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info

Our quest to do better

Two aspects in medicine, and in particular surgery and rehabilitation, still need much research and refinement. They are linked; one leads to the other.

Firstly, how can we be more "certain"? Even with our trained clinical acumen, exact physical measurements and armamentarium of sophisticated diagnostic tools, we often struggle to make or find the correct diagnoses.

In spite of accumulating as much objective information as possible, it may often still not be clear whether our conclusions are in fact the real cause of the ailment troubling our patient. This has been touched on in a previous IFSSH Ezine. ⁽¹⁾

The other question, which is equally daunting, is how to measure precisely the efficacy of our management efforts (surgery, rehabilitation/therapy), which are of course based on our initial diagnoses and treatment.

Since every case is different, it is in many instances impossible to measure scientifically and precisely the outcome of management. There are just too many variables, biases and subjective influences.

An example is congenital differences. An attempt to evaluate multiple factors which influence results was published in 2004 ⁽²⁾. The "disc-o-gram" takes into account a number of influencing factors, measurements, individual patient variations, evaluator observations and patient opinion, and presents the combined evaluation in a visual image. The result minimises bias, and indicates the interrelationship between the various factors.

In this issue, we will revisit this same concept to combine and inter-relate variables and measurements.

Our Special Feature presents a multi-author, multicentre research project to explore how best to measure the outcome of management of complex wrist conditions. This is an on-going project and invites input from all corners to improve its effectiveness and applicability.

The article in Research Roundup discusses the methodological requirements for clinical examination.



Happy hands!

Ulrich Editor: IFSSH Ezine

1. IFSSH Ezine August 2019 #35

2. Mennen, U. "Arthrogryposis Multiplex Congenita: functional classification and the AMC dis-o-gram" J Hand Surgery(B&E) Aug2004 Vol 29B No4 p363-367

WISH would like to re-affirm its aim and make a correction in the article published in the previous IFSSH Ezine (February 2020).

History of WISH

The first meeting of WISH was held during the IFSSH Congress in Berlin in June 2019. A decision was taken to stay together, start a mailing list and try to become more "official". The next meeting was held during the APWA Congress in Seoul in November 2019.

The Australian colleagues planned a "leadership session" during the APFSSH Congress, but unfortunately this had to be cancelled on the last day of the Congress due to the outbreak of the covid-19 pandemic. If you would like to join or know more about WISH, please contact: (Eva-Maria Baur) baur@baurfromberg.de, (Isabell Mehling) isabellmehling@web.de, or (Jennifer Green) jennifer.green@gmail.com,

The following is a summary of the aims of WISH:

• To advocate gender issues, career support, training, flexibility and educational opportunities for women interested in pursuing a career in hand surgery.

- To liaise with medical students and junior doctors, to encourage and promote more women to pursue hand surgery as a career by:
 - Creating visible role models
 - Providing career advice opportunities
 - Providing educational opportunities
- To evaluate gender specific issues in the field of hand surgery, including:
- Monitoring trends and statistics related to numbers of women training and working in hand surgery

Surgery of "WISH"

- Identifying gender barriers in hand surgery and developing solutions to remove them
- Identifying safety issues for female hand surgeons including radiation safety eg. breast cancer rate in female hand surgeons
- To provide leadership to represent the perspective of women on Hand Surgery committees
- To promote flexible training within the workplace for the purposes of:
- Parental leave
- Family members requiring heightened care (eg. children, partners, parents)
- To engage in research and exploring solutions regarding:
- Health risks in pregnancy
- Operating theatre sessions and on-call in pregnancy
- Return to work and support after parental leave eg. breastfeeding/expressing as a hand surgeon
- To research the policies of IFFSH member organisations with regard to leadership, selection, training, health and well-being of women in the hand surgery and provide feedback to the IFSSH for the purposes of sharing this information and encouraging best practice by member organisations.

NB: Please note the following correction to the article in the February 2020 Ezine: "Avanthi Mandaleson, Vice President of the Australian Orthopaedic Association" should read "Avanthi Mandaleson from the Australian Orthopaedic Association"

Best regards **Dr. Eva-Maria Baur** baur@baur-fromberg.de

Message from Secretary-General



Best wishes to all,

The global pandemic of the COVID-19 virus is an unprecedented threat in recent history, and causes fear to everybody on earth.

All the medical personnel have to face the risk of coming in contact with infected people, including ourselves, with or without symptoms.

Even though we are in danger, we are very proud of our vocation.

'Greater love hath no man than this, that a man lays down his life for his friends (patients).'

XVth IFSSH – XIIth IFSHT Congress, London: Change of Date

The London 2022 Organizing Committee are continuing with the preparations for the 15th IFSSH Congress. Please note that the dates have been altered. The Congress will now be held on 6th - 10th June 2022 at the ExCeL London Convention Centre.

Updates are available via the Congress website: https:// www.ifssh-ifsht2022.co.uk/

IFSSH Educational Sponsorship

The IFSSH remains committed to providing funding for the conduct of educational projects worldwide. In the first three months of 2020, IFSSH support has been directed to the first IFSSH Harold Kleinert Visiting Professor, two sponsored projects have been completed and a further two projects have secured funding.

IFSSH Harold Kleinert Visiting Professorship: Dr Steven Moran, March 2020

The IFSSH is delighted to have supported the first IFSSH Harold Kleinert Visiting Professor. Dr Steven Moran (Mayo Clinic, Rochester, USA) undertook a teaching programme to a number of Australian and Asian-Pacific audiences in March 2020. His nomination for this Visiting Professorship was submitted by the organizing committee of the 12th APFSSH Congress.

Dr Moran travelled firstly to Sydney and conducted teaching sessions with local and international hand surgery fellows, followed by sessions with orthopaedic and plastic surgery registrars. His Sydney visit concluded with lectures and clinical advice to the New South Wales Hand Surgery Association.

The second component of the Visiting Professorship included numerous lectures at the Australian Hand Surgery Society Registrar Review Course and as a keynote speaker at the 12th Congress of the Asian-Pacific Federation of Societies for Surgery of the Hand (APFSSH). The APFSSH Congress was organised in conjunction with the Australian Hand Surgery Society and the New Zealand Hand Surgery Society and their respective hand therapy colleagues, as well as the Asia-Pacific Wrist Association. The national and international audience members were appreciative of Dr Moran's extensive contribution to the meeting.

The Touching Hands / IFSSH Hand Surgery

Workshop at Mount Kenya University, January 24th -25th 2020

Dr Don Lalonde approached the CES with an application detailing a workshop to be run in Nairobi, Kenya in January 2020 - "Managing upper extremity surgery in and out of theater with surgeon provided tumescent local anesthesia". This was organised in conjunction with Professor Pankaj Jani, the President of COSECSA (College of Surgeons of Eastern, Central, and South Africa), who facilitated invitations to the program directors and trainers from the 24 COSECSA accredited hospitals in Kenya. The application was endorsed by the American Society for Surgery of the Hand. The IFSSH granted US\$10,000 which was specifically directed towards providing free attendance for approximately 80 local surgeons/trainees.

The course report details that the goal of the two day course was to have all attendees be able to safely inject tumescent local anesthesia in an almost painless manner. This would cut the need for costly sedation and improve patient safety for most hand surgery. In addition, the evidence behind safe field sterility was reviewed to enable much of Kenyan surgery to move to more affordable procedure room field sterility out of the main operating room, as it has in Canada. Eliminating sedation and full operating room sterility for many procedures will improve access to surgery for many who cannot afford unnecessary sedation and unnecessary full operating room sterility for many procedures. Dr Don Lalonde (Touching Hands), Dr Peter Nthumba (Kenya plastic Surgeon) and Professor Pankaj Jani (past COSECSA president) provided the lectures and commentaries to optimize sharing of knowledge.

The week after the course, procedure rooms were opened in two of the largest hospitals in Kenya for WALANT surgery. Upon completion of the course, positive feedback was provided by participants and unused funding was returned to the IFSSH. The full report is available in the May IFSSH Ezine and on the website: https://ifssh.info/ifssh-sponsorededucational-projects.php

Developing Country Registration Grant: APFSSH Congress, Melbourne, March 2020

The IFSSH provided US\$10,000 to the 12th Congress of the Asian-Pacific Federation of Societies for Surgery of the Hand, specifically to allow reduced registration rates for those from developing countries. The Congress was held in March with pleasing attendance and a full scientific programme. A report of the use of the funding will be placed on the IFSSH website.

Hand Surgery fellowship, West Africa

The IFSSH was recently approached regarding the intention to introduce a West African hand surgery training fellowship as a joint project of the hand surgeons at Komfo Anokye Teaching Hospital (Kumasi, Ghana), the American Society for Surgery of the Hand (ASSH) and the American Association for Hand Surgery (AAHS). This Fellowship is in the establishment stages and financial assistance was sought to provide the annual Ghana College accreditation fee. The IFSSH has pledged US\$4350 to allow this process to proceed and continue for the first three years. Progress reports will be provided to the IFSSH and distributed via the Delegates' Council.

International Consortium for Health Outcomes Measurement (ICHOM): Hand and Wrist Conditions (Adult)

The ICHOM Adult Hand and Wrist Conditions working group, chaired by Dr Steven Hovius, received \$10,000 in IFSSH funding in 2018 during the project's establishment. The aim of this project is to compile a minimum set of hand surgery outcome measures that are relevant to particular diagnoses and it is hoped that these become widely accepted for standardised reporting. More information about this project is available on the ICHOM website - https://www.ichom.org/portfolio/hand-and-wrist-conditions/

The international working group (approximately two-thirds surgeons, one-third therapists) has continued their rounds of research and consultation and are now inviting comments on the current draft - http:// bit.ly/HandWristOR. To finalise this work, ICHOM have requested further funding from the IFSSH and \$5000 has been awarded.

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 and reports of sponsored programmes 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 Kingdom 6th - 10th June, 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



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May 2020

Evelyn J. Mackin, PT United States of America (1922-2020)



The International Federation of Societies of Hand Therapists (IFSHT) honours the memory of Ms. Evelyn J. Mackin, PT. Many describe her as "the mother of hand therapy."

Born in Jersey City, N.J. USA, Evelyn Mackin had early dreams of becoming an architect; she wanted to build bridges.

She earned her degree in Physical Therapy at the University of Pennsylvania in 1944 and after working as a physical therapist with children and veterans, and raising her son Glenn, in 1967 Ms. Mackin began working with Dr. James Hunter at Thomas Jefferson University. Ms. Mackin, Dr. Hunter, and Dr. Lawrence Schneider dreamed of providing complete care of the hand patient, including preparing them to return to work. This dream became reality when they established the Philadelphia Hand Centre, (now named Philadelphia Hand to Shoulder Centre) which over the ensuing years has become a model training centre for countless therapists and surgeons, including those who have visited from other countries.

During her clinical years at the hand centre, Ms. Mackin delivered more than 112 lectures in the United States and made 53 trips to 21 different countries to lecture while she also authored 11 individual works and 33 works jointly with others. Additionally, she participated in five clinical research studies.

To assure hand therapy knowledge was shared as widely as possible, in 1976 she was instrumental in organizing the first Philadelphia meeting entitled ""Surgery and Rehabilitation of the Hand," which is now in its 46th year and remains one of the largest educational meetings for hand therapists in the world. Ms. Mackin always set aside funds to sponsor at least one foreign therapist to attend the meeting.



Evelyn Mackin (front row, third from left) with her staff at the Philadelphia Hand Centre

The Hand Rehabilitation Foundation in Philadelphia has sponsored the meeting, for many years. As a board member and then its Executive Director, Ms. Mackin supported endless educational opportunities for both hand therapists and hand surgeons.



First edition of Rehabilitation of the Hand

First edition of Rehabilitation of the Hand In 1976 Ms. Mackin spearheaded the creation of the first edition of the book, Rehabilitation of the Hand, serving as one of the editors for the first five editions. Well recognized as the core text on hand rehabilitation, it is now a twovolume book entitled Rehabilitation of the Hand and Upper Extremity, soon to be in its 7th edition and well known to all. Additionally, Ms. Mackin was a co-editor with Dr. Hunter and Dr. Schneider, and Mackin for two editions of Tendon Surgery in the Hand published in 1987 and 1997.



Ms. Mackin showing the first edition of the Journal of Hand Therapy at the first editorial board meeting

Always actively involved, in 1977 she met with a group of six hand therapists at a hand surgery meeting in the United States. These six therapists became the core founding members of American Society of Hand Therapists and Ms. Mackin served as president in 1982. During her tenure as president, she launched a newsletter entitled the International Network, to assure dialogue with hand therapists worldwide. Due to Ms. Mackin's contacts in the publishing world because of her editorship of Rehabilitation of the Hand, she was instrumental in establishing the Journal of Hand Therapy in 1987 and serving as its first editor until 1998.



Ms. Mackin speaking with therapists at the First IFSSH Congress, Rotterdam, 1980

In 1980, Ms. Mackin encouraged numerous therapists to informally meet in Rotterdam during the first Congress of the International Society for Surgery of the Hand. (IFSSH). It was at this meeting that the seed was planted for an international hand therapy society. Then during the French Hand Surgery and Hand Therapy Societies meetings in 1986 in Paris, France, Ms. Mackin led a group to form an international hand therapy society.

The International Federation of Societies for Hand Therapy (IFSHT) was founded in 1987 and Ms. Mackin served as the first President. The inaugural IFSHT congress was held in Tel Aviv in 1989 with a small number of founding member countries. IFSHT currently has 36 active member countries, seven associate member countries and ten corresponding member countries, representing roughly 8,500 therapists worldwide.





Inaugural Meeting of IFSHT in Tel Aviv. Front Row L to R: Corrianne Van Velze (South Africa), Dominque Thomas & Jean-Claude Rouzaud (France), Evelyn Mackin & Judy Leonard (USA) Carolyn Miekle (New Zealand). Second Row L to R: Helena Hae-Shya Ma (Tiawan), observer; Barbara Somekh & Rosalie Kupfer-Halstuch (Israel) Sue Boardman & Victoria Frampton (UK); Rosemary Prosser (Australia); Rosa Bolotta (Italy). Third Row L to R: Zbigniew Sliwinski (Poland), Paul Van Lede & Jacques Ottier (Belgium); Philippe Charmagne (France)

Ms. Mackin has been recognized by numerous organizations for her many contributions. In 1986, she was awarded the first Nathalie Barr Lectureship by ASHT. The Hand Rehabilitation Foundation in Philadelphia has established the Evelyn J. Mackin Hand Therapy Fellowship to promote clinical training in hand management and patient care. The American Hand Therapy Foundation has established the Evelyn Mackin Grant for Education by a Traveling Hand Therapist. The Evelyn Mackin Triennial Award given by IFSHT supports therapists from developing countries to attend the Triennial IFSHT Congress.



Ms. Mackin (5th from left) with other IFSHT pastpresidents in India; 2013 At the 9th IFSHT Triennial Congress and 12th IFSSH Triennial Congress in 2013, Ms. Mackin traveled to New Delhi, India at the age of 90 to be honored as a Legend in The Field of Hand Therapy where she gave her last official address to the IFSHT and IFSSH community. Ms. Mackin reflected on her career and the growth of hand therapy from the informal gathering in Rotterdam to the establishment and growth of the IFSHT. She described her memories as a tapestry of her life, reflective of the people she had met, the surgeons and therapists who influenced her, and the places she had visited.

Ms. Mackin served as a role model for hand therapists both professionally and personally as she believed life should be balanced. She concluded by saying: "I urge all of you to keep that passion for life, for your profession, and for your personal life as well, because I truly belief you need a balance."

Through the following reflections by IFSHT past presidents, the IFSHT is adding to this tapestry of memories of Evelyn J. Mackin, PT.

Jean-Claude Rouzaud, (France) IFSHT President 1992 to 1995

I met Evelyn in 1986 in Paris during the French Society for Surgery of the Hand (GEM) Congress with a group of therapists at a restaurant at the Palais des Congrès. During our discussion, Evelyn shared her idea to establish an international society for the rehabilitation of the hand. This dream of the International Federation of Societies for Hand Therapy (IFSHT) took shape against all odds and continues to be successful.

I was fortunate to be chosen to be a part of this visionary society to serve as the first Secretary General of the IFSHT. I can never thank Evelyn enough; I am indebted to her for the opportunity she gave me to grow both personally and professionally.

Her quiet strength and great determination gave us the courage to better ourselves. All who worked with her had the greatest respect for her; hand therapists owe her a



lot. Her intelligence and persistence allowed her to change preconceptions and break down barriers. She remained an honorary guest in France for many years. It is with great sorrow that I say goodbye to her.

Victoria Frampton, (United Kingdom) IFSHT President 1995 to 1998

I met Evelyn in 1979 when she came to visit Dr Wynn Parry at the Royal National Orthopaedic Hospital in the United Kingdom. We spent a week together and my lasting memory is the feeling she gave me that we had been friends for a long time instead of just a few days. She had a warm generous nature, happy to share what ever knowledge she had with others. She promoted and encouraged those who were keen to learn and had a gift of being able to recruit others to join her in her ventures, myself included, to the IFSHT, one of the many projects she inspired. Not many people could claim the huge

international friend and colleague network Evelyn had; she was our figurehead, mentor and friend and will be remembered always.

Corrianne van Velze, (South Africa) IFSHT President 1998 to 2001

I first met Evelyn in 1989 in Tel Aviv, at the first IFSHT Congress. It was one of those special moments in my life – meeting Evelyn, with whom I had corresponded (by snail mail) and whose book, the Rehabilitation of the

Hand (1st ed), I referred to often. She was incredibly warm and kind and made me feel so welcome in the family of hand therapists.

A meeting was held with the representatives from all the countries who attended the congress and a committee was established. I volunteered for the position of Historian and together with Evelyn (President) and Jean-Claude (Secretary-General), we formed the first executive committee.

Evelyn shared her knowledge and skills with

everyone, all over the globe. She spread the word far and wide and emphasised cooperation and sharing of knowledge and ideas not only among hand therapists, but also with hand surgeons. She made sure that hand therapists were respected by hand surgeons and encouraged us all to work together. Her therapist full of energy and willingness to share her motto was "Pass it on" and through doing this we do our bit to make sure that Evelyn's legacy lives on. My heartfelt gratitude goes to Evelyn for her caring, enthusiasm for her work and the example she set for kindness combined with an almost royal excellence us all. May she rest in peace.

Annette Leveridge, (United Kingdom) IFSHT President 2001 to 2004

I first met Evelyn at the French Hand Meeting in Paris in 1986, when Evelyn and a group of American hand therapists were meeting with internationally famed hand surgeons to discuss plans for the future of hand therapy and surgery internationally. Evelyn was poised, eloquent and enthusiastic at all times, as one came to expect.

I really got to know Evelyn from 1992 when I was the UK delegate to the IFSHT Council meeting, leading on to my election on the executive committee. It was Evelyn who encouraged me to stand for election as President of the IFSHT and who gave me support and advice throughout my years on the executive committee. She became a very good friend as well as advisor and I welcomed regular letters from her until more recent times. A very generous person, spontaneous and always willing to encourage me, particularly as I became involved with setting standards for education for therapists across the world. Rehabilitation of the Hand and Upper Extremity has been a wonderful tool no one would be able to find information in the and source of knowledge for all who treat conditions of the hand and upper extremity and I shall always remember Evelyn with love, gratitude and respect.

Margareta Persson, (Sweden) IFSHT President 2004 to 2007

Evelyn has meant so much, and still does, as a forerunner in the field of hand therapy. She is such a wonderful example of a strong wise hand knowledge, experience and wisdom.

One always felt included in the hand therapy family when she was around. I remember her sweet in her approach.

We have such a fine example to follow as hand therapists, thank you Evelyn!

Judy C. Colditz, (USA) IFSHT President 2007 to 2010

No one has had more influence on the development of hand therapy than Evelyn Mackin. Not only did she urge others to write and present information about the evolving science of hand therapy, but she also brought us together to share the information. Not one of us has escaped the benefit of her tireless efforts to pioneer a new medical speciality.

I personally recall the occasional phone call from Evelyn, asking me to contribute in some way. It was impossible to say no to her enthusiasm; she always made it seem it would be such a loss if you did not participate.

Her accomplishments are many, including the conceptualization and birth of IFSHT. One accomplishment of which many may not be aware was her single-handed effort to assure the Journal of Hand Therapy, of which she was the first editor, was included in Index Medicus. Without this inclusion, journal. She made endless phone calls seeking support letters (this was before computers). She was proud of the journal and it being recognized by Index Medicus as one of the speciality sciences within medicine.

Unassuming, gracious, and generous, Evelyn saw the possibility for everyone to contribute and be involved. The most fitting tribute we can make to Evelyn Mackin's memory is just that: contribute to the learning of others whether it be supporting the IFSHT Evelyn Mackin IFSHT Congress Grant, presenting a paper, writing an article, mentoring an inexperienced therapist, serving on a committee or leading a discussion. As Evelyn encouraged: "Pass it on."

Lynne Feehan, (Canada) IFSHT President 2010 to 2013

There simply are not enough words or ways to state how much Evelyn has done for the international community of hand therapists. I was privileged to spend two days with Evelyn on her 90th meeting. She was interested to discuss IFSHT birthday when I stayed in her home to film a video for presentation at the IFSHT congress in India. These are two days in my life I will always remember Grant; those therapists who IFSHT and IFSSH and cherish. Her passion for a global community of hand therapists that connect and learn from each lifelong passion for hand therapy has been an is inspirational. I know that there are hundreds of inspiration for us all. therapists and surgeons around the world who have Compiled by Judy C. Colditz, (USA) IFSHT also been touched and inspired by Evelyn to do more President 2007 to 2010 & Susan de Klerk, (South and do better. Thank you, Evelyn ... your passion Africa) IFSHT Information Officer 2019 – 2022. and love for hand therapy will live on in all of as we "Pass it on" to others.

Sarah Ewald, (Switzerland) IFSHT President 2013 to 2016

Evelyn Mackin was a team player with a vision, her can do attitude and enthusiasm resulted in lasting contributions to the world of hand therapy. As one of the original editors of the classic reference book "Rehabilitation of the Hand and Upper Extremity", soon to be published in the 7th edition, she along with other pioneers in the field of hand therapy and hand surgery created an enduring legacy of knowledge that benefits countless

clinicians and their patients. It was a pleasure and an honor to become personally acquainted with her through the IFSHT. She was an example to us all, inspiring and always encouraging.

Anne Wajon, (Australia) IFSHT President 2016 to 2019

I had the pleasure of meeting Evelyn at the Silent Auction, which I chaired in Delhi in 2013. She offered to support IFSHT by promoting the items for sale and took the opportunity to talk to passing therapists and surgeons.

I subsequently became President of IFSHT in Buenos Aires in 2016. Evelyn was unable to attend this meeting but called to talk to all members of the Executive Committee during our committee activities and always took a keen interest in the recipients of the Evelyn Mackin IFSHT Congress sponsor to attend the triennial congress. Evelyn's



The Covid-19 pandemic

The Covid-19 pandemic has caught each one of us off guard; some much, much more than others. And some sadly gave their life while fighting in the frontline.

This new corona virus is more vicious than any of us have seen or experienced. It is more infectious than most and spreads more readily. It also has more time to spread as the infectious period is much longer, and due to more patients surviving, this period of viral shedding is prolonged.

The full destructive force still has to be manifested, but the devastating social and financial impact worldwide is by now catastrophic for many millions of people.

It is prudent to issue directives and orders on how to behave to combat the spread of this virus. Some well-equipped and socially well-off countries let their citizens roam freely (and with disastrous consequences). Other countries have strict instructions and regulations regarding movement, travel, physical distancing and lock-downs which are enforced by the police and army. Let us spare a thought for the fact that most people globally cannot practically do "social distancing", do not have any savings or resources to live on, do not have alternatives to using public transport, do not have private toilets, do not have adequate medical care, do not even have clean water, are undernourished and often immune-compromised, have lost their jobs, and their businesses are going bankrupt.

The nature and epidemiology of this virus is mostly still unknown. Statistics and numbers are interchanged regularly as if these two terms are the same. This causes much confusion and ill-information. These figures clog our television screens and are to some extent meaningless, because nobody truly knows how many of us have, or have had the virus. It seems most who get infected get better or do not even know they were infected. Only if this figure is known can the real morbidity and mortality statistics be determined. Many serology-based antibody tests are presently being developed and investigated for their reliability and specificity to answer this question.

Also, only if this overall figure is better known, will it be possible to determine the quality of immunity. Developing a vaccine is technically complicated and will probably take much more than 18 months. So far, in some viral infections such as HIV/AIDS, development of successful vaccines have not yet been possible. Vaccines are based on our bodies reacting to a virus by producing antibody proteins. Some questions complicate the development of a vaccine even more. Is the protection going to be short term or long term? What role does herd-immunity play? Does this virus cause harm to a developing foetus, or will it have an epigenetic effect? What long term effects are communicate our lectures, seminars, conferences and recovering patients left with? Why does the virus infect case discussions in real time and more frequently. multiple organs (lungs, heart, brain, gut, kidneys, etc) We have to be careful not to become impatient with in some patients and others have no symptoms, but the well-intended restrictions imposed by authorities. are spreaders of the virus? The questions go on. It will The danger lies in grabbing onto and believing false help to understand the bigger picture if we all would statements and untested claims. Unfortunately consciously accept the fact that the Covid-19 virus will examples such as claiming the efficacy of certain be with humanity permanently, and will change much drugs or baseless pronouncements by some leaders of our familiar routines. will continue to occur. These sinister utterances dampen and skew the efforts and progress that serious scientists around the world are trying to make. The prudent attitude would be to stay calm, act responsibly, and be certain about information before sending it on.

It is ironic that all the trillions of dollars spent on military armamentarium to kill and destroy, is useless in fighting this microscopic piece of RNA. Only the military support systems such as hospital ships and the ability to build hospitals in record time are now of practical value. Highly trained soldiers are expected to change their mind-sets radically and become the diametrically opposite, namely peace officers.

Is humanity going to survive? Of course. Most patients Every new day, as more information is gathered, we get better. This should not be the question. learn more. This adjusts our understanding, as well as decision and policy making. Projections and models What we should be asking is whether humanity, and each one of us individually, will learn from this therefore change all the time. disaster. Will we spend more of our tax money on So, what are we to make of the period after the social upliftment, health and population education, lockdowns? May we dare to suggest ideas? It should be and ethical food sourcing? When will leaders realise obvious that unspecified lifting of the current, effective that petty politics and self-interest (greed) do not restrictions would undoubtedly lead to a second spike belong in a world with artificial borders. We live in in new cases and deaths. a global village. We are all in this together. We may inadvertently be forced to revisit current economic Staged lifting seems to be a reasonable option, BUT systems and social orders. only on condition that diligent measures are in

Secondly, over time we have become obsessed with attending endless conferences, congresses and meetings all over the planet. This viral outbreak has also forced us to rethink ways to communicate socially and professionally. The Internet has enabled us to use various ways and platforms to relate with one another. Consider all the advantageous side effects of this pandemic. We will dramatically cut down on the global carbon footprint, we will be more available professionally and for our families, we will reduce the chances to further spread dreaded diseases, and Once the pandemic has settled, which will hopefully be soon, a new dispensation and a new norm seems to be inevitable for all. It may then be a matter of survival of the adapted.

Staged lifting seems to be a reasonable option, BUT only on condition that diligent measures are in place at the workplace, schools, colleges, offices, and other places of congregation for testing not only for the presence of the virus, but also for antibodies to determine immunity. Equally important, methods for contact tracing, as well as clear evacuation strategies must be in place. Are we there yet? This is not a political question. This is a basic, practical question of common sense. It may still take some time to get there. Until then, do we have a choice?

Stay healthy and positive. **Ulrich Mennen**



How COVID-19 has impacted the Hand Surgery specialty in Singapore

Microsurgery, National University Hospital

No conflict of interest from each of the contributing

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Electronmicroscope images Covid 19 Source: www.news18.com



INTRODUCTION

The coronavirus disease 2019 (COVID-19) outbreak was first reported in December 2019 as a cluster of viral pneumonia in Wuhan, China¹. It has since spread relentlessly worldwide, with the World Health Organization (WHO) declaring it a public health emergency of international concern on 30 January 20202 and pandemic on 11 March 20203.2,3

The first case of COVID-19 in Singapore was confirmed HOW HAND SURGERY PATIENTS HAVE BEEN on 23 January 2020. There has been a small but steady **AFFECTED BY COVID-19** increase in the number of cases, until Singapore raised Singapore is unique in that Hand Surgery is a the Disease Outbreak Response System Condition stand-alone, independent specialty. The patient (DORSCON) alert level to orange on 7 February 2020. demographics within Hand Surgery varies widely. This indicates the disease is contained, but severe Conditions such as arthritis and osteoporotic fractures and spreads easily between people⁴ (Figure 1). At the are linked to degeneration and advanced age, whereas time of writing this article, COVID-19 has infected over sports injuries and industrial accidents are more one million people across the world⁵, with a mortality common in the younger population. rate of 5.6%. Transmission is mainly via respiratory Although COVID-19 mortalities are more common in droplets and contact⁶, but recent studies have further shown that asymptomatic carrier transmission is also people over 50 years old with chronic comorbidities^{10,11}, possible, which makes management and containment a number of cases occurring in the younger population even more challenging^{7,8}. As yet, there is no known have been reported in Singapore, with 80% of the antiviral treatment beyond supportive care. first 1000 cases being less than 60 years old¹².



Figure 1. Singapore's DORSCON Alert levels system

Singapore has stepped up measures to deal with the increasing prevalence of COVID-19, with the introduction of elevated safe distancing measures as a 'circuit breaker' for four weeks starting from 3 April 2020. This involves closure of all non-essential services across the whole country, implementation of workplace telecommuting and advising the general public to stay at home as far as possible⁹.

Additionally, the most recent outbreak in foreign worker dormitories¹³ has opened up new challenges in managing such patients with active hand conditions. Hence, it is important to stay cautious and vigilant when seeing all patients.

MEASURES TAKEN TO PREVENT COVID-19 SPREAD: STAFF

*Personal Protective Equipment (PPE)

This consists of a surgical gown, gloves, mask and goggles or face shield (Figure 2). Wearing of PPE with a N95 mask^[1] is mandatory when seeing patients who are suspected or diagnosed cases of COVID-19. All healthcare workers have been trained in the usage of PPE and fitted with National Institute of Occupational Safety and Health (NIOSH)-certified N95 respirators. If N95 masks do not fit, powered air-purifying respirators (PAPRs) are used instead. Staff training was conducted for the use and maintenance of PAPR. With assiduous use of PPE, so far, there have been no reported cases of staff contracting COVID-19 while in the line of duty. For managing non-COVID-19 patients, a minimum requirement for all staff is to wear a surgical mask during consultation and glove up when performing physical examination.

^[1]N95 masks in our context may also refer to filtering face piece respirators (FFRs) found across other countries,

e.g. FFP2 (Europe), KN95 (China), P2 (Australia/New Zealand), Korea 1st class (Korea), or DS (Japan).¹⁴

*Segregation of staff

As the COVID-19 coronavirus is extremely contagious, there is a need to segregate staff into various selfreliant functional teams, with minimal physical communication between members of different teams. The functional team structure comprises a minimum of 3 members (up to a maximum of 5), led by a Hand Surgeon specialist (consultant or attending grade) with 2 other junior staff (medical officer/registrar grade). The reason for adopting this concept is that should any member of the team be exposed to the coronavirus; the entire team is compromised and the affected team will have to suspend clinical services and be isolated for a 14-day period before they are allowed back into the workforce provided they have been asymptomatic throughout their isolation period. The other unaffected teams will continue to render patient care and ensure that clinical services are not compromised. Even during daily clinical activities such as inpatient rounds and clinics, individual team members are constantly reminded to practice responsible physical distancing from each other – keeping a minimum distance of 1 m apart) and also to stagger their meal times so as to minimize contact.

Surgical cap N95 mask Splash-proof disposable gown

Figure 2a. Staff in full PPE: N95 mask, goggles, splash-proof disposable gown, surgical cap, covered shoes and latex gloves.



Figure 2b. PAPR¹⁵

Daily emergency hand surgery calls are also covered by members of the same team. At times, there will be situations when there is a lack of manpower, such as only one junior (medical officer and/or registrar grade) staff on emergency 24-hour call and the senior staff has to do a step down call to augment the junior should there be a marked increase in clinical activity at the emergency department (Figure 3).

Medical Officer	Registrar	Consultant
G	I	К
A	С	E
Н	J	L
В	D	F
G	-	L
Н	I	М
A	D	E

Figure 3. An example of a weekly department emergency call roster where A-F are members of one team, and G-M are members of another team.

Besides being based in one hospital for the majority of the time, some of our colleagues also provide subspecialty coverage and services to other hospitals to varying degrees. However, due to the current pandemic, cross-coverage by these staff between various hospitals has been halted to reduce risk of inter-hospital infection by healthcare staff.

*Provision of services in managing COVID-19

During a pandemic situation, just like in war times, it is inevitable that manpower will be stretched and often, all specialty departments are expected to provide reinforcements from the existing pool of doctors to beef up critical areas and services to combat the coronavirus. The concept of delayering and blurring of ranks and specialty practice is very much advocated.

Senior staff members together with the junior ones are assigned to assist and work alongside colleagues from

other specialties to cover the emergency department, to run mobile medical teams dealing with mass outbreaks in the dormitories, to augment the staffing at intensive care units and assist the intensivists and also assist the infectious disease specialists at the isolation wards.

On the job training, refresher courses in critical care and infectious disease management and even learning new skills such as performing a nasal swab on a suspected COVID-19 case are conducted to ensure all the doctors are equipped to fight the ongoing war effectively. Everyone is forced out of their comfort zones and expected to contribute wholeheartedly to fight the crusade against the invisible enemy. Staff who are pregnant or immunocompromised are exempt from direct care of suspected or diagnosed COVID-19 cases.

*Education and Research

Residency rotations were also frozen, ensuring staff to stay within the current respective hospitals that they have been posted to. However, each institution is still obliged to fulfil the training requirements amidst this pandemic with adjustments and creative ways of teaching and assessments through online platforms in lieu of physical meetings or teaching sessions. Increased use of simulators and simulated assessments are also being employed during such times.

In view of this pandemic, all research related to COVID-19 is supported and enhanced. Non-COVID-19 related research is allowed to continue with modifications to study protocols. Activities that can be done remotely are encouraged with reduced staffing in laboratories and facilities where on-site supervision and practical work is required. Researchers can continue to work remotely on developing better methodologies and more comprehensive data analysis, and focus on touching up of grant applications and manuscripts.

*Communications

Daily updates from the Ministry of Health, Singapore (MOH) guidelines as well as hospital routine instructions are made available via electronic means and circulated to all staff. Help is made available for staff suffering from anxiety and burnout.

Face-to-face in-person communication and large group meetings have been suspended since late January when the first case of COVID-19 in Singapore was announced. Weekly business meetings and education sessions are held via an online tele-conferencing platform.

*Infection Prevention Measures

Staff have been advised to defer all travel as per the MOH guidelines¹⁶. Staff who had returned from affected overseas destinations prior to the guideline were placed on a 14-day leave of absence (LOA) and advised to monitor themselves for symptoms while at home.

Temperatures are measured twice daily and recorded online. Staff who develop a fever or any acute respiratory symptoms are advised to seek treatment at the staff clinic.

Staff who have cared for patients with COVID-19, were required to continue with their clinical work with a surgical mask and monitor themselves for symptoms. If inadequate PPE was worn, they will be evaluated by an infectious disease (ID) specialist for infection risk.

Subsequent management is planned in accordance with the MOH guidelines for healthcare workers exposure to COVID-19; if the staff was in close contact with the patient they are issued with a Quarantine Order for 14 days while casual contacts are followed up with phone surveillance monitoring.

SURGERIES

*Pre-operative Care

Non-urgent elective surgeries requiring overnight hospitalisation have been postponed. This is to free up more beds within the hospital for treatment of patients with suspected or diagnosed COVID-19 if required. Day surgery, trauma, infection and tumour surgery procedures are allowed to continue, though surgeons are advised to keep the number at a maximum of 2 cases per list.

Time-sensitive elective surgery patients are called a day before surgery and screened for respiratory symptoms or positive travel history. If they have either of the above, the surgery will be postponed. Patients who present in the emergency setting are screened on arrival and those who fulfil the criteria for suspected COVID-19 infection are immediately referred to the Infectious Disease (ID) department on call team and tested for the virus via nasal swabbing. These patients are admitted to the isolation ward and co-managed with the ID team. If it is possible to delay the operation without compromising on patient care, surgery should be adjourned until results of 2 viral nasal swabs (done 24 hours apart) are negative. However, any patient requiring immediate surgery will be operated on with necessary precautions as described below. This situation has only occurred once to date with one of our patients who needed emergency surgery for early necrotizing fasciitis and had a recent history of travel to a country where COVID-19 cases are prevalent.

*Peri-operative Care

Suspected or diagnosed COVID-19 patients are transported with a surgical face mask to the operating theatre along a designated route to minimise contact with others. A separate operating theatre complex with a High-Efficiency Particular Air (HEPA) filter is assigned for surgery to be performed on suspected or diagnosed COVID-19 patients. Single-use and disposable equipment are utilized as much as possible. The surfaces of intraoperative monitoring machines are covered with plastic wrap and charting is done with touch-screen devices. These machines and the HEPA filter undergo regular disinfection and maintenance checks. The number of staff involved in such surgeries are limited to reduce the risk of crossinfection. All surgeons are required to wear full PPE with PAPRs. Local or regional anaesthesia is preferred over general anaesthesia as this reduces the potential of generating aerosols.

*Post-operative Care

Post-operative recovery is conducted in the same operating theatre instead of the usual post-anaesthetic care unit (PACU). All the surfaces of machines within the theatre are cleaned with ammonium chloride disinfectant wipes and non-single-use instruments sent for decontamination and autoclaving. The operating theatre is then cleaned with sodium hypochlorite 1000ppm and treated with hydrogen peroxide vaporization or ultraviolet-C irradiation¹⁷. However, this also increases the turnover time between cases.

*Changes to surgical practice

- Anaesthesia: The fact that perioperative pain management in most of hand surgery cases can be managed under regional and local anaesthesia and nerve blocks together with the advent and popularity of Wide-Awake Local Anaesthesia Without Tourniquet (WALANT) in recent years, such hand surgery cases, emergency or elective, can be operated without the requirement of ventilators or anesthetist support. This frees up the ventilators and anaesthetist involvement, which are precious and scarce resources/expertise in the treatment of severe cases of COVID-19.
- Reduction of operative time and theatre usage: Use of implants under normal circumstances may be altered, e.g. plate fixation of fractures may make way for pins and wires under these times to minimize operating time usage and exposure of patients to prolonged surgical times.
- Consideration of conservative and non-surgical management of cases: Such alternatives should

be emphasized and discussed with patients, especially in chronic and benign cases where timing is not of critical essence such as degenerative joint diseases, repetitive strain injuries, stable deformities and uncomplicated closed fractures, etc.

OUTPATIENT CLINICS

Clinic numbers were reduced as far as possible to minimize risk of patients developing COVID-19 infection from visiting the hospital. Patients with nonurgent appointments (for both follow up cases and new referrals) were rescheduled to a later date and informed accordingly. Consultation via teleconferencing platforms has been considered, especially for patients with chronic and stable conditions. Medical indemnity companies have been supportive in providing coverage for doctors in such unprecedented times within reasonable circumstances.

All patients who attend the outpatient clinic undergo a basic screening at the entrance. This entails measuring their temperature with a thermal scanner and asking them for a declaration of risk factors (travel history, contact history and/or respiratory symptoms). Febrile patients are referred directly to the ED while patients with risk factor(s) are transferred to the isolation room where outpatient consultation, wound management and application of splints or casts take place. Staff who see patients in the isolation room are required to wear full PPE and the room is decontaminated after use.

CONCLUSION

Modification of workflows in multiple areas is necessary to prepare for the ongoing COVID-19 pandemic. All these measures implemented aim to minimize contact between the possible sources of COVID-19 and the surrounding environment, while at the same time ensure that patient care remains a priority. This will reduce the risk of transmission between these infective sources and other patients or healthcare professionals involved in patient care, and eventually help to control the spread of infection across the hospital and the country.



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AN UPDATE ON THE DEVELOPMENTS FOR THE LONDON

IFSSH&IFSHT Congress 2022

Preparations are continuing apace for the 2022 IFSSH/ IFSHT congress in London. Anticipation is building and we are getting very excited about it! This article is to bring you the latest news and developments from this.

The most important thing to let you know about is a change of venue and also a change of date....

We learned last year that there was a possibility of the House of Lords, which is the upper house of the UK Parliament, decanting into the QEII centre (our booked venue for 2022) while extensive refurbishments are being carried out at the Palace of Westminster.

The move is planned for 2025 but the QEII will be commandeered for preparatory work from 2022. They were running behind schedule and the likelihood is that this will not happen, but it remained a possibility. When I first learned of this early last year, I provisionally booked an alternative venue at the ExCeL Centre, which is situated in the Docklands, East London.





Despite the projected schedule delay, the CEO at QEII was not able to secure an assurance from government ministers that the QEII venue would be available for 2022. Our deadline for a decision was 31 January 2020. We could not afford to take the chance of being left without a venue and so we have decided to move the Congress to the ExCeL Centre.

This will entail a change of date to earlier in June. The venue is booked for 5 - 11 June 2022, with the Congress proper running 6 – 10 June 2022. Fortunately, this will not conflict with the proposed dates for EFFORT. ExCeL https://www.excel.london , which is situated in the London Docklands, was one of the venues for the 2012 London Olympics. It has several significant functional advantages. ExCeL has a more horizontal footprint than QEII and so will be much more easily navigable during the Congress. It is a much bigger venue with easily enough space to accommodate 4000 delegates, or more if necessary (QEII would have been capped at a maximum of 2500). Unlike QEII, it can provide a vast central space for industry.

Accommodation for delegates in the vicinity of ExCeL is plentiful and will be less expensive than in central London. If delegates decide that they would prefer to stay in central London, then transport options from the centre to ExCeL are good. There is the Docklands Light Railway (DLR) and also an underground tube connection, due to be completed next year. If people want to take a particularly scenic route then there are river boats departing from major London piers every 20 minutes https://www.thamesclippers.com/route-timetable.

All in all, we see this as a very positive development.









- 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 Sang Hyun Woo, MD, PhD.

Daegu Korea

We have engaged the services of Asszisztencia, a company based in Budapest, to help us organise and run the Congress. I have had experience in dealing with Asszisztencia over the last few years during my time on FESSH Council and I have found them to be invariably extremely competent and efficient. They will be a great asset.

66 The most important thing to let you know about is a change of venue and also a change of date 🤰

After the successful meeting in Berlin and with the Congress being held for a consecutive time in Europe, there will be an inevitable impact on FESSH. This Congress will therefore be a combined meeting with FESSH XXVII. We will be providing facilities for all of the requirements of FESSH, including the EBHS Diploma examination.

The programme for the Congress is starting to take shape. The programme committee, led by Jonathan Hobby and assisted by Wee Lam, includes representatives from all of the world's continents. There will be a core series of instructional lectures, the topic for which is Tendon Disorders of the Hand and Wrist and we have a publishing deal with Thieme to produce an accompanying book, which will be included in the registration fee for surgeons.

The website for IFSSH/IFSHT 2022 is up and running https://www.ifssh-ifsht2022.co.uk . It is constantly

being developed and there are several pages yet to be written. Some of it still needs to be updated to reflect the move from QEII to ExCeL, but it should be a useful source of information.

Finally, we were due to carry out a detailed site visit to ExCeL in mid-May, but with the advent of COVID-19 this will be delayed. As I write this, there have been over 1000 deaths from COVID-19 in one day in the UK.

The ExCeL centre has now been converted into the world's largest field hospital to accommodate 4000 of the critically ill. It was constructed in less than two weeks and the first patients have just been admitted there. In 2022, when the world has recovered, we will hopefully be able to look back upon this dreadful chapter in history and reflect on it. The ExCeL may be an apt and appropriate venue for this.

We look forward to welcoming you to London in 2022...

Best wishes and stay safe!

David Shewring

Chair, Organising Committee IFSSH&IFSHT 2022





Sang Hyun Woo, MD, PhD.

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

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Takayuki Miura Japan (1930-2020)

Takayuki Miura was born in the Mie Prefecture, Japan on 26 February 1930. He graduated from the Nagoya University School of Medicine in 1955 and joined the Department of Orthopaedic Surgery the next year. In 1961 he became Chief Resident in the same Department, and in 1967 Chief of the Orthopaedic Department of the Kariya Toyota Hospital. The next year he was promoted to Assistant Professor at the Nagoya University School of Medicine, followed by Associate Professor in 1983 and later in the same year full Professor for the next 10 years. Professor Miura was granted Emeritus Professor status in 1993, and promoted to Director of the Health Centre at the Chukyo University.

In 1989 Miura became President of the Japanese Orthopaedic Association, and later Honorary Member of both the Japanese Orthopaedic Association and the Japanese Society for Surgery of the Hand . In 1988 Prof Miura

presided over the 31st Annual Meeting of the Japanese Society for Surgery of the Hand, and in 1990 over the 63rd Annual Meeting of the Japanese Orthopaedic Association.

He has a long list of publications which cover a wide variety of subjects. His main interest however was articles on Congenital Differences which included the management of syndactyly, triphalangeal thumb, skin cover of the injured hand, duplicated thumb, symbrachydactyly and the cleft hand.

Takayuki was married to Naoko. He died on 1 February 2020 a few weeks before his 90th birthday.

At the 8th International Congress of the IFSSH in Istanbul, Turkey in June 2001, Takayuki Miura was honored as "Pioneer of Hand Surgery".



Ronald L. Linscheid was born on 14 June 1929 in Hutchinson, Kansas, USA. He completed his Orthopaedic residency at the Mayo Clinic in 1962. His mentor Dr. Paul Lipscomb arranged a Hand Training Fellowship with Dr. Joseph H. Boyes in Los Angeles California, after which he returned to join the staff of the Department of Orthopaedic Surgery at the Mayo Clinic.

In 1967 Dr. James H Dobyns and he formed a clinical hand unit within the Orthopaedic Department. They collaborated on a number of clinical inquiries, most particularly on disorders of the wrist. This included descriptions of scapholunate and lunatotriquetral dissociations, ulnar translations, scaphoid fracture deformation, Kienbock's disease, carpal instability nondissociative, scaphotrapezial deformities and other carpal fractures and sprains. Interest in these entities helped to initiate the formation of the Orthopaedic Biomechanics Laboratory in 1969.

The awarding of several NIH grants to study hand function with Dr. E.Y. Chao led to an early mathematical model of the hand and subsequent studies on quantitative description of intrinsic muscle, scaphoid fracture mechanics, forces acting at the trapeziometacarpal joint, kinematics of the carpus, kinematics of the distal radioulnar joint and its ligamentous constraints. An early interest in the pathophysiology of rheumatoid deformity extended to the design and clinical testing of arthroplastic procedures in the hand, wrist and elbow. Later interests include anthropology and the hand in human evolution.

A member of many societies he has held officer and committee positions, among the most prestigious being the President of the American Society for Surgery of the Hand 1989-1990. Honors include the Kappa Delta Award 1984 for "Biomechanics of the Hand", Emanuel B. Kaplan Award 1986 for "Intrinsic Musculature of the Hand", 1st ASSH Distinguished Hand Lectureship, 1987, 1st Herbert H. Stark Memorial lectureship 1992, Distinguished Mayo Clinician Award 1992, and Richard J Smith Lecture ASSH Annual Meeting 2000. He has an extensive bibliography.

Ronald and his wife Carol raised six children. Other interests included aviation, drawing, sculpture, tennis, golf and skiing. He passed away on 10 June 2012.

Ronald L. Linscheid was honoured by the IFSSH as "Pioneer of Hand Surgery" at it's Eighth Congress inIstanbul, Turkey on 10 June 2001.

Ronald L. Linscheid United States of America (1929 – 2012)

Consensus Wrist Index Tool:

GAINING A COMPREHENSIVE PICTURE OF THE PATIENT'S FUNCTION AND PERSPECTIVE.

As providers of health care, and specifically care for conditions of the hand, wrist and upper extremity, we strive to deliver appropriate treatment for the patient's condition in general but also tailored for the specific needs and expectations of each patient. With the continuous advance of therapeutic and diagnostic medicine on one hand and the economic consequences of these developments on the other hand, as we believe we should, delivering care has become increasingly difficult.

Currently, this has become one of the major challenges facing our profession and is a problem across the board in all specialties and all countries. We deal with constantly increasing pressure and oversight from bodies that do not understand our profession and have no interest in quality of care. It is unclear how to push back on these issues in an efficient manner.

We believe that we need to document the quality of our care even more robustly by integrating a standardized approach by measuring outcome into our daily practice. One way to do this is to acquire consensus data, in order to evaluate the quality of the offered treatment and to develop guidelines that reflect the current state of the art, combining evidence-based research with the clinical perspective. It is much better to be judged according to standards that are accepted and relevant to providing appropriate treatment than by economic or political standards.

As an initial step in this process we should be able to

effectively measure/evaluate outcomes of treatment. This will allow us to judge our own results and to decide what is adequate and appropriate. In hand conditions, despite its evident importance, the ability to correctly evaluate outcomes has remained incomplete. This is due to the complexity of hand and especially wrist anatomy, mechanics, and the wide range of functional tasks and treatment options used, including conservative and surgical alternatives.

Currently utilized functional evaluations may lack the ability to adequately measure what is needed and may not be sensitive enough to determine significant differences when comparing treatment regimens. In addition, the availability of a wide array of functional tests each testing a different specific function makes it difficult to compare results of different studies. Patient report versus performance has become standard practice in many settings. Commonly used measures allow us to evaluate and compare a specific outcome such as grip strength or range of motion or the patient's perception of his or her function, but a global picture of the outcome that combines these factors and incorporates a functional measure remains elusive.

Furthermore, some tests are not applicable in the setting of a private clinic or busy academic center. Many of these take time and may be too expensive to administer. A comprehensive and detailed standardized functional evaluation will need to be easily applicable in any clinical setting, in order to be widely used. Such a tool will enable not only a better understanding of outcomes but will also allow better communication and true comparison between different procedures and interventions.

We have initiated an effort to establish a consensus A preliminary trial was performed in multiple centers wrist index tool that will be detailed and specific to the with the purpose of refining the tool in June 2019 and patient but will also be standardized and easy to apply presented at the 14th IFSSH and 11th IFSHT Triennial allowing for comparison and evaluation of outcomes. Congress in Berlin. The measurements are uploaded An international, multidisciplinary forum of experts to an excel file, which provides a "spider diagram" of in this field (including hand surgeons, hand therapists the patient's objective and subjective results at three and clinical trial specialists) met in 2018 (Table 1) and points in time. This is similar to the disc-o-gram reached a consensus for an outcome evaluation tool. introduced by Mennen (2004). Other tools for wrist evaluation have been suggested (Herzberg et al. 2018). However, this tool based on the diagram is unique in Table 1: List of participating experts that it gives equal weight to the clinician's findings and patient's perspective.

Participants	Country	
Marianne Arner	Sweden	MD, Prof
Vera Beckmann	Switzerland	PT, MME
Sarah Ewald	Switzerland	OT, MA Ed
Liesbeth Hemelaers	Switzerland	OT, PT, MSc
Johanna Ismaier	Germany	OT
Patrici Kammermann	Switzerland	OT
Joy MacDermid	Canada	PT, PhD
Miriam Marks	Switzerland	PT, PhD
Sarah Mee	UK	OT, MSc
Brigitte Sparl	Austria	OT, MSc
Frederik Schuind	Belgium	MD, Prof
Andreas Schweizer	Switzerland	MD, Prof
Ruud Selles	Netherlands	Researcher
Jean-Iouis Thonnard	Belgium	PT PhD, Prof
Lucelle van de Ven-Stevens	Netherlands	OT / PhD
Esther Vögelin	Switzerland	MD, Prof
Daniel Weber	Switzerland	MD
Ronit Wollstein	USA	MD, Prof

The tool is comprised of previously validated tests, including patient related outcome measures (PROMs) and objective clinical measurements. The data from the measurements is inserted into an excel file to

create a comprehensive picture of the patients status. It is a core testing tool for wrist conditions that will likely need the addition of a supplement tool for specific conditions.

Very preliminary data suggests that this tool may provide improved patient specific data, but may need some modification to be used for comparison or standardization

How this is used in practice is illustrated in the following example: a 60 year old male with a distal radius fracture is evaluated eight weeks post injury, the following evaluations are performed: range of motion measurements of the wrist and forearm. grip strength measurements with wrist in neutral, supination and pronation.

The patient 's perspective is gathered through the use of defined interview questions: the Single Answer Numeric Evaluation (SANE) (Williams et al. 2000), and the patient specific functional scale (PSFS) (Stratford et al. 1995), which asks the patient to identify and rate three tasks that are important to them. A more global picture is gained with the Patient Rated Wrist and Hand Evaluation (PRWHE) (Macdermid et al. 1998, 2019). The patient is asked to complete the PRWHE questionnaire and the Michigan Hand Questionnaire work module (5 Questions) (Chung et al. 1998). This entire process is completed in 15 minutes or less.



Figure 1: Consensus Wrist Index Tool (CWIT): the larger the circle the greater the function and wellbeing of the patient. The smaller the circle, the poorer the function and well-being of the patient. Shown above with data from three different points in time, data points on the left are objective measurements: wrist range of motion and grip strength. On the right the lines on the spider plot represent patient rated outcome measurements.

The clinician then requires 5 minutes to enter the measurements into the Consensus Wrist Index Tool (CWIT), which is an excel file. The tool calculates the range of motion and grip strength ratios between the affected and healthy hands, as well as the scores for the interview questions and patient rated outcome measures. This initial data is automatically plotted in red on the "spider diagram" (Figure 1) and provides both the clinician and the patient with a picture of his or her situation. In this case, the patient and clinician note that range of motion is limited primarily in extension and flexion; all other areas are recovering quite well. Grip strength overall is 50% of the healthy hand and is particularly reduced when the wrist is pronated (see wrist index diagram above). The clinician learns that the patient primarily has pain when he tries to work in his garden and use a saw, that he is not able to open jars or play tennis, these

activities are a priority for him. Overall, the patient has rated his hand function as 35% of normal. As treatment progresses, measurements are repeated. The interval between measurements is defined by the clinician. The Consensus Wrist Index Tool as seen in Figure 1 compares these same data points over time: 12 weeks (yellow) and 20 weeks (green). At 20 weeks all parameters show improvement and the patient has rated his hand function as 85% of normal.

In our experience thus far, the utilization of the CWIT tool is appreciated by patients and has provided the clinician with more insight into the patient's challenges and perspective.

We are now in the midst of a study to assess the applicability of this proposed CWIT tool. We hypothesize, that patients and therapists/surgeons administering the evaluation tool in the different clinical settings will find that it is:

1) Easy and economical to administer 2) Will reflect true patient outcome

Though this is a work in progress, this is a first step in what we see as a critical effort to preserve our ability to treat hand patients accurately and adequately.

We welcome any comments regarding our approach and plan to update the community in June 2020.

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Williams GN, Taylor DC, Gangel TJ, Uhorchak JM, Arciero RA. Comparison of the single assessment numeric



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AN ALTERNATIVE MANAGEMENT APPROACH TO THE TREATMENT OF COMPLEX PHALANGEAL FRACTURES:

The Poole Finger Traction Splint

A NON- INVASIVE SPLINTING SYSTEM

Background

The management of acute complex phalangeal fractures present a challenge to both the surgeon and therapist as they are commonly unstable and difficult to treat. Several treatment options are available to the surgeon ranging from k-wires, screws and plates to various forms of traction. Many of these methods have the potential also to deliver complications such as post-operative stiffness, pain and infection.

Traction is often favoured as a treatment option as it uses the principle of ligamentotaxis which involves the application of distal traction to the digit that allows both the reduction of articular fragments and the realignment of joint surfaces by providing tension on their ligamentous and volar plate attachments (Schenk 1994), see Fig. 1.

The Poole Finger traction splint (PFTS) evolved in 2002 out of a clinical challenge of a highly comminuted base of middle phalanx fracture that was not conducive to surgical reduction. The task of stabilising the fracture was delegated to the hand therapy service; the 1st Poole traction splint was created and applied to the patient, with a successful outcome (Fig. 2). A literature review on traction methods strongly supported the Fig 1. In the clinical application the proximal portion is fixed at point A, traction makes point B move distally, points C & D converge and move away from point A. If the capsulo-ligamentous and tendon structures are analogous to the horizontal lines they apply a vice like compression to whatever lies between them, e.g. dorsally displaced fragments, and the joint space is widened.



need for early mobilisation whilst maintaining fracture stability; there were other forms of non-invasive traction already in use at that time but none allowed for mobilisation, so this was prioritised.



Fig 2. The Original PFTS

A case series of 54 patients with 39% extra articular and 60% intra articular fractures enabled the collection of outcome data. A mean TAM of 220 degrees was demonstrated, which according to ASSH criteria represents a good outcome. There were no statistically significant differences between intra and extra articular fractures or those in the middle or proximal phalanges. In 2010 a MSc dissertation examined the feasibility of non- invasive traction in the context of all other forms of traction in use. (Bradley 2010).

This integrative review of the literature concluded that the PFTS was able to provide comparable outcomes and in some cases superior outcomes to other forms of invasive traction commonly in use. Traction systems in general are best suited to pilon type fractures though we have used them successfully in spiral, oblique and comminuted fractures in both the proximal or middle phalanges. Our experience as therapists with close collaboration of our surgical colleagues has led to a change in pathway in complex phalangeal fracture management which is now therapy led.

Splint principles

The splint base is made of a thermoplastic that must be drapeable, e.g. orfit colours, tailorsplint. The splint base is moulded according to the characteristics of the fracture pattern, e.g. a dorsally angulated proximal phalanx fracture that is shortened would be splinted with the MCPs in flexion to offload the interossei whose forces are pulling the proximal fragment into flexion and the distal fragment into extension. In contrast a comminuted pilon fracture may be splinted with the digit in extension in order to optimise the ligamentotaxis effects. Critical to the ligamentotaxis effect is the stabilisation of the digit proximally by applying a non-elastic tape across the proximal phalanx.

The traction is achieved by attaching a theraband strip from a frame that extends beyond the end of the digit to the nail which has a dressing hook attached to it with superglue. Our learning from early experiences of the splint prompted the addition of zinc oxide tape over the hooks base which distributes the forces away from the nail bed which, without it can cause nail avulsion, especially in cases where there is severe comminution or shortening where more traction is required. (Fig.3).

Traction tension is set by assessing pain with passive motion, in general when traction is sufficient more motion is afforded with less pain, and the effect is immediate. This is a pragmatic simple method that requires no complex measuring system or an x-ray to evaluate fracture reduction. In general blue theraband is now used as this allows for adequate traction tension without fatiguing too quickly between appointments. Any digit including the thumb and multiple digits can be managed effectively in this system. (Fig.4).



Fig 3. A hook is superglued to the nail and reinforced with zink oxide tape



Fig 4. An example of the PFTS applied to 3 digits

The exercise regime (Fig.5).

In the first week the patient bends the wire passively flexing and extending the finger within a comfortable range. This is repeated 10x every hour. It can be modified according to the individual's response. On occasion no movement has been instigated where the fracture is highly unstable or pain is prohibitive, though this is rare. Pain relief in general is immediate. The splint remains in situ 24/7 in order to maintain tension through healing. An x-ray is taken at the return visit at the beginning of week 2 to assess fracture position in the PFTS. The decision to continue with treatment is made however based on clinical presentation.

In the main patients report a reduction in pain, increase in ROM and a reduction in swelling. When they return at week 2 the splint traction is replaced; it will be too long where the band has slackened form the increase in digit length and will fatigue a little from the exercise. Their hand is cleaned briefly and a cotton liner renewed. Then the patient's comfort with active assisted motion is assessed, if this is manageable with no significant increase in pain then this is started in order to get some tendon glide over the fracture site. The patient will attend weekly and maintain the splint for 3-4 weeks, specifically until clinical healing has taken place. Thereafter usual hand therapy treatment approaches are used to address any residual ROM and function deficits.



Fig 5. The exercise regime

What have we learnt?

The journey so far has delivered some unexpected findings. We have consistently found there to be a radiological mismatch to function. It has taken some time to develop confidence to trust in the functional outcomes versus the radiographic findings. In a case example below of a 17 year old boy who injured his thumb playing rugby the traction was applied within 1 week post fracture.

His fracture can be seen in Fig.6. He had 5 treatments in total. He recovered a pain free ROM as follows: MCP 2-48, IPJ 10-70. A Kapandji score of 9 was achieved, Power grip was 100% and a tripod pinch 73% of the contralateral hand. QDASH score was 0 as assessed at 6 weeks post fracture.



Fig 6. The original fracture, lateral and b) In traction. Full anatomical reduction of the fracture is not always seen on the Xray in traction, however functional ability improved significantly

Other benefits noted have been the rapid reduction in oedema, rarely are oedema management modalities used in combination with the splint. The biggest benefit is clearly that the patient is spared an operation and there have been significant cost savings.

The Future

In 2015 The PFTS was recognised in the UK healthcare system having won an innovations grant which has enabled the development of a training programme to disseminate the PFTS into the NHS throughout the UK. The system has been adopted by seven NHS Trusts to date. It has also been recognised by Health Education England, who awarded me a NHS Shine award for innovation.



Fig 7. Examples of the Poole Finger Traction Splint

The work of the Poole Hospital Hand therapy team has been shared at national conferences in the UK, and internationally at the IFSHT Argentina 2015 and Berlin 2019 Congresses. The next step is to undertake further research to facilitate further national and international adoption.

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SPOTLIGHT ON ISRAEL SOCIETY **OF HAND THERAPY**

The Israel Society of Hand Therapy was established in 1987 and proudly hosted the first International Congress of the IFSHT in Tel Aviv, Israel in 1989. In 2013 the society was re-established as a society under the auspices of The Israel Society for Surgery of the Hand. The society actively participates in an annual conference and an upper limb seminar presented by the Israel Society for Surgery of the Hand. In 2020 the seminar was presented by Yafi Levanon and Ayala Nota (topic: shoulder rehabilitation). The Israel Society of Hand Therapy hosts annual one or two day, well attended



workshops. International speakers are invited to these events and to date they have

Current leaders of the Israel Society of Hand Therapy

included Debbie Schwartz, Carolyn and Katherine Schofield (topic: splinting), Wim Brandsma (topic: biomechanics), Vivian Dim (topic: Manual Edema Mobilization), Aviva Wolff (topic: the elbow and treatment of pain) and Margaret Persson (topic: functional anatomy). A large group of Israeli delegates participated at the past IFSSH/IFSHT congress in Berlin, presenting their work.

FESSH-EFSHT CONFERENCE **BASEL, SWITZERLAND**

The Swiss Society for Hand Therapy is hosting the 13th Congress of the European Federation for Societies for Hand Therapy (EFSHT) in Basel, Switzerland, 3 - 6 June 2020. This triennial combined congress will take place in conjunction with the Federation of European Societies for Surgery of the Hand (FESSH).



IN MEMORIAM **EVELYN MACKIN 1922 - 2020**

To provide global networking and educational opportunities to develop and enhance the practice of hand therapy

UPDATE



IFSHT announces the passing of its founder and first president (1986-92): Evelyn Mackin, PT, February 2020 in Pennsylvania, USA. Ms. Mackin created many other worldwide educational opportunities for hand therapists that continue today. She was a founding member of the ASHT, first organizer of the Philadelphia Hand Meeting, founder and first editor of the Jour-

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nal of Hand Therapy (1987-98) and one of the first editors of the well-known text "Rehabilitation of the Hand and Upper Extremity." Her motto was: "Pass it on," and she lived this through her endless contributions in sharing hand therapy knowledge and skills worldwide. Ms. Mackin was awarded the IFSHT Lifetime Achievement Award at the most recent IFSHT Congress in Berlin in 2019.

IFSHT continues to recognize her many contributions through the Evelyn Mackin Triennial Award, established in 2010, supporting therapists from developing countries to attend IFSHT Triennial Congresses. More information on her incredible achievements are at www.IF-SHT.org.



2013 EVELYN MACKIN IFSHT TRIENNIAL AWARD RECIPIENTS in New Delhi, India; L to R: Sokny Leang (Cambodia), Sumanta Ray (Bangladesh), Evelyn Mackin, Apsara Ghimire (Nepal), Yuting Zhang (China), and Kalyani Hemalatha (Sri-Lanka)

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



THE METHODOLOGICAL REQUIREMENTS FOR **CLINICAL EXAMINATION AND PATIENT-REPORTED OUTCOMES, AND HOW TO TEST THEM**

Roberto S Rosales and Isam Atroshi

Journal of Hand Surgery (European) November 2019, Vol45, issue1, p12-18

What were your main reasons for writing this article?

In January 2019, we received an invitation from the Editors of The Journal Hand Surgery (European Volume), to contribute to a special issue focusing on the topic of clinical measurement and task assessment of the hand. We were selected to write this paper because of our previous contributions on the subject of measurement of function of the hand, but the paper of course had to go through the standard peer review process. We felt that it would be a good opportunity to spread basic concepts related to measuring outcomes in hand surgery. For example, use of patient-reported outcomes measures has become increasingly important in hand surgery and therefore knowledge about the correct methodology and interpretation is important.

What are the most interesting/important results and conclusions of your article?

Our aim was to explain to the hand surgery community basic but often difficult concepts related to information bias (reliability and validity) and to responsiveness, in a brief and easy-to-read manner.

We thank the Editor Dr Michel Boeckstyns for his ideas to simplify the mathematical concepts and reduce the length of the paper and for the tremendous work in editing the manuscript.

This paper is based on the International Classification of Functioning, Disability and Health (ICF) developed by the World Health Organization (WHO), which classifies functional measures into body function and structure, activity, and participation (WHO, 2013).

Traditionally, the measurements used in hand surgery have focused on body function and structure, such as radiographs, strength measures, range of motion (ROM), two-point discrimination, etc. Measurements of activity and participation, such as patient-completed health-evaluation questionnaires and patient-reported outcomes (PRO), are now frequently used in hand surgery, both in clinical practice and research. The assessment of any measurement for clinical research in hand surgery is difficult. A method of measuring a criterion could be 100% reliable but 100% invalid; and a so-called valid and reliable measurement may not necessary present enough responsiveness for outcomes assessment.

What should all hand surgeons and hand therapists reading your article understand about the findings of your research? Bias may be present in our assessment if we do not take into account the methodological requirements related to reliability, validity and responsiveness of our measurements. The paper explains those basic concepts, and supplementary material is provided mainly for those hand surgeons and therapists who have special interest in knowing the mathematical basis for the proposed analyses.

Using the correct methodology is an important issue in clinical research. We do peer-review for many journals, even journals not related to hand surgery, and we often face, during the review process, papers with important data collected after a long follow-up, but with a high risk of bias due to the methodological problems in the measurement assessment.

The concepts included in our paper can help the readers to better plan their research and decrease the risk of bias in their methods. Also, they will assist hand surgeons and therapists in interpreting the results of published studies in their field and assessing their strengths and limitations and judge whether the findings would impact current clinical practice.

Will you be conducting further research on this topic? If so, what will it entail?

We have elaborated on some of these concepts in a work published in The Ibero-American Journal of Hand Surgery (Rosales RS, Atroshi I. Basics of Statistics for Clinical Research in Hand Surgery.

Rev Iberam Cir Mano. 2018,46:141-16. https://www.thieme-connect. com/products/ejournals/pdf/10.1055/s-0038-1675587.pdf). We are also working on a paper about the applications of those concepts in metaanalysis.



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Member Society News



Schweizerische Gesellschaft für Handchirurgie SGH Société Suisse de Chirurgie de la Main SSCM Società Svizzera di Chirurgia della Mano SSCM

SWISS SOCIETY FOR SURGERY OF THE HAND

The past year saw several international highstanding congresses. During the 14th IFSSH / 11th IFSHT Triennial Congress in Berlin from 17-19 June 2019 many bridges were built hand in hand between Surgeons and Therapist.



From right to left: Oskar Aszmann, Leila Harhaus, Berthold Bickert, Susan MackInnon, Esther Vögelin, at the nerve transfers session

Another scientific highlight was the 74th Annual Meeting of the American Society for Surgery of the Hand (ASSH) held in Las Vegas. President Scott Levin invited Austria, Germany and Switzerland as guest countries and many host lectures, laboratory sessions, seminars and workshops were held with international guest speakers.

President Urs Hug hosted the Swiss 52th Annual Hand Surgery and 21st Hand Therapist Congress from 21 -22 November 2019 in Interlaken, at the foothills of the Eiger, Mönch and Jungfrau mountains. Over 660 participants attended the congress and shared their knowledge with surgeons, therapists and the industry. The main topic of the congress was "Evidence versus Eminence". Many interactive, well moderated sessions included international guests as well as Hand therapists to compare the evidence from the literature with the ideas of eminent and experienced Hand Surgeons.



The audience in the conference hall in Interlaken (Gothic and Renaissance style of the 19th century)

The Swiss Society for Surgery of the Hand is presently campaigning to meet the requirements (Core Surgical Curriculum) of the Swiss College of Surgeons. This campaign includes a number of difficulties, including increasing the awareness and the importance of hand surgery among the public, politicians, insurance companies and national health system stakeholders. This lack of awareness is amongst other facts, reflected in the low fee structure for outpatient surgery procedures. The campaign is called "Handfacts" and more information is on the website: www.handfacts.ch The members of the Society at the General Assembly (GA) had to be convinced by President Hug and the Council of the need to promote the importance of hand surgery, but it would also involved higher membership fees! So far many positive feedbacks have been received.



Relief of the Swiss Society Council after the GA and acceptance of the increase of member fees!



www.handfacts.ch

Esther Vögelin, Stephan Schindele and Urs Hug

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AMERICAN ASSOCIATION FOR HAND SURGERY

During this time of crisis and uncertainty that the COVID-19 pandemic has caused, the American Association for Hand Surgery hopes for the health and safety of all in the hand care community. While we know the world will overcome this situation, the coronavirus has presented us with challenges that many never thought we would face in our lifetime, and we know our hand care community will be part of a demanding recovery period once this crisis has passed. It is important that we lean on one another for support to stay strong for our families, friends, and our patients.



While some of us are spending more time at home due to lock down and cancelled surgeries, and others have been recruited to serve in the front lines to combat COVID-19, there is a bright spot that we can focus on which is the AAHS Annual Meeting which will take place January 13-16, 2021 in Kauai, Hawaii. Dr. Nash Naam, IFSSH Pioneer of Hand Surgery (honored in 2019), and his Program Chairs Drs. Julie Adams and Mark Rekant along with Cynthia Ivy, OTR/L, CHT and Vanessa Smith, PA-C are planning an outstanding scientific program. The theme for this meeting is "Educate, Energize, Empower: The Next 50 Years." The Program Committee is planning for our traditional scientific presentations, surgery and therapy workshops, and newer interactive sessions such as Last Person Standing and Mentee/Mentor Trivia. They are also planning to repeat the AAHS Beach Party, Kids Hands-on Workshop, and will host our annual Welcome Reception and Dinner Dance which are open to all attendees.

Newer programming is also being added such as a Stump the Professor session and they are exploring an ultrasound course. The Hand Association meeting is the perfect blend of education and opportunity to relax with family, and is just the style of meeting many will want to attend once we emerge from our current situation.

AAHS is also focusing on providing easily accessible education during the COVID-19 crisis to residents and fellows as well as hand therapists and advanced practice providers through an eight week webinar series. More information on this series can be found on the Hand Association website. Please encourage your trainees, therapists, and advanced providers to participate in this series, which is free to all registrants.

AAHS will again be offering the International Reverse Surgery Fellowship in 2021. The application is currently online. The deadline for applications as of now is July 1, 2020, but may be extended based on how COVID-19 trends in the coming months. I would encourage all who are interested and qualify to apply as this is a wonderful educational opportunity for those in developing areas around the world. An International Reverse Therapy Fellowship will also be offered in 2021 with the application to be made available later this year. I hope to see many of you in Kauai in January 2021. It will be wonderful time to reconnect and look ahead to the next 50 years of hand care education with AAHS.

Stay safe, stay healthy, and stay strong.

Peter Amadio, MD AAHS Representative to IFSSH

TURKISH SOCIETY FOR SURGERY OF THE HAND

The national congress of the Turkish Society for Surgery of the Hand, which is traditionally held biannually, is planned to be held in the city of Eskişehir, Turkey, from 15-18 November 2020.

Our congress, which will be held for the 17th time, has become a tradition as a social and scientific gathering where hand surgery-lovers have been coming together for over 40 years.

Eskişehir is a modern city in Central Anatolia and was home to the Phrygian civilization (is there anyone who does not know the stories of King Midas!), one of the Anatolian civilizations in history, and it has special importance as it is on the Silk Road.



Hand Therapists

TURKISH HAND AND UPPER EXTREMITY CONGRESS th NATIONAL HAND REHABILITATION CONGRESS November 15-18, 2020

Tasigo Hotel Eskişehir, TURKEY



The link for the Congress details: http:// elcerrahisi2020.org/index2. html

AMERICAN SOCIETY FOR SURGERY OF THE HAND

75th Annual Meeting of the American Society for Surgery of the Hand (ASSH)

The ASSH will host its 75th Annual Meeting 1-3 October 2020 in San Antonio, Texas, USA. ASSH President Martin I. Boyer, MD, FRCS(C) and Program Chairs Dawn M. LaPorte, MD and Ryan P. Calfee, MD, MSC have developed a rich and varied program. The price of registration increases after 15 June 2020, so register soon to reserve your spot at a discounted rate.

All international attendees are invited to attend the welcome reception, "Handapalooza," on Thursday, 1 October for music, games, and specialty Texan foods. A ticket is included with each international registration! Guest tickets may be purchased for an additional fee.

ASSH is pleased to welcome the Indian Society for Surgery of the Hand as the 2020 International Guest Society. The International Guest Society program recognizes our global partners in the hand surgery community, and we encourage our Indian colleagues to actively participate in our scientific program.

Members of the guest society will be recognized with a special interactive poster section, access to the VIP Lounge and a special international membership rate. Learn more about Guest Society benefits and opportunities at www.ASSHAnnualMeeting.org.

Hand.e Online Learning Portal – Now Free Videos!

The world's largest video database for hand surgery is now free to all users around the globe. Login or sign up today at https://www.assh.org/hande/s/ to gain access to 1,500 peer-reviewed surgical videos and lectures. Hand.e is the "YouTube" of the hand surgery field. It quickly shows you the most useful videos in hand surgery. ASSH is proud to provide Hand.e free to the public as part of our mission to advance the science and practice of hand and upper extremity surgery though education. Read more about ASSH's mission and membership opportunities on our website, www. ASSH.org.

Contact the ASSH with questions or comments at info@assh.org.

The Touching Hands /IFSSH

HAND SURGERY WORKSHOP AT MOUNT KENYA UNIVERSITY JANUARY 24TH -25TH 2020

Goal

The goal of the two day course was to have all attendees be able to safely inject tumescent local anesthesia in an almost painless manner. This would cut the need for costly sedation and improve patient safety for most hand surgery. In addition, the evidence behind safe field sterility was reviewed to enable much of Kenyan surgery to move to more affordable procedure room field sterility out of the main operating room, as it has in Canada. Eliminating sedation and full operating room sterility for many procedures will improve access to surgery for many who cannot afford unnecessary sedation and unnecessary full operating room sterility for many procedures.

Lecturers and facilitators

Dr Don Lalonde (Touching Hands), Dr Peter Nthumba (Kenya plastic Surgeon) and Professor Pankaj Jani (past COSECSA president) provided the lectures and commentaries to optimize sharing of knowledge

Funding

The course was supported by the IFSSH and Touching Hands.

Attendance

The course was attended by over 80 surgeons (general, orthopedic, plastic) and surgery residents from all over Kenya. Attendance data was captured for 75 of the attendees (see inserted attendance data)

Evaluation of the meeting

The course was evaluated by all participants in a precourse information sheet, a post course information sheet, and an evaluation form conceived by Dr Kevin Chung's team in Michigan. USA. An analysis of these evaluations by Dr Kristine Huynh kahuynh@med.umich.edu is forthcoming. The overall tone of the evaluations was very good to excellent by almost all attendees.

Outcome of the meeting

The week after the course, procedure rooms were opened in two of the largest hospitals in Kenya for WALANT surgery. More followed.



Njuguna Chancellor Mount Kenya Univ.



Hands on painless local injection workshop





Attentive participants



Prof Pankaj Jani and Dr Peter Nthumba





Hand & Nerve

Dedicated to Prof. Rolfe Birch, British neuro-orthopaedic surgeon, with my deep respect and gratefulness, for his tremendous mentor- and friendship

In 1998, the American neurologist Frank Wilson published a remarkable book "The Hand. How its use shapes the brain, language, and human culture"⁽¹⁾, where he describes the strong interrelation between the human hand and our peripheral and central nervous systems, a relation which extends to our psyche and soul.

When in 2012 I had the privilege to host the FESSH congress in Antwerp, I added a short presentation outlining my personal view on the influence of recent achievements in peripheral nerve surgery upon daily hand surgery practice.

It is nearly thirty years since I began work with brachial plexus surgery, and I frequently hear "Brachial Plexus: ooouw, this is difficult". As I am also fascinated by the developments in wrist surgery over the last decades, I still wonder how so many colleagues become familiar with the complex anatomy of wrist ligaments, bone vascularisation and cartilage changes. Isn't that complicated as well? But then, everybody jumps in, as patient demands increase, new techniques proliferate, and overall results seem promising. Moreover, there are extensive biomechanical and functional research fields. Every serious hand surgeon should be aware about the significance of advances in peripheral nerve surgery. After all, the exceptional range of movement in the upper limb enables multiple orientations of the hand as a powered, mobile, sensory organ. The innervation of the whole limb is rich and complex: there is a particular concentration of sensory organelles in the hand and wrist, not only in the skin but in the deep afferent system also, from muscles, tendons and joints.

The postganglionic sympathetic vaso- and sudomotor nerves are especially dense in the palm of the hand. Stereognosis is based upon movement. The blindfolded patient cannot recognise an object or texture simply placed upon the fingers; but can do so immediately by feeling that object or texture between the moving finger and thumb, that is between the areas of skin so aptly described by Erik Moberg as the "eyes" of the hand.

We all expect success after musculo-tendinous transfers designed to restore extension of wrist and digits, or lost movements of the thumb ray; but the rapid conversion of a flexor muscle to an extensor muscle, rests upon the integrity of the deep afferent system. It is an example of cerebral plasticity and it cannot take place if the deep afferent pathway has been damaged; disappointing for both the patient and unwary surgeon.

Continual technical refinements have much to offer; highly selective, targeted nerve transfers are today available to restore specific functions such as extension of fingers (allowing a recovery of individual long finger extension) or small intrinsic muscle action (thumb opposition, finger add- and abduction).

They are based on initial thoughts and descriptions of field pioneers like Narakas ⁽²⁾, setting the concept of a neurotisation using a nerve transfer; and Mennen ^(3, 4), examining the end- to- side co-aptation. They were further popularized through landmark technical papers by Oberlin ^(5, 6) and extensive books on nerve transfer surgery, like of Mackinnon ⁽⁷⁾.

Today, the surgical refinement both for donors and selective recipients has progressed a lot. But there are limits to cerebral plasticity, for nerve transfers with the objective of regaining cutaneous sensibility with accurate localisation are far more effective in the infant than in the adult.

But: how poor is our understanding about sensation and
pain transmission, how "standardised" is our view on
muscle de- and regeneration: probably, you are all aware2.about time concerns in motor nerve reconstruction,
but the behaviour of motor end plates after nerve fibre
degeneration remains largely unknown to us.2.

Over the years, I have attended many international and national hand surgery congresses. I have found that there are, in general, two categories of neurological sessions: the popular ones about carpal and cubital tunnel, crowded. The "specialised" one about brachial plexus lesions, spasticity, tetraplegia, nerve research: 10-15 people including the speakers, where one "specialist" listens to his or her neighbour presenting. How may we change this imbalance?

I frequently treat children after birth injuries to the

brachial plexus or brain and must look beyond the neurological injury.

The growing limb teaches me how biomechanics change due to imbalanced motor couples, impaired bone growth, and joint dysplasia. Hand function depends on upper limb function and the hand surgeon cannot separate these interrelated problems and focus only on the hand area. Moreover, the "general" hand surgeon cannot continue to think about the functional hand without considering what Wilson wrote 20 years ago and what so many pioneers in nerve and hand surgery like Birch, Brunelli, Gilbert, Lundborg, Moberg, Narakas, Wynn Parry and others taught us over and over again. Understanding of surgical disorders of the peripheral

nerves is an essential component of the practice of surgery of the hand and wrist.

Here are some examples:

- The painful hand. Pain is the chief reason for patients attending doctors. Accurate diagnosis of the cause is essential to adequate treatment (like in osteoarthritis), but understanding and integration of all aspects of pain treatment, from medication, operation upon nerves (denervation), as well as an understanding of the patient's personality, background, and his response to the pain.
- CRPS. A particularly complex and difficult pain state, indeed a nightmare for patient and doctor. A still debated pathophysiology. Careful, precise, and searching history and physical examination will guide towards causation in most cases and allow medical and / or surgical treatment (see August 2019 #35 IFSSH Ezine).
- 3. Carpal tunnel problems. Although it is frequent, the median nerve might have other problems, like a more proximal compression, a rare tumour, a cervicobrachialgia due to cervical arthritis, or a generalized neuropathy. All these possibilities should be born in mind.
- Complex and subtle disorders such as arthrogryposis. In some atypical cases, resembling obstetric palsy, the lack of elbow flexion may be

PERSONAL OPINIONS

overcome by a nerve transfer if viable muscle is still present. This may be checked before surgery by ultrasonography and eventually electromyography. Early muscle re-innervation provides rebalancing across a joint and thereby may diminish or even prevent later deformity ⁽⁸⁾.

- Work inability. In some countries and cultures, a painful or functionally disabled limb becomes the only accepted reason to stay away from difficult, stressful, unacceptable working conditions.
- 6. Cooperation with physio- and occupational therapists- simply a must. But on an interdisciplinary platform, same level exchange regarding patient evaluation and treatment. What does the regular hand surgeon – still the conductor of the orchestra- really know about specific motor and sensory re-education? About progressive functional re-validation? How often do we really practice interdisciplinary patient approach?
- 7. Wrist surgeons recently discussed the role of the posterior interosseous nerve and the rationale for systematic excision when operating a painful wrist. Interestingly, they actually wonder how much this nerve participates in wrist proprioception

 and therefore it should not be sacrificed in a "standardised "manner.

We still continue to learn so much anatomical and surgical details about the hand and peripheral nerves. They are not difficult by nature, but frequently not explained well enough and not presented in a logical pathophysiological order. We may never integrate ALL aspects of neuropathic pain, writer's cramp or spasticity. But within our large hand surgical community, we should continue to learn from each other, we must strive to maintain a common language of understanding, exchange and interaction; even if we think that our subspecialties are quite separate.

In a sense we are just at the beginning to understand the complexity of the hand and how anatomy, physiology and pathology are integrated. (1)Pantheon Books New York 1998

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(2)Narakas AO (1987): Thoughts on neurotization of nerve transfers.

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(3)Mennen U (1998): End-to-side Nerve Suture in the Primate (Chacma Baboon). Hand Surgery 3 (1): 1-6 (4)Mennen U (1998): End-to-side Nerve Suture in the Human Patient.

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(5)Oberlin C, Ameur NE, Teboul F, Beaulieu JY, Vacher C (2002): Restoration of elbow flexion in brachial plexus injury by transfer of ulnar nerve fascicles to the nerve to the biceps muscle. Tech Hand Up Extrem Surg 6: 86–90 (6)Oberlin C, Durand S, Belheyar Z, Shafi M, David E, Asfazadourian H (2008): Nerve transfers in brachial plexus palsies. Chir Main 25: S1297–1302 (7)Mackinnon SE (2015): Nerve surgery. Thieme, New

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BSSH The British Society for

Surgery of the Hand

AUTUMN SCIENTIFIC MEETING 2020

Guildhall, Winchester 14-16 October

For more information go to: https://www.bssh.ac.uk/about/events/4217/bssh_autumn_scientific_meeting_2020



AND MEMABILITATION

www.ifssh.info



Jörg Bahm MD PhD





INTERNATIONAL CONFERENCE on Dupuytren Disease and Related Diseases

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INTERNATIONAL SYMPOSIUM ON DUPUYTREN DISEASE

This conference is organized by the International Dupuytren Society and hosted by the University of Oxford. The conference will include academic research presentations and panel discussions regarding Dupuytren disease and related conditions. The goal of this conference is raising awareness regarding Dupuytren disease, sharing new concepts and ideas, and promoting cooperative efforts to work for a cure. The symposium will be a gathering of researchers and clinicians with a wide spectrum of interests: cell biology, genomics, surgery, pharmacotherapy, radiotherapy, biomechanics, hand therapy, as they relate to Dupuytren disease and related conditions.





Join us in San Antonio from October 1-3, 2020 for the 75th Annual Meeting of the American Society for Surgery of the Hand. Early programming will begin on September 30.

This year's program directors, Ryan P. Calfee, MD, MSc and Dawn M. LaPorte, MD have put together a robust program that will leave you excited about your practice and focused on achieving excellence.

Check out the pre/post-courses, labs, symposia and instructional courses.

We are all looking forward to the 2020 meeting and reconnecting with colleagues to ignite our professional passions. Register by June 15 to receive the early bird rate.

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