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ezine ifssh

CONNECTING OUR GLOBAL HAND SURGERY FAMILY

SPECIAL FEATURES
DEFINING THUMB OPPOSITION

HAND THERAPY
SOMATOSENSORY REHABILITATION OF NEUROPATHIC PAIN

Convenient Myths

RESEARCH ROUND-UP: "IS DUPUYTREN'S DISEASE REALLY A 'DISEASE OF THE VIKINGS'?"

SHARE SECTION: THE HISTORY OF HAND SURGERY AT THE UNIVERSITY HOSPITAL POLYCLINIC OF MODENA, ITALY

contents

Convenient Myths

I used to tell my patients who presented with Dupuytren's disease that the cause might have a genetic origin which may come from the Vikings, who in turn probably got it from a tribe who migrated from Northern Europe to Greenland (1). The Vikings, during their widespread military campaigns, left their genes in certain countries, hence the "higher prevalence" of Dupuytren's disease in places like Ireland, Scotland, and the Scandinavian countries. This story was of course told with tongue-in-cheek, but probably so convincingly, than many patients preferred to believe it as true and even delighted in thinking that a hidden part of their ancestry had been revealed to them!

In medicine we have many similar examples of helpful stories to explain certain conditions or phenomena to patients. These may not necessarily be based on scientific facts or experience, but they make nice stories. And over time, as they pass from one medical generation to the next, they become so entrenched that we may even think of them and share them as truth. One such intriguing story is being debunked in the article on the supposed origin of Dupuytren's disease by Ng M, Lawson D.J., Winney B., and Furniss D.,(2) which is reviewed in the section "Research Roundup".

Science does not have all the answers. We make claims based on the best available evidence at any given time, and as new information becomes available, claims and theories are revised. These claims are supposed to be based on available peer reviewed data - not thumb-sucked. Science exists, in the first place, to try and get answers to questions, problems and uncertainties we have about the universe and all that it comprises. However, since the dawn of humankind, myths and stories have been created and retold in order to make sense of mystery and explain the unexplainable.

At present, during the COVID-19 viral pandemic, this practice of storytelling has become quite evident. Pseudo-scientific "facts" and false information abound, and are propagated by lay people, politicians and scientists. Of course scientists do not get it right all the time. There are just too many known and unknown variables. Even if a research finding seems to be irrefutable, scientists should at most be cautiously dogmatic.

How then do we debunk false information? The following set of questions may help to determine the reliability of any new claims:

1. What scientific evidence accompanies the claim?
2. Is the claim verified and reviewed by other scientists (experts, peers)?
3. What is the track record of the claimant?
4. What biases or allegiances does the claimant have?
5. What collaboration exists with other scientists?
6. Can the claim be repeated by independent testing?

Take care and be safe,

Ulrich

Editor: IFSSH Ezine

Past President IFSSH

"Pioneer of Hand Surgery"

www.ulrichmennen.co.za

1. McFarlane Robert M. "On the origin and spread of Dupuytren's disease". J of Hand Surgery (volume 27, issue 3, p 385-390, June 2002).
2. Ng M, Lawson D.J., Winney B., and Furniss D., "Is Dupuytren's disease really a 'disease of the Vikings'?" J of Hand Surgery (E)(volume 45, issue 3, p 273-279)

Reflections by a confined president

Dear Friends,

Overwhelmed by circumstances that nobody could have predicted, I thought that my message should not forget what is going on these days in our world. But, I would not think it appropriate to waste your time proposing another technical paper on how to cope effectively with this pandemic. The one published by our friends from Singapore in the last issue of Ezine was exact, concise and effective. You will also find a number of similar communications in this current Ezine. Thank you all for sharing your sincere experience.

Today I'll share with you some thoughts about what it really means to be confined in a world we thought we mastered, when it is obvious that we don't. Some of these thoughts came to me by reviewing some notes that I took during a teleconference by Victor Küppers (1), a Dutch writer who lives in Camprodon, in Catalonia, Spain. He was so clear, so straightforward in what it really means to be confined by a pandemic, that I felt compelled to share some of his opinions.

These months have been difficult to most of us. In many regions of the globe, life has been hard, sad, and sometimes unbearable. We have seen people dying from this terrible pandemic, young people in improvised ICUs, old people in field hospitals, sick patients in residencies, army soldiers on the streets. We have been through all sorts of reactions: discouragement, worry, fear and panic. We all have had moments of anxiety, and yet, this is a tunnel, not a well, and from a tunnel, one can escape. We don't know when, nor under what conditions, but let's be confident. Hopefully, we'll see the light at the end of the tunnel, real soon. These are hopeful words with great healing potential.

To most of us, this has been the first time that we have been locked up, at home, apparently healthy, for more than two months. If you ever said "I don't have time", you will not be allowed to say it anymore. You had that wonderful opportunity for as long as the confinement was there. Did you take advantage of it? Time for what you may ask? Time to rest, time to be with the family, time to reflect, to put order in your life, time for your hobbies, for what you normally can't do. Or did you spend this time lying on the couch just watching TV series?

It has been time to learn how to complain less. Time to remember that we are here to help each other. We had become a selfish society, very materialistic, consumerist, where the most important values were success, fame, wealth and applause. And now we realize that the essence of the human being is altruism, empathy, compassion, kindness. After this confinement, we all should be more sensitive to other people's needs and suffering. We've been created to be good.

Once this catastrophe has passed, we should remember this. In a few years we may reflect about this situation. How do you want to be remembered? In a good mood, as a helping person, a contributing citizen, generous? Or being selfish, complaining, in a bad mood?

Yes, we are going to get out of this tunnel. No doubt. And from it we may emerge more human, more sensitive to other people's suffering, and with clearer priorities. And if this virus gives us back some of the humanity we had lost, let us celebrate this outcome.

Marc Garcia-Elias
President: IFSSH

(1) https://victorkuppers.wordpress.com/

Message from Secretary-General

Dear colleagues,
Trusting that you, your families and friends are well. The COVID-19 pandemic has upended nearly every medical discipline, dramatically affected patient care, and has had far-reaching effects on scientific meetings. Most of the medical congresses or conferences have been postponed, cancelled, or changed into on-line communications.

The Delegates' Council meeting as well as the Executive Committee meeting of the IFSSH were planned to be held during the FESSH Congress in June 2020. However, we could not make it due to social restriction and the travel ban.
The on-line executive committee meeting was held on 27 June 2020, and the following is a summary.

Executive Committee news

With the disruptions to travel and congresses, the IFSSH held an online Executive Committee meeting to discuss progress since the Berlin 2019 gathering and decide on plans for the future.
The IFSSH President, Marc Garcia-Elias, acknowledged that since the hand surgery community most recently met during the APFSSH Congress in March (Melbourne, Australia), there have been significant worldwide changes caused by Covid-19. Disruptions have occurred to personal lives, hand surgery practices and hospitals, and the IFSSH ExCo pay their respects to those who have assisted throughout the crisis worldwide and remember those who have lost their lives.

Financially the IFSSH is in a pleasing position. As for many, fluctuations occurred around the pandemic but decreases have now been regained and the treasury has been able to provide for numerous educational sponsorships recently (as detailed in the May 2020 IFSSH Newsletter).

The IFSSH website, overseen by the Historian, David Warwick, has increased again in its content:

- all grant recipients are now listed on the website (description and report) - https://ifssh.info/ifssh-sponsored-educational-projects.php
- profiles of Past-Presidents have been incorporated - https://ifssh.info/past_president.php
- more society histories have been added - https://ifssh.info/member_nation-histories.php
- a further educational resource (provided by Larry Hurst) has been added - https://www.handsurgeryresource.org/

The legalities and future congresses of the IFSSH were discussed by Daniel Nagle (President-Elect). A review of the bylaws has been occurring since the Berlin meeting, following feedback from the Council members and their societies. The Executive Committee, after reviewing the current bylaws felt that it was necessary to update the IFSSH bylaws to bring them into compliance with current not-for-profit best practices and the State of Illinois not-for-profit laws. The ExCo, in order to assure the integrity and thoroughness of this process, engaged the services of an attorney with expertise in not-for-profit law and bylaws. (The Federation is registered in the state of Illinois in the United States and is therefore subject to that state's laws.) This process included a complete review and restatement of the current bylaws.

Thus generating the "Amended and Restated Bylaws", which are not a piecemeal update of specific articles, was rather a complete restatement of the bylaws. Great attention was given to be certain the Amended and Restated Bylaws capture the intent of the old bylaws but do so in a more coherent and succinct way incorporating up-to-date legal conventions and best practices.

Following the meeting, the Amended and Restated Bylaws were distributed to all IFSSH Delegates via email. As we will be unable to meet in person in the near future, voting has been organised electronically and we ask that all societies consider the proposal distributed to the delegate and cast their vote through the described methods by 10 September 2020. The 2020 Delegates' Council Meeting will be held as a virtual meeting on 12 September 2020. Full details will be distributed to delegates by early August. We look forward to seeing all of the familiar faces, even if this is through our computer screens instead of in our Council meeting room!

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
6 - 10 June, 2022

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

I do hope that this disaster will come to an end before long, and that all of you stay fine physically and mentally.

Sincerely,
Goo Hyun

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

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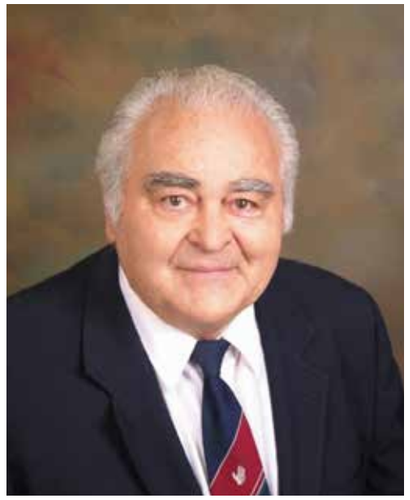
Virchel E. Wood, MD

United States of America (1934 - 2020)



Dr. Virchel E. Wood (Woodie) was a true pioneer of congenital hand surgery. He began his career as an orthopaedic resident at the University of Massachusetts in Worchester, Massachusetts. Following residency, his academic pedigree started with a hand fellowship under Dr. Robert Carroll at Columbia University (Harlem Hospital) in New York, in 1966. Dr. Wood then served his country (1967-1969) at Fort Leonard Wood, Missouri, USA., during the Viet Nam War, and for a period he served as Chief of the Orthopaedic Service. Dr. Wood then resumed his education with a second fellowship at the University of Iowa under Dr. Adrian Flatt, a noted expert in congenital hand anomalies. He continued his exploration of congenital hand surgery spending additional time learning pollicization techniques and syndactyly repairs from Dr. Dieter Buck-Gramcko in Hamburg, Germany and later he studied brachial-plexus treatments with Dr. Alain Gilbert in Paris.

After his training he set up a private practice in Walla Walla Washington, but before long was recruited by his Alma Matter, Loma Linda University, in 1971 to serve as Chief of Hand Service and the Hand Fellowship Director. Over the next 36 years he trained 76 hand fellows and 190 orthopedic residents and influenced numerous medical students. The orthopaedic department renamed the hand fellowship "The Virchel E. Wood Hand Fellowship" in his honor. After his retirement, Dr. Wood's distinguished career was further recognized with an appointment as an Emeritus Professor.

Presenting little finger pollicization, Congenital Hand Anomaly Study Group (CHASG) Meeting, 2011, Viet Nam.

Woodie's gentle warmth is consistent with his Native American heritage as part of the Wampanoag tribe from Massachusetts, the tribe that first extended warmth to the Pilgrims landing at Plymouth Rock. Although soft spoken in person, his pen was a force to be reckoned with. Virchel Wood wrote over 121 peer reviewed articles, 14 book chapters, 110 oral presentations and won 26 academic awards.
In addition to scientific works he wrote poetry and motivational articles regarding ethics and moral behavior for church journals.

Dr. Wood was a keen observer with a gift for conveying an observation in practical, but memorable terms frequently worthy of citation. He was part of the team that first identified os acromiale, an un-united ossification center of the acromion that is associated with increased risk of rotator cuff tears. He recognized the occurrence of duplicated longitudinal bracketed epiphysis in Rubinstein-Taybi syndrome and coined the term the "kissing delta phalanx". The kissing delta phalanx is now recognized as a radiologic clue to several uncommon or rare clinical disorders involving the hand. He also came up with the term "Super digit" to denote two forms of digital fusion. Type 1 consists of two metacarpals that support a single oversized digit, while type II is a single metacarpal that supports two or more digits distally.

The first CHASG meeting in Windsor, England, 1994. Virchel is 2nd from the left.

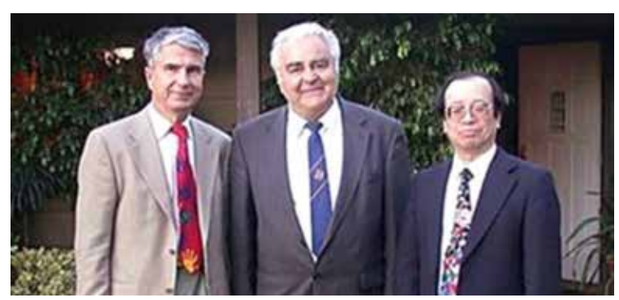
In addition to reporting on unique anatomy, he also had insight on more common disorders such as syndactyly, sharing his years of expertise in a well-cited article or thoracic outlet syndrome, publishing 7 peer reviewed papers on the topic with over 400 citations.

Dr. Simo Vilkki recalls that Virchel was intent on fully understanding anatomic entities he was studying and would carefully dissect large numbers of cadaveric specimens to ensure that his conclusions were supported. He was an avid reader and was able to foresee the benefits of new technology. For example, he promoted microvascular methods in hand trauma supporting replantation surgery as early as 1974, when the success was still unsure.

Dr. Terry Light notes that Virchel had a thirst for understanding our world that drove him to learn and share what he had learned through writing and teaching. He was sincere, earnest and always interested. His passion for learning about pediatric hand anomalies led him to travel widely in search of ideas and information. He looked closely at his own experience and shared what had worked, what conditions needed better treatments and what conditions had best not be surgically treated. In 1995 Light led a project for the American Society for Surgery of the Hand (ASSH) to identify the most influential papers in congenital hand surgery. Virchel Wood had more papers in the top group than any other author in the world. Thus, he was awarded "The Most Frequently Cited Author in Congenital Hand Literature for the past 50 years" by the ASSH.

In 1993 at the ASSH annual meeting, Dr. Wood with several other colleagues founded the Congenital Hand Anomaly Study Group (CHASG). Woodie was enthusiastic about the concept of CHASG - an opportunity to periodically meet with like-minded colleagues and safely share successes as well as challenges.

Woodie and Esther relaxing during a CHASG meeting in Sydney Australia, 1997



Dr. Wood together with Dr. Simo Vilkki & Dr. Toshihiko Ogino during Loma Linda CHASG meeting in 2002

Dr. Wood reviewing a complex hand anomaly with Drs. Michael Tonkin, Marybeth Ezaki and Steven Hovius at a CHASG meeting in Viet Nam, 2011

Virchel and Obediah

Virchel singing in the Heralds of Hope Men's Chorus

Dr. Wood with Dr. Kerby Oberg and Dr. Adrian Flatt, Dallas 2012

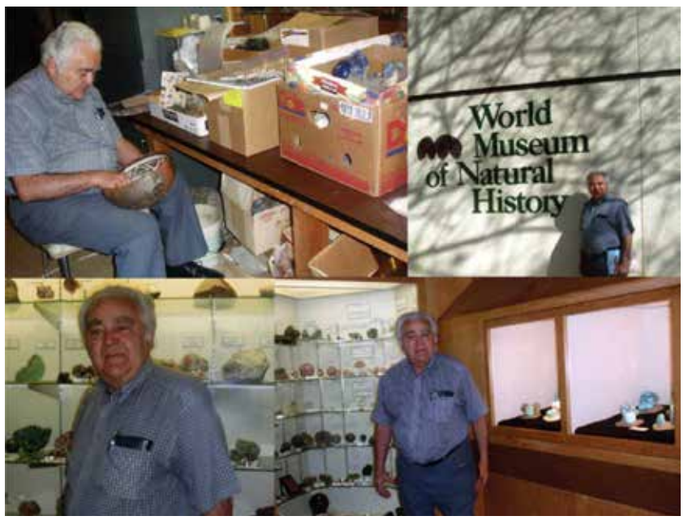
Dr. Marybeth Ezaki writes, Virchel Wood was my teacher, mentor, and friend. For me, he resides in the pantheon of "Jedi Knights" of hand surgery, not just congenital hand surgery. When I first entering the world of kids' hands, I was asked to write a paper on radial polydactyly and in researching it I had a peek into the way Virchel's mind worked - meticulous, thorough, painstaking and questioning. I relied on his "out of the box" thinking to guide me in choosing tendon transfers for paralytic hand conditions. I felt "safe" in employing what he had written and counseled. Virchel and Esther took me into their circle of friends, and made me feel so welcome as they showed me their beautiful garden, his special trees, and his beloved parrot Obediah, who was happiest perched on Virchel's shoulder. I was fortunate to have traveled the world with the Woods and experience the wonder of seeing a 3 million year old hominid with a tiny brain and an anatomically modern hand in situ in a South African cave, and the fun of sharing traditional Japanese meals in traditional Japanese attire, while seated on the tatami floor. Virchel was the curator of the natural history museum at Loma Linda University and proudly shared details of all the specimens as he showed me "his" collection.

The words that come to mind when I think of Virchel are devout and gentle. He lived his faith, quietly but profoundly. I will remember him most for his gentle and humble approach to his patients, his family, and his friends. With his comprehensive knowledge of anatomy and pathology of the hand, he loved to teach as well as mentor medical students, residents, fellows and colleagues.

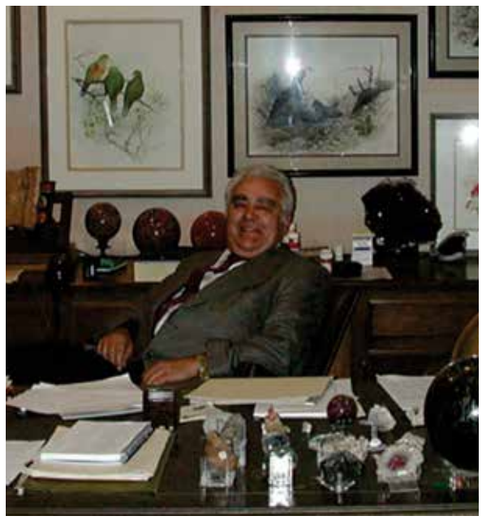
Dr. Gary Frykman, Wood's longtime partner and co-author at Loma Linda University, remembers that Woodie was always writing something, even on vacation. He delved deeply into the literature and enlightened us on many obscure congenital conditions of the hand. With his comprehensive knowledge of anatomy and pathology of the hand, he loved to teach as well as mentor medical students, residents and fellows. In addition to his vast medical publications, he published for lay journals over 60 prose articles and poems. He was an Associate Member of the International Society of Poets. Woodie was a lifelong vegetarian. He was also a modest, frugal, and spiritual man with a commitment to music. He had a rich baritone voice and loved to sing in men's chorale groups.

Dr. Kerby Oberg first met Dr. Wood as a medical student. "I had read an article about fingertip regeneration and was enamored about the possibility of limb regeneration", so with manuscripts in hand, I arranged a meeting with Dr. Wood to discuss the possibilities of a research project on the topic. Wood shrugged his shoulders and said – "it's possible, but not terribly practical. For most people, if they cut off a fingertip, they would prefer to get back to work rather than wait around for it to grow back." This captures his insight into repairs – not just what was possible, but what was practical. Nevertheless, he found time to mentor a developmental biologist interested in limb regeneration. In 1993 when I presented our project on regenerative wound healing entitled "Intrauterine and juxtanatal repair of syndactyly in fetal mice" at the Annual American Society for Surgery of the Hand, Virchel invited me to join a group that formed during that meeting - the Congenital Hand Anomalies Study Group (CHASG). He thought my perspective on developmental biology and limb development would be helpful. It shifted the trajectory of my research projects and career, and for that, I will always be indebted to Virchel.

Dr. Barry Watkins recalls Woodie's profound impact on his career, following his footsteps into an orthopaedic hand specialty, and focusing on congenital deformities. Virchel did not dabble. When interested in something, he would research it to the utmost. His publications frequently focused on concerns that were not well described or studied. Seeing the need, he would tackle it relentlessly and publish to share the knowledge he had gained. His hobbies reflected this as well. Interested in gemstones, he studied in depth and became a certified gemologist. With this knowledge in hand he collected an amazing variety of gemstones, spheres, minerals, and natural artifacts of which he knew every detail. Each morning before surgery, Virchel would awake at 4am and review a collection of manila folders that he kept on each surgery. Each folder stuffed with the most pertinent articles, anatomical diagrams, and notes from prior cases, and each updated frequently. This dedication to being as knowledgeable and prepared as possible to help each patient every time, no matter how often he had performed that surgery, was an example to us all. He deeply cared for and respected each patient, from newborn to elderly, and they loved him for it. I have "congenital" patients in their 30's and 40's that still ask me about him when they bring their children in to see me.



Dr. Wood, Curator of Gems and Minerals for the World Museum of Natural History, La Sierra University, Riverside, California, USA



Dr. Wood at his desk at home

In an article published in celebration of Dr. Wood being awarded the Alumnus of the Year at Loma Linda University and the establishment of the Virchel E. Wood Endowment Fund, Virchel commented that of his numerable awards, citations and contributions, he is most satisfied that his life-work has substantially contributed to the knowledge about congenital hand anomalies. Dr. Wood had a rich life yet with modeled humility by spending little on his own life style. We who knew him are quite enriched by having him part of our lives.

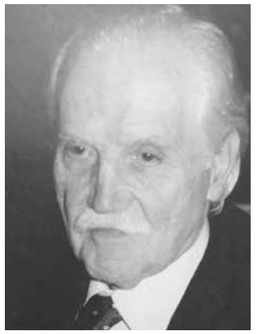
Perhaps Dr. Wood's life philosophy was best captured in a poem he wrote:

“What Is Life
Do not waste your time.
Each second must count,
for Life
Is now in session..... ”

Kerby C. Oberg (koberg@llu.edu) and Barry Watkins (BWatkins@llu.edu)
Loma Linda University, California, USA

Harilaos Theodore Sakellarides (1922 – 2011)

MD, PhD, FAAOS, FACS, FRCS



Harilaos Theodore Sakellarides was born 13 August 1922 in Kalambaka, Greece. After his graduation as a medical doctor in 1950 in Greece, he continued his training in Orthopaedic Surgery, Plastic Surgery, Trauma Surgery and Hand Surgery, including fellowships at the Cochin Children's Hospital in Paris, Royal National Orthopaedic Hospital in London, Birmingham Accident Hospital in Birmingham, Croydon Hospitals in London and Hospital for Special Surgery in New York. In 1959 he was invited to join the Massachusetts General Hospital in Boston where he was one of the founders of the Department of Hand Surgery. In 1965 Sakellarides joined the Boston University Medical Centre as Assistant Clinical Professor of both Hand and Orthopaedic Surgery for 30 years. During this time he also served as Chief of Hand Surgery at the Franciscan Children Hospital.

Harilaos Sakellarides was certified in both Greece and the USA and held a series of noteworthy hospital and academic appointments. He has been an active participant in numerous Hellenic and International Societies (in all 39!) including Fellow of the American Academy of Orthopaedic Surgeons, Fellow of the Royal College of Surgeons, Fellow of the American College of Surgeons, Academie de Surgerie of France, President of the Hellenic Hippocratic Orthopaedic Society, President of the American Academy of Neurologic and Orthopaedic Surgeons, as well as visiting professor at teaching hospitals in Greece, Romania and India.

Sakellarides has a long list of publications in peer reviewed international journals which are devoted to hand surgery and orthopaedics. In 1963, he was recognised by his colleagues for his new and innovative surgical techniques, and was featured in a 2-page article in TIME magazine. He was a clinician for over 60 years, and used to teach his students: "Always, do no harm"

Harilaos was married to Loukia and they had two daughters and a son together. He died on 27 April 2011 at the age of 88 jears.

Harilaos Theodore Sakellarides was honoured as "Pioneer of Hand Surgery" at the Eighth Congress of the International Federation of Societies for Surgery of the Hand in Istanbul, Turkey in June 2001.

Robert Henry Cradock Robins (1923-2015)

MA, MB.BChir, FRCS (Eng)

Robert Henry Cradock Robins was born on 7 August 1923 in High Wycombe, England. After school he completed his medical degree at Queens College in Cambridge, and clinical training at the St. Bartholomew's Hospital in London and house jobs at the Royal United Hospital in Barth. The war saw him being called up as a ship's doctor in the merchant navy. After the war he was appointed as the Luccock Medical Research Fellow in the Department of Surgery at King's College in Newcastle where he became responsible for the treatment of hand injuries and infections. Because of the large volume of industrial hand injuries, he claimed to be the first surgeon in the UK to focus solely on surgery of the hand! In 1952 his research led to be awarded the Sir James Berry prize by the Royal College of Surgeons (England) for his dissertation titled "The treatment and preservation of the injured hand".

This research also earned him the Hunterian Lecture in 1954. This evolved into a textbook "Injuries and Infections of the Hand" which was published in 1961. He published extensively on various other aspects of the hand as well as orthopaedics. Robins moved to the Princess Elizabeth Orthopaedic Hospital in Exeter as Senior Registrar. While at Exeter he became the Council of Europe Traveling Fellow to Sweden and France, and in 1960 a British Orthopaedic Association Travelling Fellow to North America. The next year Robins was appointed Consultant Orthopaedic Surgeon at the Royal Cornwall Hospital in Truro until his retirement in 1988.

In 1956 Robins, with four other founder members, started the "Second Hand Club" in the UK. It was called "Second" because a few years earlier 12 senior surgeons formed the "Hand Club" and wanted to keep it exclusive to a maximum of 12 members. This allowed them to have dinner on Friday evenings at the Athenaeum Club in London, with a short scientific meeting on the Saturday morning. Amongst the excluded this became known as "the dining club with hand surgery as gossip". The Second Hand Club became the British Society for Surgery of the Hand (BSSH) in 1968 and he was elected its President in 1979. The original journal, the "Proceedings of the Second Hand Club", later became the "Journal of Hand Surgery", of which he was editorial board chairman for 10 years.

Robert Robins served on numerous boards and councils, amongst others the Cornwall Area Health Authority, examiner for the Edinburgh College FRCS, chairman of the BOA Subcommittee on Hand Assessment Charts, and the Royal College of Surgeons (England) Board. He was twice a British Council Fellow. His hobbies included gardening, sailing, fishing, art, folk music and Morris dancing. Robert H.C. Robins married his wife Shirley in 1953, and they had a daughter and three sons. Robert died on 23 February 2015 at the age of 91.

In 2001 at the 8th Congress of the IFSSH in Istanbul, Turkey, Robert H. C. Robins was honoured "Pioneer of Hand Surgery"

Thumb opposition

ITS DEFINITION AND MY APPROACH TO ITS MEASUREMENT

Thumb opposition and its measurement are complex topics because of differences in a) definitions, b) use of terminology, c) identification of opposition movement components, and d) application of measurement techniques. This review attempts to provide some clarity to these differences.

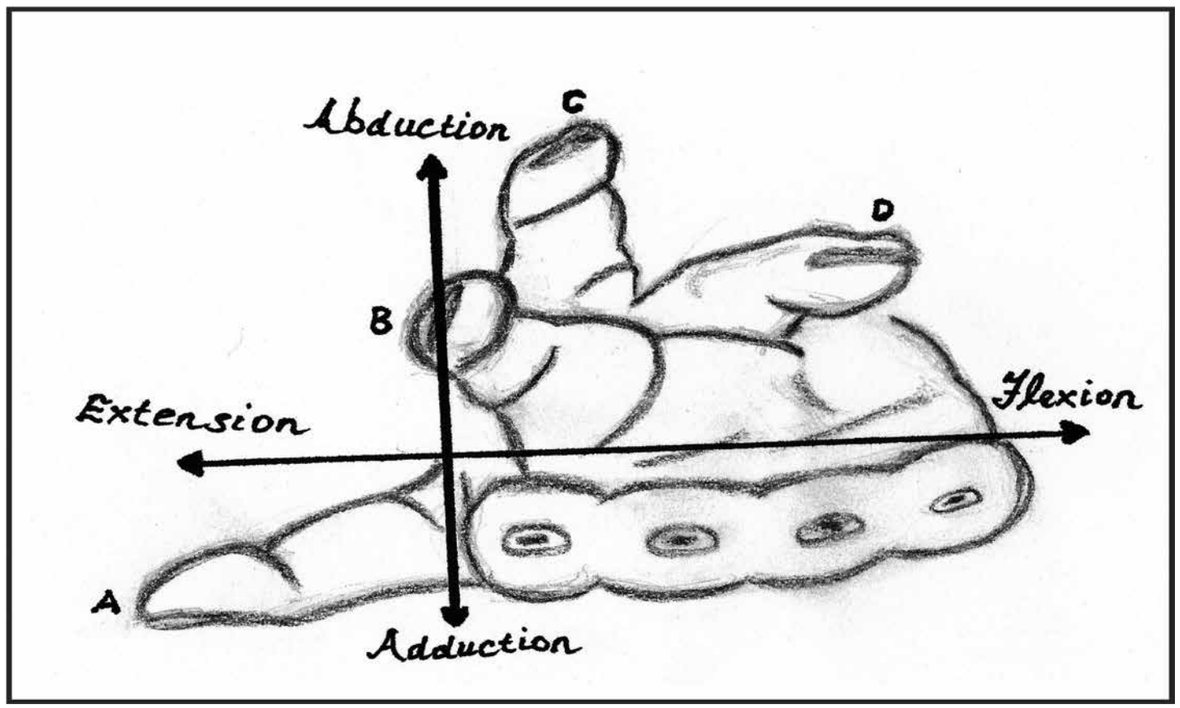
Definition of opposition

Opposition of the thumb is defined as the positioning of the thumb pad diametrically opposite to the distal pad of the middle finger, be this positioning for grasp of small or large objects. Opposition is the placement of the thumb in the position rather than the activity of achieving grasp (Smith, 1987).

Terminology

The trapeziometacarpal (TMC) joint allows movement in extension/flexion (alternatively termed radial abduction/adduction) in the frontal plane; abduction/adduction (alternatively, antepulsion/retropulsion) in the sagittal plane; and supination/pronation (rotation around the longitudinal thumb axis) (Figure 1). The first two are angular movements and the third is an axial rotation.

I prefer to use the terminology extension/flexion and abduction/adduction for movements in the frontal and sagittal planes, and not those in brackets. Nevertheless, both are used by different authors.



Circumduction is the path followed by the thumb in movement from full supination of 30 degrees (reposition); to neutral rotation of 0 degrees when the thumbnail is at 90 degrees to the frontal plane with 20 degrees of extension and 30 degrees of abduction (neutral position), to full pronation of 90 degrees with the thumbnail parallel to the frontal plane of the palm (opposition) (Figure 1).

The sources of opposition movements

The sources of the movement components of opposition remain arguable. Smith (1987) believes that abduction/adduction, although primarily occurring at the TMC joint, is also present at the metacarpophalangeal (MP) joint. Most agree (Zancolli, 1979). In the clinical example of the congenital hypoplastic thumb, MP joint radial deviation (abduction) is increased, in combination with ulnar collateral ligament insufficiency, to cater for loss of TMC abduction.

Rotation is mainly at the TMC joint with some present at the MP joint (Milford, 1988; Smith, 1987), although some such as Zancolli (1979) agree with Kaplan (1965) and consider that the totality of rotation of the thumb in opposition (90 degrees pronation from the neutral position) is produced at the TMC joint level.

The third component of TMC movement in opposition is flexion. Flexion, of course, is also present at MP and interphalangeal (IP) joints. These are not opposition movements but allow the thumb to oppose specific anatomical targets such as the ulnar-palmar aspect of the hand. That is, they allow the thumb to attain opposition positions that are not possible without MP and IP joint flexion.

The muscle controllers of the three TMC movements are the thenar muscles, the most important being the abductor pollicis brevis (APB). The extrinsic flexor pollicis longus (FPL) contributes secondarily to TMC joint flexion. The shape of the TMC joint and the changing tension in TMC joint ligaments are the other two factors which determine the available range of motion in specific TMC joint positions. During TMC joint flexion and abduction, thumb pronation occurs automatically as a consequence of joint shape and ligament tension. The APB, opponens pollicis and flexor pollicis brevis (FPB) arise ulnar to the axis of the TMC joint and are inserted distally radial to this axis. With contraction of these muscles, TMC joint flexion, abduction and pronation occur simultaneously. As APB and FPB insert distal to the MP joint, both play a role in radial deviation and possibly, although at best minimally, in pronation of that joint.

Measurement of opposition

Methods range from angular measurements of movements with a goniometer (Smith, 1987) to the clinical application of the Kapandji scale of opposition movements (I to 10) (Kapandji, 1986) to more sophisticated measurements with sensors such as a gyroscope (Kuroiwa et al., 2018). All have some problems. For instance, angular measurement of pronation is unreliable, relying on the assessment of thumbnail angle with the plane of the palm (frontal plane).

From the above, we can see that most opposition movement occurs at the TMC joint with some contribution from the MP joint. In measurement of opposition are we measuring TMC joint abduction, pronation and flexion or are we measuring the ability to reach a position which incorporates opposition as a part? To achieve the position of tip-to-tip opposition demands MP and IP joint flexion of either or both thumb and finger. These are not positions that can be reached through TMC and MP joint opposition movement alone. This is also so for attainment of many Kapandji positions of opposition (Kapandji, 1986).

A recent publication from Kuroiwa et al, (2019) assesses opposition using a gyroscope to measure TMC abduction and pronation only and compares these measurements with Kapandji scores. From the above information we can see that measurement of TMC

joint abduction and pronation is not inclusive of all components of opposition movements. Nevertheless, their conclusion that these two movements reach a plateau and do not increase after Kapandji position 6 is valid. In other words, opposition as measured by these two parameters does not indicate increasing opposition after Kapandji position 6.

Therefore, perhaps we would do better to consider the Kapandji score as an indicator of the ability to attain a position requiring opposition rather than as a pure measurement of opposition movement. To be fair to Adelbert Kapandji, he acknowledged with some emphasis that attainment of position 10 to the distal palmar crease of the little finger, for instance, could be achieved through 'crawling of the thumb across the palm'.

The example of congenital thumb hypoplasia is again pertinent. An individual with this condition may reach position 10 without opposition but with radial deviation (abduction) at the MP joint and MP and IP joint motion. Kapandji was at pains to point out that this was not opposition and that the preceding positions 1 to 6 must be achieved to allow progress to position 10. These truths introduce the concept that an increasing Kapandji score indicates optimal if not maximal movement at many joint levels, MP and IP joints as well as the TMC joint, and that it is not simply a measurement of increasing opposition.

Many authors have emphasised that maximal rotation in pronation brings the plane of the thumbnail parallel to that of the palm (frontal plane)- see definition of opposition. This is perhaps the most relevant of practical points in measurement of opposition. As the thumb abducts and flexes across the palm at TMC joint level, pronation increases from the resting position, when the thumbnail is at 90 degrees to the frontal plane, to a position of 0 degrees -maximum pronation, as described above. Whether thumb opposition to digit is tip-to-tip, requiring IP joint flexion, or it is pulp-to-pulp with minimal or no flexion, the anterior part of the thumb must oppose the anterior part of the digit, NOT digit tip or anterior pulp of one digit to the side of the other digit. The same applies to Kapandji positions 7 to 10, when with IP and MP joint flexion combined with maximal abduction and pronation, the anterior tip of the thumb, NOT its side, must oppose the appropriate crease. Figure 2 of the Kuroiwa publication raises some doubts as to whether this methodology was followed correctly, particularly for positions 9 and 10 when Kapandji's forbidden palm crawling appears to be present, despite the best of intentions of the authors. This position is not opposition and measurements of pronation and abduction when palm walking are not valid indicators of opposition, regardless of the sophistication of measurement device.

My approach

Despite some concerns with the methodology of Kuroiwa et al. (2019), I agree that we should question whether attainment of Kapandji positions 6 to 10 is evidence of an increasing opposition capacity, when this function is measured only by TMC abduction and pronation. In clinical practice, to measure these two movements, I prevent thumb MP and IP joint flexion.

The individual aligns the anterior aspect of the thumb pulp against the lateral aspects of the index finger proximal phalanx -position 0 (no pronation); the middle phalanx-position 1; and the terminal phalanx-position 2. For positions 3 to 6, the anterior pulp of the thumb is opposed maximally to the anterior pulps of index, middle, ring and little fingers. This is an effective method of measurement of increasing TMC and MP joint abduction and increasing pronation from 0 to 90 degrees. Note that this method removes thumb MP and IP joint flexion. It is not a measure of the ability to oppose in all thumb positions. However, if I wish to measure the ability to oppose the thumb in a tip-to-tip manner with index to little fingers- positions 3 to 6, and to oppose the thumb to other anatomical parts- positions 7 to 10, it is necessary to include increasing thumb MP and/or IP joint flexion.

For valid measurement of opposition in either circumstance, explanation of the intent and application of the correct methodology, as detailed above, are absolute necessities. We must decide whether we wish to measure thumb TMC joint abduction and pronation or whether we wish to document an ability to oppose in different thumb positions? In the example of congenital thumb hypoplasia referred to earlier, MP and IP joint flexion may be compromised. In these circumstances, the resulting Kapandji score may also be a reflection of these anomalies and not simply a reflection of poor opposition. The concept of the Kapandji score as a measure of movement of the thumb at many levels is more apparent.

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Figure legend

Figure 1. Extension and flexion in the frontal plane and abduction and adduction in the sagittal plane. The thumb positions in circumduction from 30 degrees supination (A), to neutral position (B), through maximal abduction (C), to 90 degrees of pronation (D). Redrawn after Eduardo Zancolli. Note that the course of pure abduction/adduction follows an oblique plane of 15 degrees in relation to the true sagittal plane.

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Somatosensory Rehabilitation of Neuropathic Pain

Boer K., Packham T.L., Vögelin E., Spicher, C.J

Worldwide, 450 million people suffer from chronic neuropathic pain. This pain is spontaneous, disrupting sleep, unresponsive to many drugs and often without clear anatomical etiology. This pain forces people to consult many medical doctors or therapists, without relief. Most treatments focus on coping with pain without reducing it. The International Association for the Study of Pain (IASP) defines neuropathic pain as: "pain caused by a lesion or disease of the somatosensory nervous system".

The dysfunction of the somatosensory system may allow opportunities for treating this complex painful problem. Claude J Spicher, Occupational Therapist and Certified Hand Therapist Switzerland, developed a method to evaluate, diagnose and treat neuropathic pain. The Somatosensory Rehabilitation of pain Method (SRM) can change and reduce neuropathic pain, using the neuroplasticity of the somatosensory nervous system. This article presents an overview of this method.

Neuroscience foundations for SRM

We all know that nociception is vital for the survival of the human being, alerting us to potential tissue damage or other threatening conditions. If the resulting pain perception is out of proportion to the tissue damage, is not resolved with normal healing, or is not associated with visible tissue damage, it could probably be neuropathic pain.
Finnerup et al. (2016) proposed an algorithm for diagnosing neuropathic pain. In summary:

1. If the patient's history suggests that the pain may be related to a neurological lesion or disease and not to other causes such as inflammation or non-neural tissue damage and if the pain distribution is neuro-anatomically related, this may possibly be neuropathic pain.
2. If the pain is associated with sensory signs, such as "tingling", "numbness", "radiating", "dull" or "tugging" in the same neuro-anatomically distribution, this may probably be neuropathic pain.
3. If a diagnostic test confirms a lesion or disease of the somatosensory nervous system explaining the pain, the neuropathic condition is definite. (Finnerup et al., 2016).

The article from Finnerup however does not describe diagnostic tests for neuropathic pain. The SRM is descibes a series of useful, patient friendly, non-invasive tests.

Somatosensory nervous system

The somatosensory cortices in the brain are responsible for processing somatosensory information from the skin and soft tissues, such as the touch, temperature, pain and vibro-tactile senses. A lesion, due to trauma, entrapment, metabolic dysfunction or biochemical injury (Woolf & Manion, 1999) can affect the peripheral nerves and thus the somatosensory nervous system. Multiple studies in animal models of nerve injury demonstrate immune and histochemical changes of the nerve resulting in excitatory activity of the peripheral and central nervous system in the brain as a pain sensation. (Schmid et al, 2013; Calvo et al, 2015).

This means that a cutaneous nerve branch lesion, in the periphery, can induce spontaneous pain signals through the somatosensory nervous system, including but not limited to a phenomenon in which a simple touch is perceived as painful (Spicher et al., 2017).

Clinical anatomy

The cutaneous nerves form a very complex network just below the skin. Across the body, the 240 cutaneous nerve branches are therefore vulnerable to trauma and may consequently get injured (Spicher et al., 2020 Mar). Trauma, surgery, inflammation, nerve compression, polyneuropathy or any damage of the skin can damage the sensory nerve branches generating neuropathic pain. An atlas of clinical anatomy was composed on the basis of 3133 aesthesiographies mapping the partial loss of sensitivity in people suffering from neuropathic pain, to help identify the lesion of involved cutaneous nerve branches (Spicher et al, 2020 Mar).

Diagnosing neuropathic pain

McGill Pain Questionnaire

In the SRM the McGill Pain Questionnaire (MPQ) is used during treatment to describe and evaluate pain (Melzack. 1975). The MPQ consists of a list of qualifiers that allows patients to describe their unique pain phenomena and assesses the intensity of each of these qualifiers (Spicher, 2006; Spicher et al., 2020 Jan).

The patient is asked to choose the most appropriate qualifiers to describe her/his perception of pain and to quantify the intensity of each sub-group of qualifiers (i.e. from 0-5).

The total score, ranging from 0-100, can differentiate sensory pain from affective pain. Sensory pain is somatic pain (soma body) and affective pain is semantic pain (sema meaning). The qualifiers may also give preliminary indications about the type of neuropathic pain suffered by the patient, including tactile hypo-aesthesia (spontaneous neuropathic pain) or static mechanical allodynia (SMA) (touched-evoked neuropathic pain).

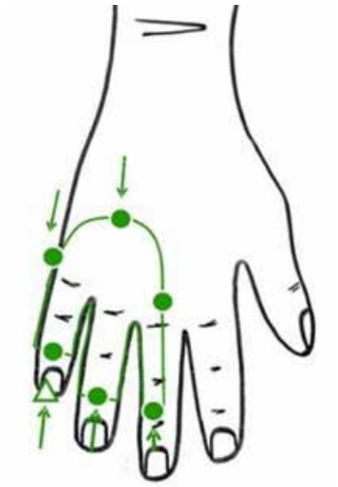
To diagnose neuropathic pain, the SRM assesses the sensitivity of the skin. Two different types of changes are distinguished. Tactile hypo-aesthesia, partial loss of sensitivity, and SMA: "pain due to a stimulus that does not normally provoke pain" (IASP 2011). Both types are diagnosed in different ways.

Diagnosing Hypo-aesthesia

If you presume the person is experiencing tactile hypo-aesthesia, the affected area is examined with an aesthesiometer in order to reveal the hypo-aesthetic territory. This is carefully mapped, following an established protocol. The boundaries of the hypo-aesthetic territory are drawn on an image of the affected body part. This map is called an aesthesiography (Spicher & Kohut, 2001).

This is the first clinical examination record of the SRM (Fig. 1). In the middle of the delineated territory, the degree of hypo-aesthesia is determined by the pressure perception threshold (PPT) using the different sizes of aesthesiometers from the Semmes-Weinstein monofilaments and by the static 2-point discrimination value. The effect of sensory re-education (Dellon, 2000) is measured by repeating the PPT and the static 2-point discrimination test.

Figure 1



Aesthesiography at 0.4-gram of the tactile hypo-aesthesia territory of the right dorsal branch of the ulnar nerve (7 February 2020). This aesthesiography delineates the area on which the stimulus is not detected. The points marked are the first point at which the patient cannot feel. The arrows indicate the axis on which the stimulus was applied ie, from normal sensation to no feeling. The triangle indicates the point from which measures were taken.

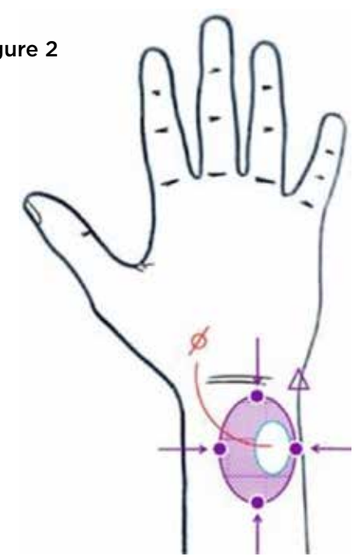
Diagnosing SMA

Allodynography

If you suspect that the patient suffers from SMA, the Visual Analogue Scale (VAS) is used to measure the pain intensity. As soon as the patient perceives change in intensity he/she must say STOP. Patients who have been in pain for a very long time get used to perceiving pain and it is difficult to map the problem if you don't explain clearly what you expect from the patient. The code used is: green when the pain at rest stays similar despite the application of the 15.0-gram stimulus, orange when the discomfort increases and red when the stimulus is perceived as painful.

With a 15.0-gram monofilament the boundaries of the painful skin are carefully mapped, always following the same procedure. The points where the patient tells you STOP are drawn on an image of the affected body part. This map is called an allodynography (Fig. 2). This is a new procedure for objective clinical examination of static mechanical allodynia (Packham et al., 2020 January).

Figure 2



15.0-gram - successive allodynographies for the left palmar branch of ulnar nerve of the left hand;
d0=first day of assessment
(16 July2013);
d19=19th day of treatment;
d58= 58th day of treatment
(Létourneau, 2014)

Rainbow pain scale

The rainbow pain scale (Spicher, 2006; Spicher et al., 2020 Jan) is a procedure used to determine the severity of the SMA. This test passes through the seven colours of the rainbow, going from red to violet, each color corresponding to increasing force levels (0.03–15.0 gram) using the monofilaments (Spicher et al., 2008).

This third clinical examination of the SRM demonstrates a significant 'inter-rater' and 'test-re-test' reliability (Packham et al., 2020 March).

By mapping the aesthesiography and allodynography, the pain becomes visual, instead of only being felt by the person. Patients are usually astonished by the accuracy of the drawing, which corresponds to the portion of skin where they experience neuropathic pain. During treatment, the changes of sensitivity on the Rainbow Pain Scale are used to evaluate the progress, even if the pain intensity remains consistent for the patient (Fig. 2).

Somatosensory rehabilitation

Once it is determined whether the patient has hypo-aesthesia or SMA, the patient receives a specific home program with exercises.

If the patient has spontaneous neuropathic pain, the exercises are performed in the hypo-aesthetic territory (Fig. 1). By 'waking' the skin, pain is 'put to sleep'.

With SMA, the skin cannot be rehabilitated in the painful territory as this provokes the pain. The patient is advised to avoid touching the painful area as much as possible. A Distant Vibrotactile Counter Stimulation (DVCS) is used to provide comfortable tactile stimuli.

To be effective, the patient needs to perform these sensory exercises 8 times a day, keeping two things in mind: exercises must always be perceived as comfortable, and it is important to focus on the stimulation, because it is an active relearning process. This can be compared with learning a foreign language or learning how to play an instrument. It needs determination, patience and a lot of engaged practice. Education and adherence are essential for successful somatosensory rehabilitation.

Continuing evaluation

By repeating the same diagnostic neuropathic pain tests, the progress can be monitored. A decrease in the PPT and static 2-point discrimination value means that the hypo-aesthesia is regressing.

Gradual shrinking of the allodynic territory is an indicator of SMA improvement, accompanied by decreasing rainbow pain values. When SMA resolves, one may find underlying hypo-aesthesia which has to be treated accordingly to prevent SMA from reappearing.

Conclusion

Pain is always a discomforting and disabling limitation for participation in daily life activities. By decreasing pain the person will experience increased participation. Somatosensory rehabilitation is a method for diagnosing and treating neuropathic pain originating from dysfunction of the somatosensory nervous system. The pain is carefully mapped by looking for areas of abnormal sensitivity of the skin.

The treatment, relying on the neuroplasticity of the somatosensory nervous system, is performed by patients themselves. The possibility to evaluate even the smallest change helps to encourage the patient to continue with the exercises. The treatment is tailored to fit the individual, but cannot be done without effort of the patient. Patience, activity modification and exercises are essential for success.

Finally, the 2c level of evidence-based practice - to treat Complex Regional Pain Syndrome of the upper extremity with SRM (cohort n=48) – suggests that this method may be an alternative to other conservative treatments (Packham et al., 2018). As to medical malpractice in nerve injury (Krauss et al., 2020), rehabilitation of neuropathic pain should emphasize the patient-clinician communication.

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EFSHT Virtual Congress: 1 – 4 September 2020

EFSHT Congress Presidents Vera Beckmann-Fries and Marianne von Haller are excited to announce that they are preparing a web-based congress for the same dates (1-4 September 2020) during which the congress in Basel would have taken place. Sessions will take place in the late afternoons, enabling participants to continue working and still take part in the congress.

They wish to offer participants the possibility to attend the congress and to benefit from the many interesting symposia the session organisers have put together, despite restrictions placed upon us all by the global Covid-19 pandemic. Visit the website for more information: http://fessh2020.com/#welcome

NEW IFSHT CORRESPONDING MEMBER: NIGERIA

The IFSHT welcomes Auwal Abdullahi, as the new corresponding representative from Nigeria, Africa.

Auwal Abdullahi

Abdullahi is a lecturer in physiotherapy at the Bayero University, Kano, Nigeria. He holds a BSc in Physiotherapy, an MSc in Neurological Rehabilitation and is currently a PhD scholar in Medical Sciences (Clinical Neuro-rehabilitation) at the University of Antwerp, Belgium. He is a Fellow of the London Academy of Sports and Health Sciences in Clinical Neurology Sciences and conducts research in the area of rehabilitation of the upper limb in people with stroke, among others.

Nigeria is the fourth corresponding member of the IFSHT from the African continent (in addition to Ethiopia, Ghana and Zimbabwe) and the 11th from around the world.

HAND THERAPY AND COVID 19

View the inspiring messages from our member countries regarding hand therapy service delivery during the global COVID 19 pandemic. https://ifsht.org/page/hand-therapy-and-covid-19

IFSHT EXCO MEETING: LONDON 2020

The current executive committee of the IFSHT was fortunate to have had a face-to-face Exco meeting in London in February 2020. We were able to plan and discuss the IFSHT mission and were also able to meet with the organising committee for the London 2022 joint triennial Congress of the IFSSH and IFSHT (https://www.ifssh-ifsht2022.co.uk/default.aspx).

The committee formed a strong working bond and look forward to rolling out planned ventures during our term of office (2019 – 2022).

Stacey Doyon (USA), Susan de Klerk (South Africa), Nicola Goldsmith (UK), Anne Wajon (Australia), Maureen Hardy (USA), Peggy Boineau (USA)

Art Exibit # 12

Albert M. Mennen 2010

Dupuytren's disease - really a disease of the Vikings?

Michael Ng, Daniel J Lawson, Bruce Winney, Dominic Furniss

Journal of Hand Surgery (European)(Volume 45 issue 3 p 273-279)

What were your main reasons for writing this article?

Recent times have seen an explosion in the amount of genetic data that is available. The cost of sequencing a person's entire genome is falling rapidly, and can now be achieved for around $1000 US. Many of us will have our genomes sequenced to aid in our medical care within the next 10-20 years.

Compared to other specialties, genetic studies in Hand Surgery are relatively uncommon. However, they can have very important benefits. For example, my group along with others have defined the common genetic variants that predispose to Dupuytren's Disease (see doi: 10.1056/NEJMoa1101029; doi: 10.1016/j.ajhg.2017.08.006). These studies have shown that DD is caused by lots of different genetic variants each of small effect coming together with non-genetic factors to cause the disease – very different to the old teaching of it being an "autosomal dominant disease". These studies have identified lots of new biological pathways that are important in the biology of DD, and may represent new therapeutic targets. Some of these are currently under further investigation, so watch this space.

Genetic studies can also have other more immediate benefits. For example, working with Paul Werker's group in the Netherlands we were able to show that a genetic risk score calculated in patients undergoing surgery for DD was able to predict surgical recurrence, even when the diathesis factors were taken into account (DOI: 10.1097/PRS.0000000000005208).
This study paves the way for precision medicine in Hand Surgery.

> "...we did not find supportive evidence that DD is a 'disease of the Vikings'"

With regards to this study, we were intrigued by the long-held notion that DD is a "disease of the Vikings". Whilst we know that there is some evidence that it is more common in Northern

Europeans, the evidence for a specific Norse inheritance is surprisingly weak. We set about trying to prove or disprove the theory from a genetic viewpoint.

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

We looked for evidence of excess Norse inheritance in DD in several ways. Firstly, we hypothesised that patients with DD would show a higher prevalence of Norse "Ancestry Informative Markers" compared to controls. Next, we hypothesised that the DD associated genetic variants would show an excess of Norse inheritance compared to sets of genetic variants drawn randomly from the genome. Thirdly, we looked to see if the genetic regions associated with DD were under more population specific selection.

Finally, we looked to see whether areas of the UK with known high Norse influence (eg Scottish Highlands) carried a higher genetic risk score for DD compared to other regions in the UK. In all analyses, we did not find supportive evidence that DD is a "disease of the Vikings".

3. What should all hand surgeons and hand therapists reading your article understand about the findings of your research?

For me, the most important lesson from this study is to constantly question dogma. Much of hand surgery and hand therapy is passed down from master to apprentice, with little room for questioning the orthodoxy. Only if we constantly challenge the "facts", and generate high quality evidence, will we move our specialty forwards. Research really is the future of Hand Surgery.

4. Will you be conducting further research/ publishing further work on this topic? If so, what will it entail?

My group's work spans the spectrum of research from bench to bedside, encompassing genetics, epidemiology, experimental medicine, clinical trials, and health economics.

As well as continuing to work on Dupuytren's Disease, we also study the genetic origins of other hand surgery conditions such as carpal tunnel syndrome and osteoarthritis (see doi: 10.1038/s41467-019-08993-6).

Our studies have also expanded to cover non-hand conditions (see doi 10.1101/2020.05.14.095653; doi 10.1038/s41467-019-13145-x). In the future, we will increasingly use studies of single cells from patients to provide an increasingly granular picture of the biology of disease (see doi 10.1038/s41467-020-16264-y).

Sometimes, we also discover interesting things about biology in general. For example, we were the first to discover genetic variants pre-disposing to being left handed (doi 10.1093/brain/awz257), and correlated these variants with structural changes in the brain of left-handed people.

We are driven forward by our patients demanding better care, and new treatments with better efficacy and fewer side effects. We also use our skills in big data analysis and statistics to study the epidemiology and health economics of hand surgery conditions, giving insights into the costs, effects and complications of surgical treatments in national and international datasets.

Finally, analysis of big data is being revolutionised by artificial intelligence and related techniques. Our group is exploring the potential applications across a wide variety of applications.

If you are interested in learning more about the cutting edge of DD research, please do come to the 2021 International Conference on Dupuytren's and Related Diseases (https://dupuytrensymposium.org) to be held in Oxford, UK in September 2021.

Answers by:

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Member Society

MEXICAN SOCIETY FOR SURGERY OF THE HAND (AMCM)

Board members 2019-2021

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Dr. Victor Azpeitia – Volunteer surgical missions coordinator

AMCM hand surgery meeting
Tlaxcala, Mexico

The following photos are from the successful AMCM Meeting in Tlaxcala, Mexico, which was attended by about 200 local and international delegates.

17th South American Hand Surgery Meeting/35th Colombian hand surgery meeting - Cartagena, Colombia

In alliance with the ASOCIMANO Colombian Society for Surgery of the Hand, Mexican hand surgeons and hand therapists participated in the 17th South American Hand Surgery Meeting in Cartagena, Colombia.

Altruistic Hand Surgery Missions.
For more than 20 years under the leadership of Dr Victor Azpeitia, our association has offered weeklong free assistance once or twice per year to under resourced areas to diagnose and perform surgery on all kinds of hand pathology, including congenital differences.

“Una mano para tus manos” or “A hand to your hands” surgical campaign.
Our International delegate Dr Emmanuel Ruiz with co-operation from his Hospital Muguerza Sur, established a regular campaign to pediatric patients in need of hand management in the northern part of the Mexico. For the 3rd year in 2020, Dr Ruiz and many volunteer surgeons, residents, anesthesiologists and hand therapist collaborate to make a change in these children’s life, offering hand surgery and therapy totally free.

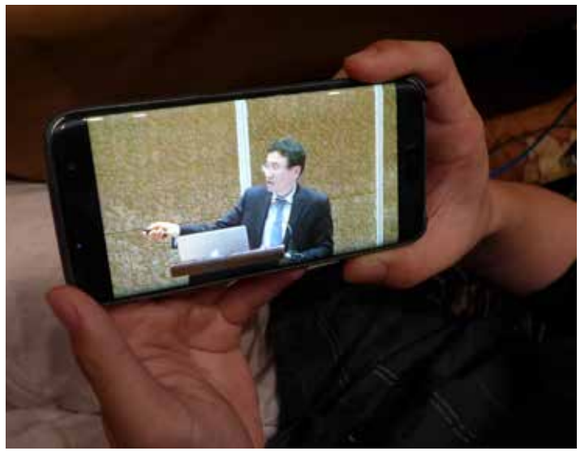
Continuous medical education during the COVID-19 pandemic: "Seminarios Quedate en Casa" or "Stay Home Seminars"

We also have adopted webinar communication to keep updated. The advantage is that more experts from all over the world can participate. Our President, Dr. J.R. Bonfil co-ordinated a large group of surgeons from Latin America, Spain and Italy.
The faculty uses different platforms but with a common objective, the sharing of knowledge in hand surgery with interactive participation between presenters and attendees.

We thank all the doctors, students, residents, medical societies that walk side by side with us on this unprecedented journey.

THE ASSOCIATION OF CHINESE-SPEAKING HAND SURGEONS UNITED (ACHSU)

Due to pandemic of Covid19 in first half of this year, the major Congress of the year of the Chinese-speaking Association which was originally scheduled for early May was replaced by a virtual congress. Case discussion, seminars, and online education sessions have regularly been carried out through WeChat and Zoom conferences. Since national and international travels were curtailed and the patient volume which decreased to less than 40% of the normal workload in the first 6 months of this year, members had more time for local conferences and educational forums within their own cities and in their own departments.



For the last 5 years, The Association of Chinese-speaking Hand Surgeons United has used a hybrid format for their on-site Congresses and simultaneous real-time virtual broadcasting through WeChat. This allows up to 2000 additional Hand Surgeons throughout China to participate using their smartphone App.

The 25th Anniversary Congress of the Federation of European Societies for Surgery of the Hand (FESSH) invited our Association as their Guest Society.
More than 50 presentations from Chinese-speaking hand surgeons were accepted and many have been scheduled to for podium presentation and symposia. Again these will be presented as a virtual congress instead in September 2020.

Members of the Association have been actively involved in online international educational activities through WeChat and Zoom. Drs. Zeng Tao Wang, Bo Liu, Chao Chen, Jun Tan and Tian Mao have delivered online courses, and Jin Bo Tang was invited to lecture through Zoom to audiences in South America, United States of America, England and Asian countries.

In fact, about 5 years ago, lecturing and conferences through WeChat had become a major platform for conferences in conjunction with the main congress venue in mainland China. This hybrid conference format enabled participation of members all over our vast country as well as accommodating the huge number of practicing hand surgeons in China. One previous conference of our Association which was held in 2016 had about 2000 "virtual" hand surgeons. These virtual courses, conferences and congresses are now a well-accepted format of sharing knowledge and academic discourse.

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CHILEAN SOCIETY FOR HAND AND MICROSURGERY

Dear friends and members of the IFSSH,

Reflecting on the last months of 2019 and the first 6 months of 2020 many things come to mind.

As probably many of you know in October 2019 a social uprising occurred in Chile that lasted almost to the first week of March 2020, when all the attention and worries shifted to the pandemic which caused the first victims in our country, and it is still hitting us hard.
This made us understand how vulnerable we are, especially those struggling with poverty and discrimination, but also made us understand how strong and adaptable we can be.

We were struck once again with the notion that as health care professionals we have a responsibility; we have a role in our society to provide comfort and hope. We are asked to be role models. Professional success, wealth and other superficial things often grab us and steer us away from our calling, but for most of us this COVD-19 pandemic has been a wakeup call.

We are a society of hand surgeons, but most of all, we are an organized group of friends that can offer more than just hand surgery.
Most of our members are doing voluntary work e.g. performing necessary surgery on vulnerable patients who were put on a waiting list because of the pandemic, or they donate money, clothing, food and time, and a reassuring smile for those in need.

It has been a time for social distancing but emotional closeness. We have never asked so many times, to so many people and so sincerely: "Are you and your family Ok?

We have never been so flexible, so adaptable and eager to be a part of the solution rather than part of the problem.

We know that this disease may fade away but hope that what we have learned, what we valued most, will linger forever and that friends can reunite again soon.

Sincerely hoping that everyone is healthy and well,

Sociedad Chilena de Cirugía de Mano y Microcirugía

THE ECUADORIAN SOCIETY FOR SURGERY OF THE HAND (ECUMANO)

How the Sociedad Ecuatoriana de Cirugía de la Mano took advantage of the COVID 19 Pandemic.

The Ecuadorian Society for Surgery of the Hand (ECUMANO), is a young Society. It was only recently accepted as a member of the IFSSH at the last triennial Congress Berlin 2019. We had planned various courses and academic meetings and activities for this year.
We started organizing our first international course on distal radius fractures in Ecuador in April, and have been working for months.

Invitations were sent out, and it seemed the dream was about to realize. Surgeons from different areas started to register and the financial resources were covered. But suddenly the dream began to transform into a nightmare, all caused by the pandemic. First we delayed the Course, and then it was cancelled. As the pandemic became worse, courses and congresses all over the word were being cancelled.

The executive of ECUMANO decided that these difficulties should be taken as the opportunity to evolve. The Members took a decision to make the Society "more digital". The recently envisaged Course has now been transformed into the "first virtual course on injuries of the distal forearm".

After some planning and obtaining the necessary resources, the virtual course took place in June engaging senior Hand Surgeons from Latin America

(see fliers). It was a great success with more than a thousand attendees from 15 countries. Online Courses have the added advantage that it allows more delegates to attend, apart from saving on travel and accommodation costs, as well as time away from home.

The pandemic is a hard blow to everyone all over the world. However, it forces one to be innovative and take advantage of new opportunities. As a young and small Society we are proud to have been able to hold a major course with quality and excellence.

KOREAN SOCIETY FOR SURGERY OF THE HAND

How the "W Hospital", Daegu, Korea, manages to combat COVID-19

At around 2am on 19 February 2020, I was woken by an urgent phone call from the Daegu Disaster and Safety Countermeasure Headquarters on COVID-19 informing me that one of our employees had tested positive for the COVID-19. The employee, who worked on the first floor of the radiology department, had already been on sick leave for two days with cold and flu symptoms. An emergency meeting was called and doctors on the board of directors and department heads managed to sit together at 03:30. We had to decide what to do with the 260 inpatients and how to inform them of the unpleasant news, not to mention the roughly 1000 outpatients arranged to visit the clinic. Foremost, the 1000 outpatients and 65 operations booked for that day were to be cancelled by phone call explaining the situation, a relatively easy decision to make compared with what was to be done with the post-operation patients in the hospital. We had to decide what to do with the patients who were recovering from operations but needed further observation or management. Also, if any discharged patients developed symptoms of COVID-19, it could result in serious community infection.

This was to feel like the longest most harrowing night of my life. It was just the beginning of our combat against COVID-19. This unprecedented situation suddenly before us, triggered hours of lively debate as we explored all the options and potential outcomes. This 'think aloud' discussion went on until dawn when the sun rose. At ten in the morning, this bad news would be announced nationwide by TV, SNS, and other media hence the overnight meeting discussing our patients' welfare. We decided to be transparent and inform people as it is, and ask for their understanding. In-hospital announcement, web page updates, text messages and also letters were chosen as delivery methods. Tasks were assigned to the respective departments. One hundred and seventy patients who had no contact with the infected employee, those whose antibiotics were discontinued following surgery, and those who could manage with just oral antibiotics, were to be discharged from hospital first thing in the morning. Those leaving hospital were to be instructed to self-quarantine for two weeks. I, as representative of this hospital, personally sent messages to every one of the 90 inpatients who had to stay in hospital and to those who visited our hospital during the previous two weeks informing them of our situation and to ask them to visit a designated screening center if any of the symptoms developed.

An epidemiological investigation team from the Korea Centre for Disease Control and Prevention (KDCD) arrived and reviewed all the CCTV footage from the hospital to analyze the flow of human traffic to reveal all close contact incidences of the infected employee. Fourteen people who were in close contact went into self-isolation at home for two weeks. Sixty-five people who were identified within the contact group underwent COVID-19 tests immediately. Usually the results were released six hours later, but because of the sudden outbreak in Daegu at that time, the results were delayed and we had to wait one and a half days which was a nerve racking experience. Miraculously, all 65 people tested negative, which was, I believe, attributed to the rigorous prevention measures taken since January. We had already limited entrance to the hospital, instructed all staff members and patients to wear masks, and wash their hands frequently (Figure 1)

Figure 1. Entrance control at the main gate of the hospital to check body temperature and travel history.

Our hospital was reopened after two days of a full disinfection process following KDCD requirements. By this time, Dalgubul-daero, the biggest street in Daegu, which our hospital faces, was empty except for the frequent passing ambulances (Figure 2). It was like a ghost town, with only sirens breaking the silence. Although our hospital opened after the mandatory closing period, not one patient visited as we were on the 'closed hospital list' broadcast on live TV news.

With only twenty percent of the hospital inpatients and no outpatients it was somewhat awkward in the beginning with too many employees. At that time, the explosion of confirmed cases from the now infamous religious group overwhelmed Daegu leaving many people stricken with panic and full of fear. Some employees from other hospitals in Daegu refused to work, accepting no pay and even risking job loss. At our hospital, another meeting was arranged to discuss the temporary overstaffing issue and also emergency surgery. We reached a consensus to use vacation days to deal with overstaffing. In terms of emergency surgery, there were many negative opinions on account of the fear of infection. At that time, one of the scrub nurses persuaded those who were negative to resume necessary surgery. These were her words: "I am also struck with fear, worried that I might place my family in danger when returning from work in the hospital. Remaining open is essential as W hospital is the number one Hand and Reconstructive Microsurgery Centre in Korea. We pride ourselves on helping those in need. Although COVID-19 could pass by without any serious symptoms, it can also be fatal. But to be afraid of this and avoid emergency operations on broken or amputated hands and feet, the medical staff at W hospital would sacrifice its pride. If we do not take care of our patients, who would? Retired medical professionals returned to help, and even staff from other cities are coming to the aid of the now overstressed Daegu medical workers.

Figure 2. The biggest street in Daegu which our hospital faces, was empty except for the frequent passing ambulances.

I believe we should contribute to help our community in any way we can. I volunteer to scrub for emergency operations, and believe many of my co-workers would do the same."

Figure 3. Emergency replantation operation wearing four-set protection equipment.

Figure 4. Drive-through COVID-19 screening center at the parking lot right next to the hospital.

After the meeting having been encouraged by these touching words, we actively informed the local media, broadcasting outlets and university hospitals that our Emergency Room was open and we would continue to perform emergency operations (Figure 3). We provided sufficient masks, face-shields, protective clothing, hand sanitizers and thermometers to all our employees with the help of the Daegu Medical Association and public health centers. Additionally, in the outdoor parking lot, a drive-through corona virus testing station was set up following the government guidelines (Figure 4). A public relief hospital service was also set up for outpatients. Fortunately, two public health service doctors from the Korean Ministry of Health and Welfare were appointed and worked with us for two weeks. W Hospital surgeons who had fewer elective operation schedules volunteered in the Emergency Room and other public health centers.

> "...tested negative, which was,... attributed to the rigorous prevention measures taken since January"

Since the first confirmed case in Korea on 20 January, a total of 11,503 people have been confirmed positive for corona by the end of May, of which 6,884 were born in Daegu, accounting for 60 % (Figures 5 & 6). In the same period, the KCDC (Korea Centre for Disease Control and Prevention) reported that 271 people had died of corona, of which 186 (68%) occurred in Daegu. These statistical figures show how serious the COVID-19 was in Daegu at the time. Compared with last year, the number of elective and emergency operations and the number of outpatient and admitted patients has decreased dramatically. Despite the harsh measurements between 19 February and the end of May, we successfully carried out 3,119 hand and orthopedic operations, both elective and emergency cases, without additional infection of patients and any staff. Fortunately, since May, all statistical numbers have increased again to around 90% compared to last year (Figure 7).

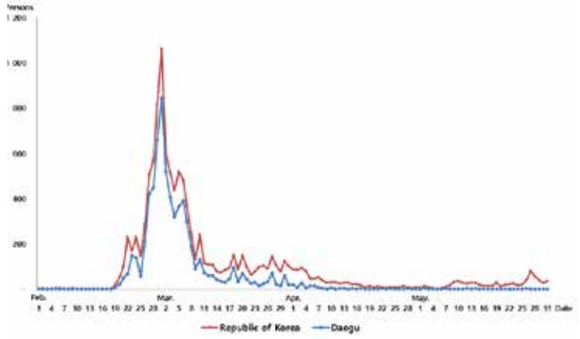

Figure 5. The number of daily confirmed new COVID-19 cases in Korea and Daegu. four-set protection equipment.

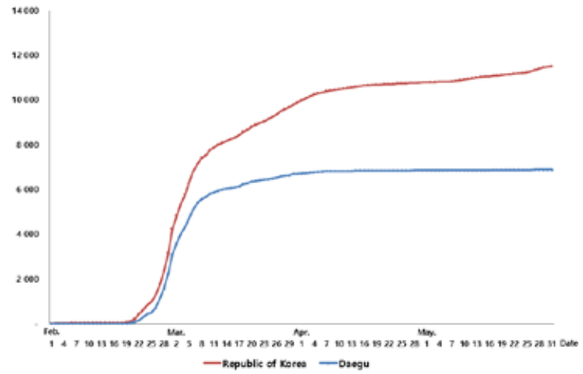

Figure 6. The number of cumulative cases of COVID-19 in Korea and Daegu.

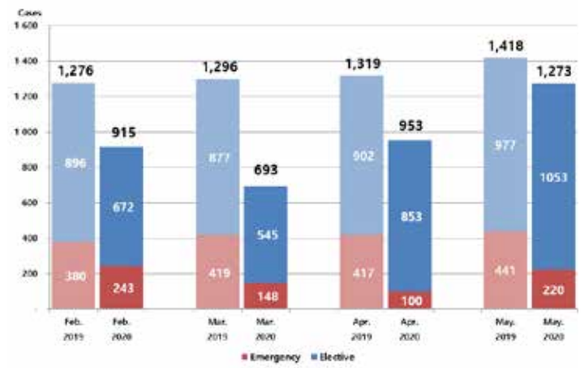

Figure 7. Comparison of the numbers of elective and emergency operations at W Hospital in 2019 & 2020.

To perform emergency cases and elective operations, daily temperature checks were performed on all employees without any exception and an entrance control center was set up to restrict family visits and enforce mask wearing, hand washing, and continuous disinfection. All the patients who were scheduled for surgery underwent screening tests in advance.

If testing was not possible before the operation due to severe injury, operation staff donned four types of protective wear during the surgery. In addition, the operation room was closed down and rigorous disinfection followed. The patient was then sent to an isolation ward. Our hospital has four wards with a total of 260 beds; one is used as an isolation ward for patients with fever and patients who were operated without first taking a corona virus test. Every time after an admitted patient developed fever a screening test was done. The wait time for the result was like a recurring nightmare. If there were to be another positive test, we all had to go through the same difficult process of sending inpatients back, cancelling operations and closing the hospital for a few days again.

The war against COVID-19 is far from over and we are still walking on thin ice which can break any day. For a large general hospital to remain operational a lot of effort needs to be done. Everyone, including all medical and non-medical workers, in- and out-patients, their family members, employees of the outsourcing companies which deal with parking and cleaning, and even the snack bar part time workers who come in and out of hospital have to be closely monitored. All the aforementioned people and their family members are a composite part of the hospital. No longer do I fall asleep from the daily work within five minutes.

With COVID-19 ever close by, restlessness and worry rob me of peaceful sleep, causing me to wake up several times in the early hours, paralyzed with

fear and anxiety over the potential risks, and even suffering from heartburn. However, my harbored doubts about the ability to overcome this COVID-19 situation has transformed into a determination, gaining confidence from the successes achieved over the last few weeks and the proud teamwork of our hospital staff. As everybody should, I have to protect myself; aware that everyone I come into contact with could be a positive carrier. I work with the mindset that even if I were infected, the patient I operate on should not get infected, resulting in the maximum use of protective gear. For the last three months, I have gone nowhere but to the hospital and my home, minimizing contact with people. At home I use a separate bathroom. I eat alone and maintain distance from my family members.

Due to the severity of the situation in Daegu, the number of patients in our hospital has declined dramatically and many scheduled operations have been cancelled. However I have been deeply moved that many patients still came to receive scheduled operations from other cities in Korea as well as from other countries. I am deeply humbled and grateful for their trust towards our professionalism at W hospital, and am determined to continue with dedication. I believe doctors and nurses should dedicate their abilities to their patients. They depend on us.
My sincere thanks go out to all our staff members who work day and night, remaining professional despite the grave personal risk ever present.

I witnessed heroic moments from my fellow workers through this experience. I want to thank all my overseas friends who expressed their concern and provided encouragement. I am also thankful for all the unexpected encouragement, supplies and attention from many companies from around the country. We are still safely hanging in here thanks to the devotion and commitment of our mighty fellow workers.

Dr. Sang Hyun Woo
W General Hospital
W Institute for Hand & Reconstructive Microsurgery
Daegu, Korea

AUSTRIAN AUSTRALIAN HAND SURGERY SOCIETY

Traumatic Hand- and Forearm Injuries during SARS-CoV-2 pandemic 2020

On 11 March 2020 the WHO classified the outbreak of the Severe Acute Respiratory Syndrome coronavirus 2 (SARS-CoV-2) in 114 countries, with a combined total of 118,000 cases, as a pandemic [1]. In Austria, the first cases of COVID-19 were confirmed on 25 February (week 9) in Innsbruck, Tyrol. By 13 March (week 11), the number of confirmed SARS-CoV-2 cases in Austria increased to 208 [2]. On 13 March, Tyrol, an Austrian federal state, had been added to the list of risk areas for an infection with SARS-CoV-2. Several restrictions were implemented over the following days. From 15 March onward, people were not allowed to leave their houses without a reasonable excuse. On 17 March (week 12) the restrictions were expanded: all restaurants, bars and clubs had to remain closed. For all Tyrolean communities quarantine was ordered from 18 March to 7 April (week 12-15). During this time period, all outdoor sport activities were prohibited.

Sport facilities were closed from 17 March until 29 May and ski resorts had to remain closed after 15 March. Sport Trauma injuries are one of the most common presentations at the Department of Trauma Surgery in Innsbruck, Tyrol. During the time of the pandemic, the work routine at our department changed dramatically. Not only did the total numbers of cases decrease significantly, but also injury patterns changed.

In week 7-10, before the first restrictions were implemented, about 836 patients per week were treated at the Department of Trauma Surgery in Innsbruck, which is similar to recent years (2017-2019; n= 845). During the lockdown, the number of patients treated at the emergency department decreased steadily every week. The lowest point was reached in week 13 with 202 patients per week.

Interestingly, the percentage of diagnosed hand injuries and forearm injuries increased during this time. While hand injuries and forearm injuries accounted for 22% of all treated injuries in years 2017-2019, the percentage rose to 30% in week 13 in 2020. Furthermore, amputations increased from an average of 16 per week during the years 2017-2019 to 28 in 2020. In week 7-22 the most frequent hand injuries and forearm injuries were cuts and stabs (n= 394), contusions and sprains (n= 770) and bone involvement (n= 592). During the same period, fractures of the hand and forearm decreased to less than a third per week (n= 15) as compared to levels before the restrictions (week 7-10; average n= 59). Contusions and sprains dropped to on one-eighth (n= 7) of the baseline per week (week 7-10; average n= 60)

One reason for these findings is certainly the different leisure time behavior of the population in times of restrictions and lockdown. As soon as ski resorts and sport facilities were closed, acute injuries from this sector were eliminated. Many patients reported having injured themselves while doing work at home and gardening (n= 691). In week 13, 62% of patients with hand or forearm injuries claimed to have injured themselves at home or in the garden, which is more than double the percentage of a week before the quarantine period (22.75% per average in week 7-10).

Hand surgery in Innsbruck has therefore certainly changed significantly during the SARS-CoV-2 outbreak in Tyrol. Elective operations had to be postponed from 16 March onwards and only emergency operations were performed, averaging one per day. But since week 22, the number of patients treated at the Department of Trauma Surgery in Innsbruck has increased again, similar to previous years.

It remains to be seen whether a second wave of SARS-CoV-2 infections will occur due to border openings, loosening of contact bans, and lifting of restrictions in Austria.

References

[1] https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020, website WHO, 11 March 2020
[2] https://info.gesundheitsministerium.at/, website Ministry of Health Austria, 08.07.2020

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AUSTRALIAN HAND SURGERY SOCIETY (AHSS)

Australia has been able to isolate from the pandemic and limit the infection rate. International travel has been banned. Australians returning from international travel are quarantined. The states within Australia have also been isolated. Elective surgery in both the private and public sector was ceased. The private health system and hospitals were commandeered and controlled by the state and federal governments. Emergency and urgent surgery continued under

strict guidelines formulated by the state and federal governments. One of the biggest challenges Australia faced was the lack of personal protective equipment (PPE).

While Australia did have a stockpile of PPE it was estimated that this would only last for one month. We were unable to source PPE and facemasks, in particular N95 masks. Because of our isolation and the quarantine measures that had been put in place, the anticipated impact of the pandemic did not occur. Most states have now removed the restrictions on elective surgery. In early July some states experienced an increase in the number of Covid-19 infections and as a result still have restrictions in place. The AHSS is working with the Royal Australian College of Surgeons, the Australian Orthopaedic Association and the Australian Society of Plastic Surgeons to monitor the impact and the response to Covid-19. We have come to realise that facemasks, eye shields, temperature monitoring and hand washing have become a part of normal practice.

In March 2019 the AHSS held a combined scientific congress with the Asian Pacific Federation of Societies for Surgery of the Hand and the Asia Pacific Wrist Association. As a result of Covid-19 restrictions some countries were prevented from attending. Our initial registration of approximately 1600 people fell to just below 1000 registrants. The last day of the four-day meeting was cancelled because of concerns about the risk of infection. Fortunately, to our knowledge none of the attendees contracted Covid-19. We now watch the rapidly increasing number of people that are infected around the world and are acutely aware that we could be in the same position within a short period of time.

Jeff Ecker
President: Australian Hand Surgery Society
(Editor: at the time of going to press, new strict lock-down measures have been imposed in Australia)

BELGIAN SOCIETY FOR SURGERY OF THE HAND

The Belgian Hand Group is proud to announce that on 27 June 2020, the first candidates for the Belgian Hand Surgery Certificate (BHSC) have successfully obtained their certificates! This 2-year inter-university training was introduced in 2018, jointly organized by the 7 Belgian universities. The students are taught hand surgery at a basic level with theoretical and cadaveric courses in 8 separate 2-day modules. This education can prepare the students for the European Diploma in Hand Surgery examination later in their careers after the required fellowship training. The admission to this course is subject to a selection procedure by the BHSC steering committee in accordance with all our universities' internal regulations. It is open to European and extra- European orthopaedic, plastic or general surgeons and residents, preferably in their last 2 years of internship.

This first cycle was a tremendous success, in spite of the first unexpected COVID 19 challenging months. There were 21 students who finished the course successfully and obtained the first BHSC certificates after fulfilling all requirements which included attendance, examination, a publication, a paper and a presentation on a topic of hand surgery. Due to the corona pandemic, the last 2 modules had to be re-organized online, which was a challenging and fast adaptive procedure for the teachers and students.

It was decided to organize the dual jury exam online as well. With the support of both our research and education center (IORT) and a profession meeting organizing organization ('Meet U There'), we managed to establish a fully online live event exam with 16 examiners, 4 juries and 22 candidates. Even the paper "defenses" occurred virtually. Every candidate was able to undergo the examination in their preferred language viz. Dutch, French or English. The deliberation and the results were organized in a joint online event. The first prize was awarded to the highest grade who was Michiel Cromheecke. His reward is free registration for the next FESSH or IFSSH meeting.

The level of knowledge on hand surgery was high. All examiners were very pleased to have noticed that the students learned much and demonstrated a profound and practical knowledge of hand surgery, which is the intention of this BHSC course. We are convinced and pleased to have contributed to a higher level of quality for future hand surgeons and are sure most of these candidates will further their career, hopefully with a very successful European Diploma in Hand Surgery in the coming years.

The next cycle for the BHSC is 2020-2022 - More information at: https://www.bhsc.be/

COLOMBIAN SOCIETY FOR SURGERY OF THE HAND

ASOCIACIÓN COLOMBIANA DE CIRUGÍA DE LA MANO
NIT. 830.054.636-7

As everyone knows, the pandemic affected our professional practice and our personal life. We never thought that it would be so fast and so forceful; we were thinking it was an isolated virus in a distant country and at the moment we are in quarantine without reaching a peak. As medical personnel we constantly live in the anxiety of getting infected personally or those we love. The personal protection equipment (PPE) has been insufficient and it is up to each one to take the necessary measures.

Our customary 'face-to-face' 36th Congress, which was scheduled to take place in the city of Barranquilla in Colombia from 26 – 29 August 2020, will now take place virtually on a new date, 25 – 26 September 2020. Also, the bi-national Congress on Hand Surgery in conjunction with our colleagues in Venezuela which was planned to take place on 27 November 2020, has been cancelled due to the pandemic as well as their current political and social situation. It will be rescheduled.

Fortunately we live in an era in which we can use virtual devices and platforms such as webinars. This allows us to carry out high-level scientific events in partnership with the trade. It also allows us to strengthen our bonds of brotherhood between Latin America and the rest of the world, and at the same time improve our medical education and knowledge for the common welfare.

BRAZILIAN SOCIETY FOR SURGERY OF THE HAND (SBCM)

During this pandemic period all public health efforts and resources are directed towards combating the Covid-19 virus. The professional activities of the Brazilian hand surgeons were greatly compromised and are limited to emergency cases only.

The activities of the Brazilian Society for Surgery of the Hand (SBCM) also suffered a great deal with the arrival of the Covid-19 pandemic. We do not foresee, in the short term, significant changes in the public health scenario. We were therefore obliged to make adjustments to the administrative, teaching and training activities.

The 2020 Annual Congress, which, for the first time, was to be held in the Amazon region, unfortunately had to be canceled, as this region was strongly affected by the infectious disease.

The efforts of the Board of Directors was then focused on maintaining, and even expanding the teaching and continuing education activities through the electronic media. The podcast of SBCM called 'Handcast' was created by Webmão. The numbers of attendees increased markedly with the weekly webinars.

The logo of the Brazilian podcast, 'Handcast'.

In addition we have the kind co-operation of distinguished colleagues from South America and worldwide. This also resulted in a webinar partnership between the presidents of the Brazilian Society for Surgery of the Hand, João Baptista Gomes dos Santos, and the Latin American Federation, Jefferson Braga Silva.

A webinar about congenital hand deformities. Chair: Dr Henrique de Barros (2021 President elect of SBCM)

We hope to overcome the current difficulties in search of better times, for a safe return to our noble practice.

Dr. João Baptista Gomes dos Santos
President

Dr. Maurício Pinto Rodrigues
Secretary

ASOCIACION ARGENTINA DE CIRUGIA DE LA MANO Y RECONSTRUCTIVA DEL MIEMBRO SUPERIOR

Due to the serious health situation of the Covid-19 pandemic, the Government of Argentina has mandated preventive and obligatory social isolation from 20 March 2020.

Since then, all scientific activities scheduled for this year were suspended. For this reason, we had to adapt to the new health situation, and we turned some of our activities into virtual events.

Virtual AACM activities during the Covid-19 pandemic

17 April:
Virtual Clinical Athenaeum: MIPO technique in humerus. From novice to expert.
https://www.youtube.com/watch?v=g4Soi7t_Ffk&t=3s

23 April:
Videoconference
SOS, ART patient
https://www.youtube.com
watch?v=l6YAQaHyMFw&t=22s

28 May:
We give each other a hand. Discussion of problem cases contributed by AACM members.
https://www.youtube.com/watch?v=7napVT41ilM

4 June:
Promedon Webinar Series: Hand and Wrist. Ulnar side pathology of the wrist.

11 June:
Virtual Clinical Athenaeum: Elbow fracture-dislocations. Simplifying the complex.
https://www.youtube.com/watch?v=WUWtRhPwQpg

26 June:
46th Hand Surgery and Upper limb Updating Course. Update on Peripheral Nerve Surgery. It was a live virtual course with interactive participation of the audience, which was transmitted from our AACM headquarters. We had as foreign guests Joaquim Casañas (Spain), Jorge Clifton (Mexico) and Orlando Merced O'Neill (United States). We also had outstanding local speakers.
https://www.youtube.com/watch?v=sUWho-YIXcc

7 July:
Participation of our Presidents in the Monthly Session with the Mexican Association of Hand Surgery.

Dr. Violeta Levy (2018 President):
Vascularized bone grafting in upper limb

Dr. Enrique Pereira (2020 President):
Current concepts in osteosynthesis of the distal humeru

Dr. Alvaro Muratore (2021 President):
Current concepts in osteosynthesis of the distal radius

Dr Martín Caloia (2019 President):
Treatment of scaphoid nonunion, my preferences

Next 2020 Scheduled Events:

13 August: Virtual Clinical Athenaeum: A B C in the management of tumors.

10-12 September:
Advanced Course in Experimental Microsurgery

TO BE RESCHEDULED
Cadaveric Course of Pediculated Flaps in the Upper Limb Injected preparations.

Enrique Pereira
President

Gustavo Teruya
General Secretary

Pablo E. Zancolli
Paul Pereira
Executive Committee

The history of Hand Surgery at the *University Hospital Polyclinic* of Modena, Italy

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Professor Augusto Bonola: the founder

In 1946 Prof. Augusto Bonola became the first Professor of Orthopaedics at the University of Modena and started an Orthopaedic Clinic in the old Modena Polyclinic.

Dr. Paolo Bedeschi, who was an assistant in the Orthopaedic Clinic of Modena, visited Prof. Erik Moberg in Sweden in 1960. On his return he was assigned the task of treating most of the hand injuries of the Hand Surgery Service.

SICM (Società Italiana di Chirurgia della Mano), was founded by eight founding members.
On 8 December 1962, at the Orthopaedic and Traumatologic Centre (CTO) of Florence, directed by Prof. Oscar Scaglietti, Prof. Augusto Bonola was appointed SICM President, Prof. Umberto Mangini the SICM Treasurer/Secretary and Dr. Paolo Bedeschi the Secretary to the SICM presidency.

In August 1963, the Orthopaedic Clinic moved to the new Polyclinic of Modena, where it became a modern Department, adequately equipped to treat all types of orthopaedic conditions, particularly severe and complex injuries of the upper limb.

In January 1964, the first issue of the "Rivista Italiana di Chirurgia della Mano" (Italian Journal of Hand Surgery) was published in Italian.

Prof. Augusto Bonola chose as the SICM logo a copy of the cymatium on the gate which is found at the entrance hall of the Modena Old Hospital. At the base of the logo there is a quotation in Latin by Julius Casserius: "Rimatur manus apta manum; mens erue mentem" (The skilful hand of the surgeon dissects the hand; the mind supports its comprehension) [1] [2]. Julius Casserius (1552-1616) was a great anatomist, a surgeon and a lecturer at the Padua University. His great contribution to the anatomy of the upper limb was published by Landi A. et al. in the IFSSH Ezine May 2012 [2]. In 2016 Julius Casserius was included in the list of "Giants of Hand Surgery", at the 13th IFSSH Congress in Buenos Aires, Argentina.

Figure. 1 Modena, April 1964, first instructional Hand Surgery Course. From left: Prof. Oscar Scaglietti, guest of honour and lecturer, Dr. Paolo Bedeschi, Secretary of the Course and Prof. Augusto Bonola, Director of the Course.

In April 1964 Bonola organised the first Instructional Course in Hand Surgery in Italy in Modena (Fig. 1).

Augusto Bonola was one of the eight founding members of the IFSSH in Chicago in January 1966.

From 1967 to 1985:

Microsurgery of nerve lesions was introduced into the Modena Clinic in 1967 by Bedeschi, who presented a report at the 12th SICOT Congress in Tel Aviv in 1972 [3]. In 1975 the first Italian triennial post-graduate School of Hand Surgery was founded in Modena by Bonola.

Prof. Bedeschi was the IFSSH Delegate from 1973 to 1979, and SICM President from 1977-1979. He was appointed Director of the Orthopaedic Clinic of Modena in 1976, after the retirement of Prof. Augusto Bonola at the age of 70 years. He sadly died shortly afterwards on 9 December 1976. Bedeschi was promoted to Full Professor of Orthopaedics in 1980.
Bedeschi was also the organiser of the "A. Bonola Courses" from 1977 until 1996.

At the May 1977 IFSSH Delegates Meeting in Edinburgh, Bedeschi proposed a triennial IFSSH Congress, which was adopted. The first IFSSH Congress was held in Rotterdam, The Netherlands in 1980.

In 1978 Dr. Antonio Landi attended the Microsurgery Centre of Bernard O'Brien in Melbourne, Australia for four months. On his return to Modena, Landi was put in charge of micro-vascular services.

In the autumn of 1980, Proff. Mario Boni of Pavia and Paolo Bedeschi of Modena, in collaboration with the Ministry for Universities, were successful in introducing Hand Surgery teaching into the Medical Degree Program, which also involved the establishment of a Professor of Hand Surgery. In 1981 Prof. Alessandro Caroli from the University of Modena became one of the first associated Professors of Hand Surgery in Italy, and under his direction the Hand and Microsurgery Unit at the Modena Polyclinic was established and became the regional centre for severe upper limb injuries and limb replantations. Caroli was elected SICM President from 1985-1987.
"La Mano" (The Hand), a treatise written in Italian by A. Bonola, A. Caroli and L. Celli, was published in 1982 [4].

From 1986 to 1998: the dawn of FESSH

Figure 2 captures a meeting held by the members of the IFSSH Scientific Committee on the microsurgical treatment of peripheral nerve surgery at the Third IFSSH Congress in Tokyo on 6 November 1986. The Members were (from left) Hanno Millesi of Vienna, Austria, Paolo Bedeschi of Modena, Italy, and George Omer of Albuquerque, USA.

In July 1989 Caroli organized a European Hand Surgery meeting in Taranto, Italy, with the aim to have a combined European Federation.
In February 1990, delegates from 13 European Hand Surgery Societies met in Paris and founded the Federation of European Societies for Surgery of the Hand (FESSH).

Dr. Oliviero Soragni was elected SICM President from 1993-1995, the fourth SICM president from Modena.

Figure. 2 Tokyo, November 1986, 3rd IFSSH Congress. Working breakfast of the three Members of the IFSSH Commission for the study of the microsurgical treatment of peripheral nerve lesions. From left: Prof. Hanno Millesi (Vienna), Prof. Paolo Bedeschi (Modena) and Prof. George Omer (Albuquerque, New Mexico,USA).

Prof. Bedeschi devised and introduced new or modified techniques in Hand Surgery. Five of these techniques are: the honeycomb technique for Dupuytren's contracture, a digital-palmar variant of "open palm technique"[5]; an anterior approach for proximal row carpectomy [6]; tripodal, a cement-less prosthesis for the trapezium-metacarpal joint [7]; ministaple in bio-resorbable material (poly-L-lactic acid), for osteosynthesis of fractures of the carpal scaphoid [8]; a two stage early surgical treatment for radial club hand, by a radial-palmar release, external skeletal distraction and atraumatic centralization[9]. He retired on 1 November 1997 as Full Professor of Orthopaedics and Director of the Institute of the Orthopaedic Clinic at the University of Modena. His place was taken by Prof. Luigi Celli. In 2001 during the IFSSH Congress in Istanbul, Professor Bedeschi was recognized as 'Pioneer of Hand Surgery', and in 2003 he was nominated Honorary President of the Italian Society for Surgery of the Hand.
The 4th FESSH Congress was held in Bologna in June 1997. The President of the Congress was Dr. Antonio Landi and the honorary President was Prof. Alessandro Caroli (Fig. 3).

The lecturers of the instructional course of the Congress on "Stiffness of the joints of the upper limb" were: Stephen A. Copeland for the shoulder, Norbert Gschwend for the elbow and Philippe Saffar and Antonio Landi for the wrist and hand. This complex topic was published in English as a monograph [10].

On1 November 1997 Alessandro Caroli retired as the Director of the Hand Surgery and Microsurgery Unit at the Polyclinic of Modena, and was succeeded by Antonio Landi.

Figure. 3 Bologna, June 1997, 4th FESSH Congress. Prof. Alessandro Caroli, honorary President of the Congress (left), delivers to Dr. Antonio Landi, President of the Congress (right), the collection of medals representing the logo of the previous FESSH Congresses.

In 1998 the Modena Hand Unit was upgraded by a generous allocation of 440 million Italian Lire, assigned by the Regional Health Authority of Emilia-Romagna.

In collaboration with Prof. Antonietta Vannini, Medical Director of the Rehabilitation Institute of Montecatone, which looked after patients who suffered from upper limb spasticity and tetraplegia, Antonio Landi with Mikael Keith were able to do two neuro-contol system implants on patients with the aim of restoring active control of their paralysed hands in 1998.

The Consensus Conference on Replantation and Human Hand Transplantation

The Hand Unit of Modena raised the issue within SICM regarding the necessity to establish a national coordination system to deal with "micro-vascular casualties" all over Italy. A committee was approved and named CUMI (Coordinamento Urgenze Microvascolari Italia) and was directed by Paolo Bedeschi and Antonio Landi as the secretary.

Figure. 4 The logo of CUMI was designed by Rita Castellini, a qualified anatomical illustrator at the Rizzoli Institute. The Country of Italy lies on the palm of the hand surrounded by "the white" amputated fingers.

An appropriate logo was designed and it included a green direct access telephone number. The operative centre was set up in the Modena Polyclinic (fig. 4).

In March 1999 the first European Consensus Conference on replants and Human Hand Transplantation was held in Modena and the proceedings, in Italian and English, were published in a dedicated issue of the Italian Journal of Hand Surgery [11].

At the Conference a questionnaire was compiled, approved by the FESSH Council, and sent to 132 European Hand Centres. The questions were grouped into three sections: organisational features, management and coordination and clinical aspects. Questions coved aspects such as: indication and contraindication for replantation of a single digit, multiple digits and the sequence of replantation; the implications of chemical contamination of the amputated parts; exposure to physical agents (eg. replantation of burned and frozen parts); replantation of hand and digits in organ-transplanted patients; etc.

Fifteen Centres in this survey encountered medico-legal problems, but the surgeons were never prosecuted. Only in one case was there a compensation of 120,000 Euro paid by the Hospital [11].
The FESSH Council delegated David Elliot and Antonio Landi, supported by the then Secretary-General of FESSH Ann Nachemson, to compile a booklet on the consensus details. This document was distributed to the Delegates of the FESSH Meeting in Amsterdam in May 2002 [12].

The Consensus Conference on Human Hand Transplantation was preceded by an award ceremony. An Honorary Degree by the University of Bologna was bestowed on Professor Göran Lundborg of Sweden in the Great Hall of St. Lucia on 5 March 1999 (fig. 5).

The Consensus Conference on Human Hand Transplant was initiated in part by the first hand transplant done by Dr. Jean-Michel Dubernard in Lyon, France, on 23 September 1998, who described in great detail the

surgical procedure, the anti-rejection therapy, early complications and the patient status six months post-operation. On a follow-up, Prof. M. Merle, President of the French Society for Surgery of the Hand (GEM) was allowed to do a clinical examination on the patient and concluded that the functional outcome was extremely poor. He also remarked about the "premature" media reporting and the unfortunate hype this incident has caused. The same sentiment was expressed by colleagues from America, Sweden, Finland and the Italian Society of Surgery of the Hand [11].

Figure. 5 The ceremony of Laurea honoris causa: Prof. Marchetti precedes Prof. Lundborg.

The longstanding interest in Brachial Plexus Injuries

In the early seventies several surgeons from all over Europe (H. Millesi, Y. Allieu, A. Gilbert, M. Merle, E. Morelli, G. Brunelli, R. Vigasio, L. Celli, P. Raimondi, A. Berger, A.C. J. Slooff, R. Birch and many other international surgeons) began to gather in the Clinique Longeraie in Avenue 9 De la Gare in Lausanne, Switzerland, under the leadership of Algimantas O. Narakas, to discuss the management of brachial plexus injuries. Even after his death in 1993, this 3 yearly meeting continued as the Algimantas Narakas Club. Sir Sidney Sunderland attended these meetings regularly, taking notes like a student, and at the same time sharing his enormous expertise with other attendees (fig. 6).

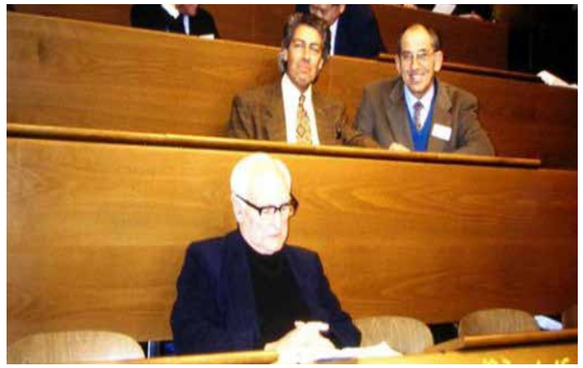

Figure. 6 Prof. Sunderland seated in the first row. Prof. Giorgio Brunelli and Dr. P. Raimondi are seated in the back.

The rapid development of early brachial plexus surgery was also taken up in 1976 at the Orthopaedic Institute in Modena by Celli, Mingione, Rovesta and Landi.

Landi spent two years from 1976 to 1978 as a clinical lecturer at the Royal National Orthopaedic Hospital (RNOH) in the Hand and PNI Unit headed by D.M. Brooks and C.B. Wynn Parry. During this period, he focused his attention on two main topics: the value of the Tinel sign in the brachial plexus lesions[13] and the role of the somatosensory evoked potential (SEPs) as a diagnostic tool in brachial plexus lesions [14]. He was invited back in November 2008 by R Birch to the 7th International Meeting on Brachial Plexus Injuries to share his extensive experience on SEPs.

Modena: The '24hour First Aid Service' and the establishment of 'Congenital Deformities of the Hand Clinic'.

In order to function optimally as a "24hour First Aid Service" for hand injuries for the Emilia-Romagna Region, a dedicated area was assigned at the hospital with its own two emergency theatres.

Also during 2004, the national congress of SICM was held in Sardinia. The main topic was "The upper limb and perinatal pathologies". This triggered the establishment of the Congenital Deformity Outpatient Clinic which was regularly attended by the professor of Paediatrics S. Bernasconi, the head of the Orthopaedic Paediatrics Unit of Rizzoli Institute O. Donzelli, the geneticist A. Percesepe and the expert in rare diseases P. Ferrari. This unit became a national centre for congenital hand dysplasias. Many publications have flowed from this collaboration over the years [15-21]

Dissection on cadavers

Cadaveric dissection was historically influenced by Catholic Church as it was prohibited by Pope Bonifacio VIII (1230-1294 ca). Subsequently a Papal Bull by Sisto V, a former student of the University of Bologna, in 1471 restablished the possibility to perform anatomical dissection by medical students. The Bulla was reinforced by Pope Clemente VII in 1523.

Following a further period of denial by the Church, Prospero Lambertini (1675-1758), Archibishop of Bologna was elected Pope with the name of Benedetto XIV and thanks to his Catholic enlightened spirit, cadaveric dissections were again allowed.

But unfortunately a new long period of obscurantism was enacted by the Royal Decree of 1933 (and is still in force!), which prohibited this practice once again. However the importation of cadaveric frozen parts from abroad were ultimately considered legal and workshops, mainly in the arthroscopic field, are now carried out on regular basis in Italy.

During the ban Italian Hand Surgeons did their anatomic dissections abroad, notably in France, thanks to the friendly relationship between F. Darin and A. Masquelet, at the University Descartes in Rue des Saints-Pères, Paris.

A number of junior members of SICM received € 500 bursary each from the Society to practice their surgical procedures in Paris. The teaching faculty included A. Masquelet, P. Raimondi, M. Ceruso, A. Landi and A. Gilbert (fig. 7 A-7 B).

Figure. 7A The Italian participants to the Course with Dr. F. Darin at the centre of the picture.

Figure. 7B Dr. A. Gilbert looking after the trainees: Dr. M. Abate in the front and Dr. A. Leti (right) and Dr. N. Della Rosa on the left in the back.

The Master's Degree in Hand Surgery

In 2005-2006 the Chancellor of the University of Modena G. Pellacani approved the creation of the Master in Hand Surgery Degree in order to re-establish a training program for the whole of Italy, which has been deprived of its independent specialisation in accordance to the new European rules. A. Leti was the driving force in coordinating this process.

In 2008 the Hand Unit in Modena was selected by IBRA (International Bone Research Association) as its centre in Italy. In September 2009 Landi was appointed Chief

of the Department of the Pathologies of the Locomotor System.

Accreditation of the Hand Trauma Centre in Modena was confirmed by FESSH in 2009.

The "Aboriginal Guild"

During the period from 2010 to 2013 the Policlinic of Modena went through a critical time due to various political conflicts regarding the administration of the two main hospitals of the city. The medical units and the administrative personnel of these two hospitals were unnecessarily duplicated and obstinately maintained by politicians. Funds to maintain this duplication was diverted from the medical departments.

The vast majority of medical and paramedical personnel, disillusioned and disgruntled, under the leadership of the Thoracic Unit, U Morandi and the input from the Hand unit, founded the "The Aboriginal Guild" (named after the Aborigines of Arnhem Land of the Northern Territory of Australia, who declined to exploit the uranium discovered in their Reserve). This led to the establishment of the Teaching Hospital of Modena in 2016.

The graduates of the Modena School

Apart from the above achievements by individuals associated with the University-Hospital Polyclinic of Modena, graduates from this institution exceled in various other ways:

- Prof. L. Celli published the volume "Treatment of the elbow lesion: new aspects in diagnosis and surgical techniques" in collaboration with A. Celli and B. Morrey.
- Dr. Oliviero Soragni, former president of SICM (1993-95) became the Director of the Orthopaedic and Hand Unit in the Republic of San Marino. In the 1980s he introduced wrist arthroscopy in Italy.
- Dr. Pederzini who was trained by S. Copeland in the UK, as well as by T. Rosenberg, J. Roth and T. Whipple became one of the international experts in elbow joint arthroscopy.
- Dr. R. Luchetti, president of SICM from 2013 to 2015, was also president of EWAS. The FESSH Congress will return to Italy for the third time (after Bologna and Milan) in 2023 in Rimini under his presidency.
- Prof. G. De Santis switched to Plastic Surgery after his training in the O'Brien Unit in Melbourne, and in 2009 was appointed full Professor in the University of Modena. He was the President of the World Congress of Microsurgery held in Bologna in June 2019.
- Dr. R. Adani, also a former President of SICM as well as of SIM (Italian Society of Microsurgery) started his career with A. Caroli in Modena and as a microsurgery research fellow in 1989 in the University of Singapore with R. Pho. He was Head of the Hand Unit of Verona from 2008 to 2015, and has now succeeded Antonio Landi and as the Head of the Hand Unit in the Department of Orthopaedics in Modena.

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2021 World Symposium on Congenital Malformations of the Hand and Upper Limb

Minneapolis, Minnesota, USA . May 20-22, 2021

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Abstract Submission are now open for the 2021 World Symposium on Congenital Malformations of the Hand and Upper Limb.
The meeting will take place in Minneapolis, Minnesota, 19-22 May 2021

This meeting is designed to provide attendees with a practice update and high-level forum on the current state of limb development, assessment, classification, and treatment. The international panel of speakers and attendees will share scientific presentations and cases to foster discussion together with expert Symposia on critical areas of focus. The Faculty are recognized experts in congenital hand and upper limb malformations and have been selected for their knowledge, expertise, and contributions in this area. Social events will encourage further discussion and relationship development amongst the international attendees.

We encourage you to participate in the meeting by submitting an abstract for a paper or poster presentation.
Registration for this meeting will open in the Fall.
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The British Society for Surgery of the Hand

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13-14 December 2020 (Sunday - Monday)
Hands-on Wrist Arthroscopy Workshops
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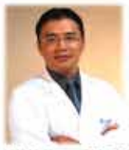
Course Director 课程主任: PC HO 何百昌


Mark BARATZ (USA 美国)


Eva-Maria BAUR (Germany 德国)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Worcester College

Dear Colleagues, Dear Friends,

The next Event of the Belgian Hand Group will take place in Antwerp A cadaver course is will take place on **Friday 9 October** with Frederik Verstreken, Pascal Ledoux, Bruno Lussier and others. One part of the cadaver course is devoted to the trapeziometacarpal prosthesis and another part to some others prosthesis and technics.

The Congress on **Saturday 10 October** is on "*State of the Art of the Trapeziometacarpal Arthritis*" with *Pascal Ledoux* as guest of honour. Others several high-profile speakers from Belgium and abroad have been invited to share their knowledge and experience on this topic.

The topics of the Congress are:

- Anatomy Imagery Biomechanics
- Results Complications
- TMC arthritis in young people
- Pantrapezial arthritis
- National register in Belgium
- Radioprotection Session

Info & Registration on https://belgianhandgroup.be/congress/

I hope to see you in Antwerp,

Best regards,

Anne Lejeune
Belgian Hand Group President