached consensus on the classification of 5 tracks: a thumb, wrist, finger, nerve, and hand trauma track and their conditions corresponding criteria, outcome measures (tools) and outcome measurement timepoints. The timepoints for outcomes measurements have been categorized as by two tracks 'regular' and 'extended' tracks for cases requiring short or longer follow-up respectively. Following the finalization of the hand trauma track, which is still in progress, the



Figure 3. Working Group members at the 2018 FESSH Congress Working Group will be defining a track breakout session

hierarchy. This hierarchy will guide implementors of the Set on which track(s) to measure cases, and particularly, complex, multi-structure cases, using the Hand and Wrist Standard Set. On June 19th, the working group will be meeting during the 2019 FESSH congress to discuss the track hierarchy. Earlier this month, some of the WG members attended the ICHOM Conference in Rotterdam, Netherlands and the ICHOM team did a site visit of Xpert Clinic.

At the conclusion of the formal working group process, the Project Team which hold an open validation period, in which a survey will be distributed to a wider network of patients, clinical and registry leaders, and scientist to provide feedback on the recommendations of the Standard Set. The feedback of the open validation surveys will be used to refine and finalise the Set. The final ICHOM Hand and Wrist Standard Set will be published in the form of a flyer (two-page overview of the ICHOM Standard Set), a reference quide (full detail of the Standard Set for institutions interested in collecting) and an academic publication. All the materials will be published on ICHOM's website and will be open access to promote the dissemination of the work.

#### **Financial**

The development of the ICHOM hand and Wrist is at 75% completion. The funding provided by the sponsors, including IFSSH, has been used to pay the salaries of the ICHOM Project Team: Director of Standardisation/Manager oversight, Hand and Wrist Programme Manager (FTE) and Hand and Wrist Research Associate (FTE). Additionally, funds have been used to cover operational and overhead costs of delivering the monthly international conference calls (i.e. office rent, WebEx videoconference subscription and Qualtrics survey platform subscription, research resources, etc.). The funds were also used to cover the cost of travel of the ICHOM project team to the international breakout sessions and for the conference tickets of working group members that attended the ICHOM conference in May 2019. Lastly, the funds will also be used to create the promotional and marketing materials (i.e. ICHOM flyer and reference guide), the journal publication (i.e. fee for open access) and for any future updates and maintenance of the Standard Set.

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#### **ESSER MASTER CLASS FELLOWSHIP**

The Esser Masterclass is a cadaver hands-on course on five elements of the hand surgery:
Nerves, Fractures, Tendons,
Osteo-Arthritis and Local flaps.
The Esser Masterclass is focused on providing a tailored made and hands on education by experts in the field. Our mission is making high-quality hand surgery education accessible for every hand surgeon around the globe and our motto is training from hand surgeons to hand surgeons.

Esser Masterclass introduced a new education principle: FAIR-TRAED (Fair Transparent Education). FAIR-TRAED means that the registration fees are directly invested in the Esser Masterclass educational materials to advance hand surgery trainings. The organization and the faculty have a passion for hand surgery and support FAIR-TRAED which means that they do not receive any financial compensation. This enables Esser Masterclass to keep the registration fees at a minimum.

In line with the FAIR-TRAED principle, Esser Masterclass in collaboration with the IFSSH developed the Esser Master Class fellowship. The fellowship is for hand surgeons form the developing countries.

Each year two places for each masterclass are reserved and provided with a 50% reduced registration rate. There is also a travel grant provided to one of the fellows.

Last January during our course

on tendon surgery we were pleased to invite our first fellow: Dr. Mohamed Adbelrahman from Khartoum, Sudan. Dr Abelrahman is a plastic surgeon focused on handsurgery. With the travel grant is was possible to attend the Esser Master class on tendons. For the next courses fellow already have been selected. We are also developing an educational platform. On this platform the presentations, course books of the master classes will be accessible. Also video's providing additional information on surgery of the hand will be published on this platform. For surgeons from the developing countries this will be a possibility to access all the information from the courses without the necessity to be physically present.

We thank the IFSSH for their support on the Esser Master Class fellowship and educational platform.

On behalf of the Esser Master Class

#### Dr. Michiel Zuidam

Plastic surgeon Erasmus MC Rotterdam, the Netherlands www. essermasterclass.com



Dr Abdelrahman (right) receiving the Esser Master Class travel grant from Dr. Michiel Zuidam (left)



Dr Jason Wong, Manchester UK (right) explaining to the fellow Dr Abdelrahman (left).



Participants of the Esser Masterclass Tendons 2019 during hands on session.

## IFSSH GRANT REPORT FOR HAND SURGERY FELLOWSHIP IN SHANDONG CHINA

Sudan is one of the largest countries in Africa, with a population of around 37 million. It has suffered from two prolonged civil wars between the North and South after gaining independence from the United Kingdom in 1956. The first civil war which ended in 1972, started again in 1983. The second war and famine related effects resulted in more than 2 million deaths in two decades and 4 million people were displaced. A final North and South comprehensive agreement was signed in January 2005. There are a huge number of trauma hand patients and only a very few hand specialists. For this reason, I wanted to pursue a fellowship in Hand Surgery.

I was offered a generous grant by the Educational Committee of the IFSSH to spend six months undertaking the Hand & Microsurgery Fellowship in the Department of Hand and Foot Surgery, Provincial Hospital of Shandong University in China.

Prof Wang is the head of the department and through his secretary he organized everything for me – my visa, airport pick up and accommodation.

The hospital is huge and has multiple departments with state of the art equipment and research and laboratory facilities.

There are 6 teams in the Department of Hand and Foot Surgery – each team has 2 to 3 specialists – and each team does a scheduled 24 hours emergency on-call.

I was attached to one team to help with emergencies (tendons, fractures and re-implantations) as well as with their elective day surgery. The rest of the week was following Prof. Wang at two outpatient clinics and two operative days, where he does congenital and complex trauma and microsurgery cases. Prof. Wang explained every case scenario and operative procedures to me.

Also, I had the chance to learn and enhance my microsurgery skills in the animal laboratory which was most helpful.

During my six month fellowship I attended a very useful flap course run by the Department.

Now, when I look back, I have gained a lot and learned much about the field of Hand Surgery. I am sure there is still much to learn and once I am settled I will try to attend extra specialized courses. I will also now be able to assist with those run by the Sudanese Orthopaedic Surgeon Association.

It is mandatory to establish a dedicated hand surgery unit to be able to help my people. Some of the challenges will be to get hold of hand and microsurgery instruments and getting help for its establishment from experts outside of Sudan.

I have worked closely with colleagues and we are pleased to announce that we have now formed the "Sudanese Society for Surgery of the Hand".

I do really appreciate the great help from IFSSH and hopefully our collaboration will continue in the future. Thank you.

Sincerely, Mohamed Abdelrahman MD Khartoum, Sudan



The members of the Sudanese Society for Surgery of the Hand



Courses are now helping
Sudanese colleagues learn
essential skills for trauma and
elective cases

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### 2019

### **Hong Kong International Wrist Arthroscopy Workshop and** Seminar



2019 年度香港国际腕关节镜工作坊及研讨会

#### 7 December 2019 (Saturday)

International Wrist Symposium & Clinical Workshop on Arthritis 腕关节炎疼痛专题研讨会及临床工作坊

Target Participants 参加对象:

Doctors, Therapists, Nurses and related professionals 医生,治疗师,护士及其他有关专业人士

#### 8 - 9 December 2019 (Sunday - Monday) **Hands-on Wrist Arthroscopy Workshops**

#### 腕关节镜操作班

Target Participants 参加对象:

Orthopaedic Surgeons & Hand Surgeons 骨科医生及手外科医生

#### Course Director 课程主任: PC HO 何百昌



Mark BARATZ (USA 美国)



Eva-Maria BAUR

(Germany 德国)



Wei-Jen CHEN (Taiwan 台湾)



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Hong Kong Society for Surgery of the Hand

香港手外科医学会

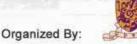
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Email 电邮: olc-ort@cuhk.edu.hk Website 网页: www.olc-cuhk.org









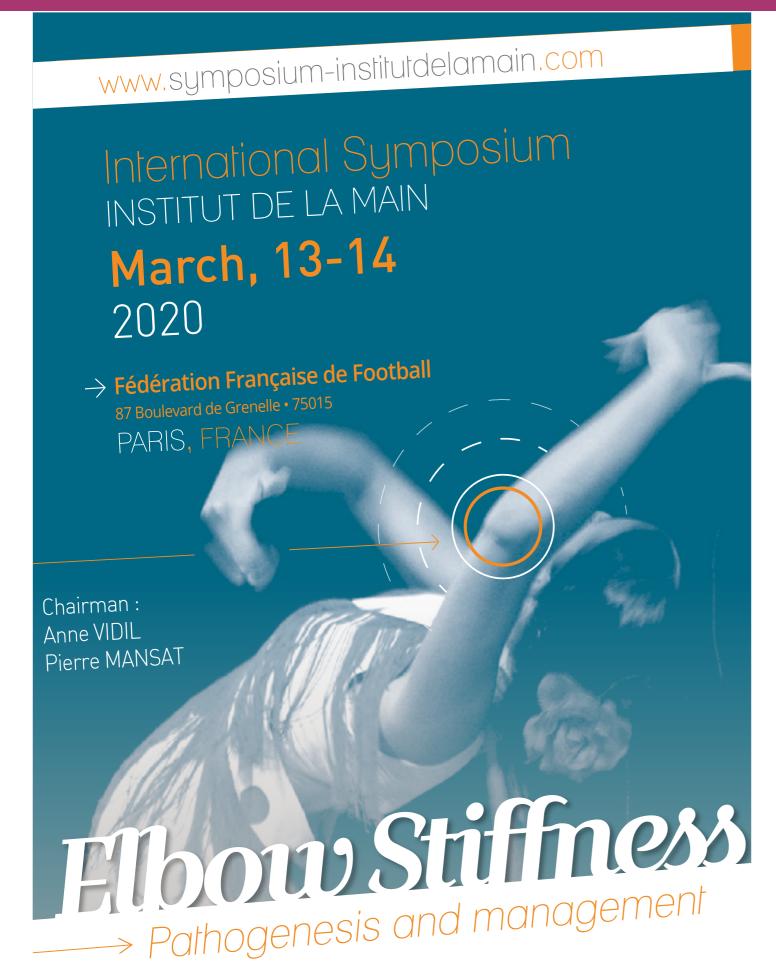








UPCOMING EVENTS www.ifssh.info November 2019 UPCOMING EVENTS







Dear Hand surgeon, Dear Colleague,

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#### Contact

info@foundationhandsurgery.org The Foundation for Hand Surgery is a non-profit European organization, independent, without industrial support or conflict of interest. The status of the foundation based in Geneva can be consulted on the website <a href="https://www.foundation-handsurgery.org">www.foundation-handsurgery.org</a>.

Its aim is to offer additional training opportunities for hand surgeons at all stages of their professional training, from the early years to the final stages of perfecting their already acquired technical skills. Many invited experts from Europe are part of the education training program.

The sessions are taking place in **Geneva** at the Swiss Foundation for Innovation and Training in Surgery (SFITS - Geneva University Hospital).

The program of the courses for 2019/2020 is available below.

Applicants participating in the training will be able to register on the dedicated website: <a href="https://www.foundation-handsurgery.org/overview/">https://www.foundation-handsurgery.org/overview/</a>

The Foundation for Hand Surgery solely relies on donations and sponsorships. To this end, please note that **each registration will need to be confirmed by a donation to the Foundation for Hand Surgery** (minimum amount is 350 euros).

You can find more information about the donation process on our website: <a href="https://www.foundation-handsurgery.org/donate/">https://www.foundation-handsurgery.org/donate/</a>

We hope to see you and share our experiences.

Best regards,

Grégoire Chick, Gilles Dautel, Philippe Bellemère, Bruno Lussiez, Alain Tchurukdichian

**Foundation for Hand Surgery** 

Campus Biotech Innovation Park, Bâtiment F2/F3, Avenue de Sécheron 15, CH-1202 Geneva, Switzerland Tel: +41 225 45 12 92 - info@foundation-handsurgery.org

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UPCOMING EVENTS www.ifssh.info



# 12APFSSH/8APFSHT

12th Asian Pacific Federation of Societies for Surgery of the Hand & the 8th Asian Pacific Federation of Societies of Hand Therapists Triennial Meeting 11-14 March 2020 | Melbourne Convention and Exhibition Centre

apfssh2020.org



We look forward to seeing you in Melbourne from the 11th - 14th March 2020, to learn, be inspired, network with colleagues and enjoy everything Melbourne has to offer.

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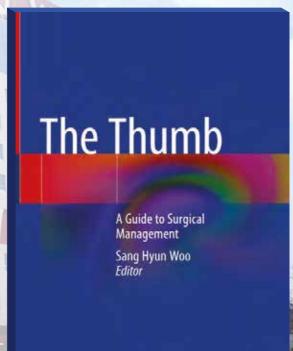






A Guide to Surgical Management





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Sang Hyun Woo,MD,PhD.

The Thumb 1st ed. 2019, VIII, 390 p. 357 illus., 312 illus. in color.

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Sang Hyun Woo (Ed.)

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· Includes coverage of the latest microsurgical techniques

• Features superb clinical photos and video clips

• Written by globally renowned orthopedic, plastic, and hand surgeons

#### About this book

In this book, globally renowned orthopedic, plastic, and hand surgeons provide the knowledge required in order to understand and resolve the full range of problems associated with diseases, anomalies, deformities, and trauma of the thumb. The opening section describes the history of "making a thumb" and covers the fundamentals of anatomy, embryology, and functional dynamics. After careful presentation of the surgical procedures for various developmental anomalies of the thumb, subsequent sections focus on the treatment of bone and joint, tendon, and nerve problems encountered in patients with different diseases and injuries. All aspects of the surgical management of benign and malignant tumors of the thumb are then described. The final section is devoted to current and emerging treatments for trauma, including amputation and microsurgical and non-microsurgical reconstruction. The text is supported by superb clinical photographs as well as high-quality schematic drawings and video clips. The book will be of value not only to practicing surgeons but also to residents and medical students.

#### About the authors

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