

ezine
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CONNECTING OUR GLOBAL HAND SURGERY FAMILY

HAND THERAPY
WHAT IS IT LIKE TO PROVIDE
HAND CARE IN A WAR ZONE?

OBITUARIES

Complex dislocation of the PIP Joint



HIGH PRESSURE INJECTION INJURIES
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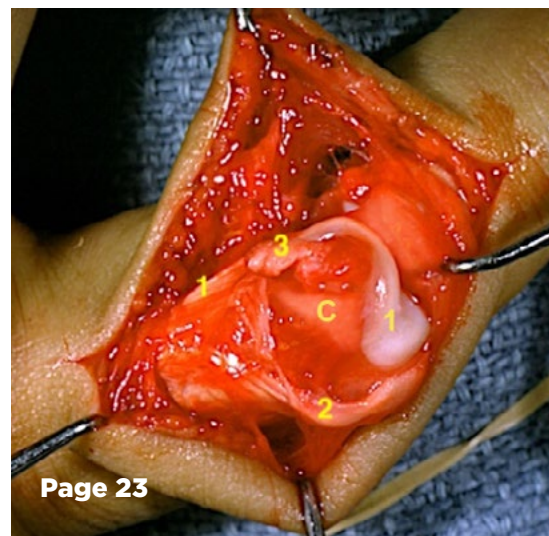
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We acknowledge the generous donations to date and thank the donors for their commitment to furthering the work of the IFSSH



https://ifssh.info/hand_surgery_donation_program.php

DO WE
*convert knowledge
into wisdom?*

Knowledge asks: Is it true?

Knowledge is the accumulation of facts and information that we gain through learning, study, experimentation, and experience. We go to school, college, university, do fellowships, attend seminars and congresses. It is the evidence we need to understand. It is the essence of science.

Wisdom asks: How do you apply it?

Wisdom is the way we apply accumulated knowledge wisely, appropriately, honestly, and justly. It is gained by close observation, careful reflection, and genuine humility. It learns from mistakes and considers the consequences of actions.

We spend much time, effort and money gathering information.

How much time, effort, and energy do we put into evaluating our judgements, our decision-making, and appropriate actions? And especially analysing the results of our actions honestly?

Understandably, with a busy practice, it is difficult to set aside time for reflection.

But practising wisdom is essential to grow as a doctor, to offer a better service, and to become a more gratified person.

Make time and become wise. Happy hand surgery,



ULRICH MENNEN
Editor

*‘Be the change
that you want
to see’*

We had the annual meeting of the Indian Society for Surgery of the Hand last fortnight, and I was privileged to deliver the Prof. R. Venkataswami Oration, named after my teacher. The organisers chose the title, ‘Be the change that you want to see’, a saying attributed to Mahatma Gandhi. I immediately said that I had already spoken on the topic at ASSH as the International Guest lecturer. To that, the ISSH Secretary, Dr Praveen, said, ‘Sir, you can always speak differently’. I accepted, remembering the words of Heraclitus, the Greek philosopher, ‘No man steps into the same river twice, for it is not the same river and he is not the same man’.

When Martin Boyer, the President of ASSH in 2020, chose the topic for the International Guest Lecturer talk, he told me, ‘Raja, you just speak on how and what you did at Ganga’. This time, I thought about the same title, ‘Be the change that you want to see’, and felt the most important word was the word ‘see’. First, you need to ‘see’ to make any meaningful change. I found that all major social and professional breakthroughs have been made by people who ‘saw’ something beyond themselves. So that became the basis of my talk. That will also form the basis of this President’s message for our current Ezine issue.

Mahatma Gandhi ‘saw’ that he needed an inspirational weapon to unite a country like India, which was culturally, religiously, and linguistically diverse. He chose non-violence and practised it.

Prof Venkataswami wanted to provide quality hand surgery to the working class of North Madras. His conviction led him to draw a red line from the gates of the hospital to the hand injury unit with the slogan ‘People with a hand injury, please follow the red line’. He did this in the 1970s, and the unit soon attended to 30 hand-injury patients a day. Harold Kleinert felt that he needed to staff the whole world with Hand Surgeons. And he did not stop the training locally.



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Kleinert used his influence to obtain a waiver from the entrance exams so good overseas surgeons could come to Louisville for hands-on training. As a beneficiary, I know the value of his vision. His trainees led the change in the quality of Hand Surgery practised worldwide, from Argentina to Australia and from Korea to India. Mrs. Sharon Kleinert has extended the legacy by making a substantial donation to the IFSSH to create visiting Professorships and fellowships.

Paul Brand felt that he could do something about the plight of the leprosy patients. They were treated as untouchables, but Brand saw a world where they would also get what they deserved. He worked in the field and proved they could be operated on like other people and heal like normal people. In the process, he pushed the boundaries in tendon transfers. It is all because he saw the need to provide an opportunity for leprosy patients to lead a normal life.

The list could go on and on. All of them had aspirational goals. Coming to recent times, one good feature that has changed the Hand Surgery scenario in India is the 'Train the Trainers' programme conceived by Chaitanya Mudgal, an Indian American from Boston and Santhosh Rath, President of ISSH in 2023. Conceived on the model existent in the AO Foundation common in the United States, it was tailored to the Indian needs and rolled out. It is now 4 years, and we have found that the candidates who were part of the earlier batches are now leading the change in the country for the better. We reviewed the progress, and the results make me believe we could do this as an IFSSH project for all developing countries, particularly in Africa. For change to happen, we need leaders who can 'see' far beyond.

I will attend the inaugural meeting of the Kenyan Society for Surgery of the Hand this November and will explore running such a programme in the future. Don Lalonde has worked hard to increase access to quality hand surgery by pushing the concept of WALANT operating theatres in parts of Africa. IFSSH has partnered in this effort and found that change is possible. Now it is time we develop leaders who can drive the change and make the triennium goal of 'providing quality hand surgery care to the millions who are less privileged' a reality.



S. RAJA SABAPATHY
President: IFSSH

Secretary-General Report



Dear Colleagues,

I am delighted to share the activities of the Executive Committee over the past three months. To better serve our members, the Committee will regularly send surveys to our Delegates to obtain feedback and suggestions and better fulfil our mission. In addition, we have decided to allocate more time to the Council meeting, when Delegates meet in person each year. This will allow face-to-face discussions and feedback from the Delegates of the Societies and Federations to the Executive Committee.

Our Immediate Past President, Dr Daniel Nagle, has been working very diligently to ensure smooth financial processes within the Federation. Several documents have been prepared by him and discussed within the Committee to ensure the proper handling of the Federation's finances in the years to come. We thank Daniel for his wisdom, knowledge, and great dedication to this important matter for the Federation.

I also draw your attention to the recent changes led by our Communications Director, Dr Aida Garcia Gomez, in our social media. The Instagram and Facebook accounts have been upgraded to have better content and visual design, timely posts on educational activities and event updates, and incorporation of educational components. "Tips and Tricks in 60 seconds" is a new feature, while "Mini Journal and Book Club" provides a forum to share the views of colleagues worldwide on published information. On our website, selected lecture videos from the 2025 Congress are now available. For those who did not attend the IFSSH Congress in Washington DC, USA, this is a great chance to listen to the highlighted lectures of this Congress. I hope you enjoy these educational features. We look forward to further enriching them.

Best regards,



JIN BO TANG
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IN MEMORIAM:

Martti Vastamäki

(1943–2025)



The international hand surgery community has lost one of its most brilliant pioneers. Professor Martti Vastamäki, MD, PhD, passed away on 4 December 2025, in Finland.

Born in Helsinki in 1943, Martti Vastamäki grew up on a farm in Kuusisto, Kaarina, a rural background that instilled in him an extraordinary work ethic. Graduating in 1969, he made medical history by practicing actively as a physician and surgeon across seven different decades (from the 1960s to the 2020s). He treated an estimated 100,000 patients and continued performing surgeries well into his 80s. Throughout this lifelong devotion, his wife, a pioneering emergency polyclinic head-nurse Anita Vastamäki, stood by his side as his support.

His main clinical tenure was spent at the Orthopaedic Hospital of the Invalid Foundation (later Hospital Orton), where he headed the Hand Surgery Department. Professor Vastamäki's academic legacy is profound; he authored numerous textbooks, organised countless courses, and supervised doctoral dissertations on topics ranging from nerve entrapments to Kienböck's disease and frozen shoulders. He knew the scientific literature of his field by heart, mastering research designs and theoretical discussions with a rare ability to place historical publications instantly into modern context.

Professor Vastamäki achieved a globally unique "double crown" by receiving the highest international pioneer distinctions in two distinct fields: the Pioneer of Hand Surgery award from the [IFSSH](#) (2016) and the Pioneer of Shoulder and Elbow Surgery title from the ICSS (2019).

As a visionary leader, he put Finnish hand surgery on the global map. In 1976, he was one of the five founding members of the [Finnish Society for Surgery of the Hand](#). He represented Finland as an IFSSH council member and delegate for nearly 20 years, culminating in his role as President of the historic 6th IFSSH World Congress in Helsinki in 1995. Martti Vastamäki founded the Scandinavian-Japanese Shoulder Society, to connect surgeons to share knowledge from different parts of the world.

Alongside surgery, temperance work was a core lifelong pillar; he remained entirely sober throughout his life and actively lectured on the medical dangers of vaping and nicotine just a month before his passing.

Professor Vastamäki never truly retired. In his later years, he cherished time with his granddaughters, driving them to piano and dance lessons, and enthusiastically playing board games with them, such as Blokus and Kivi.

He deeply understood the vital importance of a grandparent's role in guiding, supporting, and passing down lifelong wisdom to the next generation.

He was a true renaissance man with an exceptionally rich persona. He enjoyed competitive poker, choir singing, and demonstrated his endless vitality by learning to play the saxophone after turning 70. This passion also led him to found the [Finnish Association of Musicians' Medicine \(SMULY\)](#), and through his career he personally treated around one thousand professional musicians.

Martti lived a rich and active life until his final moments, maintaining a deep intellectual curiosity. His persona was a seamless composition of profound thought, uncompromising scientific work, human warmth, and a legendary wit. He always knew how to lighten the mood with stories from his career. At the end of this journey, his daughter, Heidi Vastamäki, dedicatedly cared for him during his final weeks in hospice care, and Martti passed away just as he had wished – cradled peacefully in her arms, one year after his wife Anita had passed away in the same hospice care unit. The legacy of this great surgeon, scientist, and joyful artist of life will remain deeply cherished.

Heidi Vastamäki, MD., PhD, Docent in Hand Surgery. The Treasurer and the IFSSH Delegate of the Finnish Society for Surgery of the Hand (fssh.fi)

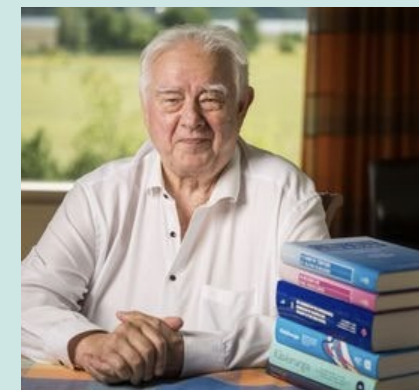
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Young Martti in university laboratory in the 1960s.



Heidi Vastamäki, Timo Raatikainen, S Raja Sabapathy and, Martti Vastamäki at the FESSH Presidential Dinner in June 2025. Professor Martti Vastamäki was the keynote speaker at the FESSH Congress in June 2025. He passed away in December 2025.

Prof. Vastamäki with some of his publications.

IN MEMORIAM:

James Randolph Urbaniak

(1936-2026)



James R. Urbaniak, Distinguished Virginia Flowers Baker Professor and Chief of Orthopaedic Surgery at Duke, emeritus, retired, passed away on 18 July 2026.

Jim was born in Fairmont, West Virginia on 15 May 1936 to Cecil and Patricia Urbaniak.

Cecil was born in Poland and Patricia in Lexington, Kentucky. Jim was the middle child with a brother Joe (now deceased) one year older and a sister, Cecily, nine years younger. Jim graduated valedictorian, was all-state in football, and lettered in basketball and track at West Fairmont Senior High.

Jim was recruited by the legendary Paul "Bear" Bryant with a football scholarship to the University of Kentucky where he lettered three years. He was one of the top three pass receivers in the SEC, All-SEC Scholastic Awardee, recipient of the "WHAS-TV Award for All Around Value to the Team". He graduated with High Distinction from the University of Kentucky.

Jim then attended Duke University Medical School, graduating in 1962. He then completed an Orthopaedic residency at Duke in 1969, with a tour of duty from 1963-1965 serving in the U.S. Navy as the Attending Physician to the United States Congress and Supreme Court.

Jim joined the Duke Orthopaedic faculty in 1969 and was awarded the Distinguished Virginia Flowers Baker Chair and served as the Chief of the Division of Orthopaedic Surgery from 1985-2002. His academic accomplishments and contributions in Orthopaedic Surgery are legendary. He pioneered research and clinical microsurgery in reconstruction of musculoskeletal disorders.

“A patient cares more about how much you care than how much you know”

He replanted more than 1500 amputated body parts. His major contribution was the pioneering treatment of avascular necrosis of the femoral head by free vascularized fibular grafting. He and his team performed more than 3500 of these procedures to salvage hips in young patients. He presented more than 400 lectures in 40 countries, published over 300 articles in peer reviewed scientific journals, and authored 14 textbooks. He mentored more than 400 residents and 200 fellows, many of whom were international.

Jim received many awards for his contributions and leadership. Among them are: Kentucky Colonel, American Orthopaedic Association (AOA), American British Canadian Travel Fellow (ABC Fellow), American Academy of Orthopaedic Surgeons (AAOS) Distinguished Achievement Award, Kappa Delta Award for Outstanding Research, Distinguished Southern Orthopaedic Surgeon, International Federation of Societies for Surgery of the Hand (IFSSH) Pioneer Award, Duke Orthopaedic Teaching Award (awarded twice), William Anlyan Lifetime Achievement Award, American College of Surgeons Elmir Nix Award for Ethics and Sheen Award for Lifetime Achievement, Master Surgeon by Duke Department of Surgery and Duke Department of Orthopaedic Surgery, Orthopaedic Research and Education Foundation Lifetime Service Award, the Bristol-Myers Squibb/Zimmer Award for Distinguished Achievement in Orthopaedics, the establishment of the James R. Urbaniak Chair, and the dedication of the James R. Urbaniak Sports Science Institute at Duke.

Jim served as President and Chair of the Board of several national and international organisations including: American Orthopaedic Association, American Society for Surgery of the Hand, American Society for Reconstructive Microsurgery, Eastern Orthopaedic Association, International Federation of Societies for Surgery of the Hand, American Board of Orthopaedic Surgery, Orthopaedic Research and Education Foundation, and Journal of Bone and Joint Surgery.

Jim's contributions to life go far beyond his pioneer work in microsurgical reconstruction of the musculoskeletal system. He was beloved by his trainees and colleagues for his compassionate care of his patients, sense of humour, moral integrity, kindness, and respect for others. He committed tireless investment and elevation of those around him. His calm demeanour made him approachable by all, and he had tremendous impact on the lives of his many trainees, colleagues, and patients!

For decades he worked with Duke Athletics and the Sports Medicine team in the care of upper extremity injuries of Duke athletes. He played a pivotal role in introducing multidisciplinary care to athletes, ensuring they received the most comprehensive and effective treatment. He was an avid Duke fan and for 65 years he did not miss a Duke football or basketball home game unless he was out of town or in the operating room.

Jim treasured precious time with his family, swimming, and fishing at the North Carolina beaches in the summer, skiing in the Colorado mountains in winter and traveling, especially to historic sights, and golfing.

Jim's enduring legacy continues and is disseminated through the numerous physicians he trained and mentored, and the countless patients' lives that have been impacted by his compassionate care. One of his favourite quotes was "a patient cares more about how much you care than how much you know". He lived out this quote not only by his words but also by his actions which spoke louder than his words. It is impossible to list the endless caring gestures and sometimes quite extraordinary things he did for his patients and their families, the residents and fellows and their families, his own family, friends, neighbours, and simply anyone he met.

He cared not only about whatever orthopaedic concern there was and was a master at diagnosing and treating, but he also cared about every aspect of the person. His life was defined by humility and selflessness – always having the deepest empathy for others and always willing to put the well-being of others before his own as evidenced by the sleepless nights spent in the operating room only to appear in clinic the next day cheerfully greeting the staff and the patients and giving them his complete and unparalleled attention, expertise and skill.

The saying among the orthopaedic residents at Duke “we stand on the shoulders of giants” could not be more appropriate in describing how Jim Urbaniak (the greatest of giants) affected those around him – always elevating others - enabling them to achieve and succeed because of his guidance and belief in them.

He leaves behind his Piedmont family who feel his loss with a profound sense of grief – a family made up of faculty and all orthopaedic surgeons who ever trained at Duke. This is a family not by blood or even by shared experiences but is rather a family because of the love he had for each Piedmont Society member and their family, and the love he fostered within that community. There is no doubt that the values and lessons he instilled in this society will improve the lives of thousands of others because of the foundation he established. The Piedmont family is deeply committed to one another and owes that commitment to Jim and Muff.

One of his students was asked if she would like to have any of Dr. Urbaniak’s hand textbooks. She replied, “Absolutely! Anything that has touched Dr Urbaniak is a treasure. Everyone is so touched by his legacy”. Truer words have never been spoken.

Dr. Urbaniak is survived by his wife, Martha (Muff) who was born in Summit New Jersey and graduated from Duke University School of Nursing. Jim and Muff had 56 years of a very happy marriage. They have 2 children, Kathi and Michael and 2 grandchildren, Hex and Grayson. Jim attributed Muff with her steadfast love, constant elevation, and tireless assistance as a major factor in his successful career!.

“Always elevating others – enabling them to achieve and succeed because of his guidance and belief in them”

IN MEMORIAM:

Carl-Göran Hagert (1933–2026)



My beloved father, Professor Emeritus Carl-Göran Hagert, passed away on October 6, 2026. One of Sweden’s first hand surgeons, he devoted his professional life to advancing our specialty, teaching future generations, and helping patients through exceptional clinical skill and compassionate care.

He received his medical degree from the University of Gothenburg in 1963. In 1967, the year hand surgery became an independent specialty in Sweden, he began his specialist training under Professor Erik Moberg. In 1969, he completed a fellowship with Professor Alfred Swanson in Grand Rapids, Michigan. He became board certified in orthopaedics in 1972 and in hand surgery in 1973.

In 1975, he earned his PhD at the University of Gothenburg with the thesis “Metacarpophalangeal joint implants: an experimental and clinical roentgenographic study”. Fifty years later, in 2025, the university honoured him as a Jubilee Doctor.

From 1975 to 1985, he served as Co-Chairman of the Department of Hand Surgery at Sahlgrenska University Hospital in Gothenburg. He subsequently established hand surgery in Kuwait, serving as Associate Professor and Chief of Hand Surgery at Kuwait University Hospital from 1985 to 1990.

He returned to Sweden as Chief of Hand Surgery at Lund University Hospital from 1990 to 1998, before becoming the Willie White Visiting Professor of Surgery at the University of Pittsburgh from 1998 to 2001.

Recognized by the IFSSH as a Pioneer of Hand Surgery in Berlin 2019, he conceptualized the “forearm joint” and made groundbreaking contributions to the understanding of the distal radioulnar joint and triangular fibrocartilage. His research combined anatomical and biomechanical understanding with careful clinical observation. He was particularly devoted to recognizing nerve compressions and subtle motor deficits, including what he described as “the M4 hidden paresis”.

His first scientific publication appeared in 1959, and he co-authored his final scientific paper in 2023, at the age of 90; a scientific career spanning more than six decades. He published more than 40 international scientific papers and contributed 12 textbook chapters.

Together with Erik Moberg, he co-authored "Splinting in Hand Therapy", published in 1984. His innovations included minimally invasive fixation systems for distal radius and distal radioulnar fractures, and the ISOP isometric muscle measurement device.

“He offered them his surgical skill, his time and his heart”

An exceptionally dedicated teacher, he educated and mentored medical students, surgeons and hand therapists across Sweden, Kuwait and the United States. He served as Secretary of the Scandinavian Society for Surgery of the Hand, Scientific Secretary of the Swedish Society for Surgery of the Hand, and Co-Chairman of the IFSSH Evaluation Committee. He was an ASSH member since 1990.

His devotion to patients was at the heart of everything he did. Many came to him after years of pain without an explanation. He listened, believed in the reality of their suffering, and kept searching for answers. He offered them his surgical skill, his time and his heart.

As his daughter and a fellow hand surgeon, I shared an extraordinary bond with him. He taught me an incredible amount about our field: how to examine carefully, recognize hidden weakness, and find what might otherwise be overlooked. Just as deeply, he taught me about empathy, compassion and the responsibility of caring for another person. His teachings remain central to the way I care for my own patients. Sharing both a family bond and a profession with him has been one of the greatest gifts of my life.

He was a man of warmth, grace and deep faith, grounded in his love of family and his belief in God.

He often quoted Hippocrates: "Cure sometimes, heal often, comfort always." I will always hear those words in his voice.

I loved him deeply. I will remember him with immense gratitude as an extraordinary surgeon, a pioneer in our field, and my beloved Pappa.

He is mourned by his wife Carin, his life partner of 72 years, his six children, 13 grandchildren and three great-grandchildren.

Elisabet Hagert, MD, PhD

Daughter and fellow hand surgeon

Art Exhibit #29

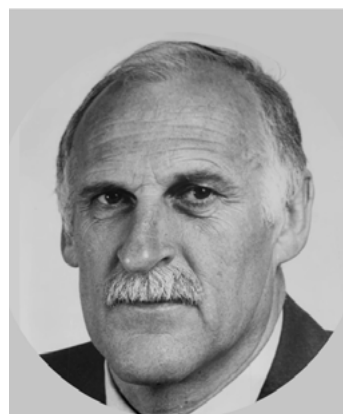


“Ephemerera”

Artist: [Mark Messenger](#) (American) | Medium: ceramic
Symbolism: life, action, creation, and inevitable mortality.

Philip Sykes

1939



Philip J. Sykes was born in Fleetwood, Lancashire, United Kingdom in 1939. He was educated in Cambridge and at the Middlesex Hospital and earned his medical degrees in 1964. His surgical qualification (FRCS England) was obtained in 1968. He then did a microsurgery fellowship with Bruce Baily in Stoke Mandeville and with Bernie O'Brien in Australia.

Sykes became Consultant Plastic Surgeon at St. Lawrence Hospital in Chepstow, UK, and concurrently served as an Honorary Clinical Teacher at the University of Wales College of Medicine in Cardiff.

He went on to develop national training symposia in both plastic surgery and hand surgery. His particular interest in rheumatoid arthritis, congenital anomalies, and complex reconstruction after trauma made Sykes not only a sought-after surgeon but also a gifted teacher, one who inspired many of his trainees. He has published widely and co-authored a book on the History of Plastic Surgery.

Sykes was President of the British Society for Surgery of the Hand in 1992, and the British Association of Plastic Surgeons in 1994. He served as Chairman and Examiner for the Intercollegiate Board in Plastic Surgery from 1989 to 1991. In 1998 he was recognised for his outstanding contribution to surgery with an OBE (Officer of the Order of the British Empire).

At the 2010 International Triennial Congress of the IFSSH in Seoul, Korea, Philip Sykes was honoured as 'Pioneer of Hand Surgery'

Joel Engel

1936



Joel Engel was born on 27 April 1936. From 1954 to 1956 he served in the Israel Infantry and Medical Corp. He went to Medical School in Freiburg (1956-1959) and Zurich (1959-1962) in Switzerland. After qualifying he did several Fellowships: Hand Surgery with R. Tubiana in Paris, France (1969), Rheumatoid Arthritis with K. Vanio in Heinola, Finland (1973), Hand Surgery with H. Kleinert in Louisville, Kentucky, USA. (1974), Congenital Hand Surgery with R. Carroll in New York, USA. (1974), Rheumatoid Surgery with Nalebuff in Boston, USA. (1974) and Microsurgery with J. Tupper in San Francisco, USA. (1975).

He was appointed Chairman of Orthopaedic Surgery at the Tel Aviv University in Israel, Director of Hand Surgery at the Chaim Sheba Medical Centre, Tel-Hashomer, Israel and Consultant Hand Surgeon, Afula Hospital, Israel.

Engel was member of numerous organisations including Israeli Surgical Society, Israeli Orthopaedic Society, Israeli Hand Club (President, 1977), American Association for Society of the Hand, Israeli Plastic Surgery Society, British Society for Surgery of the Hand, Societe Internationale de Chirurgie Orthopedique (SICOT), Israeli Society for Sports Medicine, American Foundation for Hand Surgery, New York Academy of Sciences and Japanese Society for Surgery of the Hand.

In 1989 Joel Engel was the hosting organiser of the 4th Congress of the IFSSH in Tel Aviv, Israel.

He published a book, 7 book chapters and over 100 articles. Engel was invited as visiting professor multiple times.

Joel Engel was named "Pioneer of Hand Surgery" at the 11th Triennial Congress of the IFSSH in Seoul, Korea in 2010.



VOLUME 10, NUMBER 6

HIGH PRESSURE INJECTION INJURIES A Deceptively Benign Wound That Demands an Emergent Work-up

Hand Surgery Resource provides concise, evidence-based education on hand trauma diagnosis and management. This issue reviews high-pressure injection injuries (HPII) of the hand, an uncommon but limb-threatening emergency.

Introduction

High-pressure injection injuries (HPII) are uncommon but limb-threatening emergencies that often present with deceptively benign wounds. A thorough history of the substance injected, pressure of injection, timing, work setting, and safety protocols used is essential.

Most cases need prompt, extensive debridement; patient education about the injury's hidden severity is key.

Pathophysiology

Pressures near 100 psi can breach intact skin. Injected material tracks along the path of least resistance, often along neurovascular structures, until blocked by tendons, pulleys, or bone. Tissue necrosis and vascular thrombosis can appear within 1.5 hours of injection.

Related Anatomy

Skin, flexor tendons, the flexor sheath, digital nerves, and digital arteries are most commonly involved.

Incidence and Related Conditions

HPII cause roughly 1 in 600 hand traumas, occur in 92-99% of cases in men, and most often involve the non-dominant index finger. Related conditions include irritant and vesicant IV extravasation and accidental epinephrine autoinjector injection.



Differential Diagnosis

HPII (work-related or self-harm), IV extravasation, puncture wounds, and flexor tenosynovitis.

Symptoms

Initial presentation is often a painless, minor-looking puncture. Hours later, edema, pallor, and severe pain develop, sometimes mimicking digital compartment syndrome.

Typical History

A 40-year-old male laborer injects his non-dominant index finger with a high-pressure paint gun at work. The wound looks trivial, so he delays care. Within an hour, worsening pain, swelling, and erythema prompt an ER visit. This is a common clinical scenario.

Examination

Document entry and exit wounds, assess perfusion, capillary refill, and sensation, and test tendon function. True injury extent is often unclear until debridement.

Workup Options

Baseline labs, plain radiographs for subcutaneous air or radiopaque material, and ultrasound help characterize injected material and tissue involvement. Imaging may help document the proximal extent of the injection which can guide the area requiring debridement.

Conservative Treatment

Reserved for select cases with known benign materials (saline, air, certain animal vaccines without oil adjuvant): tetanus prophylaxis, antibiotics, elevation, close monitoring. Worsening signs mandate prompt surgical reevaluation.

Operative Treatment

Most injections, especially oils, like hydraulic fluid, solvents, and vesicant extravasations, need urgent, wide debridement, compartment decompression, and tendon sheath exploration, ideally with magnification to protect neurovascular structures. Negative-pressure therapy and staged re-irrigation reduce residual contamination. For extravasation, particularly of cytotoxic drugs, the Gault flush-out technique (lidocaine, hyaluronidase, stab incisions, saline irrigation) is a useful adjunct, especially in children.

Complications

Non-operative management of oils or cytotoxic agents carries up to an 88% amputation rate. Digital stiffness and weak grip/pinch are common even after timely surgery.

Outcomes

Early debridement is linked to 16-38% amputation rates, rising to 58% when surgery is delayed past six hours. Stiffness and hypersensitivity are frequent; hand therapy is essential for maximizing recovery.

Key Educational Points

Examine for entry and exit wounds; true severity is rarely apparent before debridement. Serial X-rays can detect retained material. Most injections need immediate formal debridement, since delay raises morbidity and amputation risk. Solvents and oil-based materials carry the highest risk. Gault-treated patients need daily monitoring for compartment syndrome or necrosis.

Recent References

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VOLUME 10, NUMBER 7

COMPLEX DISLOCATION OF THE PIP JOINT
When the “Jammed Finger” Won’t Reduce

Hand Surgery Resource provides concise, evidence-based education on hand trauma diagnosis and management. This issue reviews complex (irreducible) proximal interphalangeal (PIP) joint dislocations, a rare but surgically urgent variant of the common finger PIP dislocation.

Introduction

Complex, or irreducible, PIP joint dislocations are a rare but critical variant of a common hand injury, the PIP dislocation. Unlike simple dislocations, closed reduction always fails because the proximal phalanx head and neck becomes trapped by tendons or soft tissue like the collateral ligament or the lateral band of the extensor hood becomes entrapped in the joint and prevents an anatomic reduction.

Early recognition prevents repeated failed reduction attempts and prevents delaying the required surgery needed for these harder-to-treat injuries.



Fig. 1: Complex dislocation of the left long finger after failed closed reduction attempt.

Pathophysiology

A deviation force first ruptures the collateral ligament then further flexion, deviation, and torsion split the lateral band off the central slip, forcing it over the proximal phalanx condyle and into the joint. At times the deforming force continues until it also ruptures the central slip. In volar complex dislocations, the proximal phalanx head becomes trapped between the flexor digitorum superficialis and flexor digitorum profundus thus blocking a successful closed reduction.

Related Anatomy

Central slip, lateral bands, proper and accessory collateral ligaments, volar plate, flexor digitorum superficialis and profundus, and the head of the proximal phalanx.

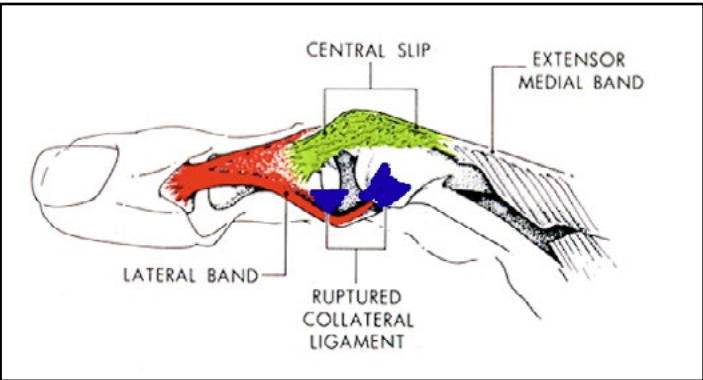


Fig. 2: Complex dislocation of the left long finger pathoanatomy with ruptured collateral ligament (blue), lateral band torn off the edge of the central slip and displaced into joint (red), and intact central slip (green).

Incidence and Related Conditions

PIP dislocation is a very common hand injury; the complex, irreducible subtype is very rare and usually closed, though about one-fifth are open injuries. Related conditions include proximal and middle phalanx fractures, collateral ligament and volar plate injuries, and central slip rupture.

Differential Diagnosis

Simple, reducible PIP dislocation, PIP fracture-dislocation, isolated central slip rupture (boutonniere), and collateral ligament injury without dislocation.

Symptoms

Finger deformity, ecchymosis, swelling of the PIP joint, and joint pain following digital trauma. Sideline reduction attempts typically fail or only partially correct the deformity.

Typical History

A young athlete sustains a flexion-torsion injury to the finger while tackling or catching. The finger appears deformed; a coach or teammate attempts to “pop it back in,” but the joint remains malaligned, and the player presents later with persistent pain and deformity. A dog leash wrapped around a finger can also provide the torsional trauma needed to produce a complex PIP dislocation.

Examination

A gentle reduction attempt under digital block fails, confirming the diagnosis. Collateral ligament stability, tendon function, and neurovascular status should all be assessed as accurately as possible. Open dislocations should be diagnosed by a careful exam of all associated skin lacerations. After a failed closed reduction, the digit often remains deviated and malrotated.

Workup Options

AP radiographs can show a widened joint space; lateral views may appear partially oblique due to rotational deformity at the PIP joint level. Although rarely needed, MRI can identify trapped interarticular soft tissue when other imaging is equivocal and the clinical situation isn’t clear.

Conservative Treatment

True complex dislocations cannot be managed conservatively, since closed reduction always fails. Splinting or buddy taping is appropriate only after confirming a stable, reduced, simple dislocation.

Operative Treatment

Early diagnosis should prompt open reduction with extraction of the trapped lateral band or collateral ligament and anatomic repair of all injured structures. Postoperative dynamic extension splinting and early motion protocols improve functional recovery.



Fig. 3: In a complex PIP dislocation initially a deviation force ruptures the collateral ligament (3). Next additional flexion and torsion split the lateral band (1) off the central slip (2) and force the lateral band over the proximal phalanx condyle (C) and into the joint.

Complications

Stiffness, persistent PIP joint pain, and residual deformity.

Outcomes

Early diagnosis, surgical repair, and dedicated hand therapy can yield good functional outcomes, though some limited range of motion should be expected even after timely treatment.

Key Educational Points

Suspect a complex dislocation whenever closed reduction fails. Remember, repeated forceful reduction attempts risk further injury. Widened joint space or a rotated lateral X-ray suggests interposed tissue. Open and complex PIP dislocations require urgent surgical referral, while simple, stable dislocations do well with early protected motion.

Recent References

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Explore More on Hand Surgery Resource
Visit the [Hand Surgery Resource website](#) for the complete diagnostic guide, exam links, and treatment tables on PIP joint dislocations, or access content through the Hand Surgery Resource and Anatomy at Risk apps, available on the Apple Store and Google Play. While you’re there, also check out our recently updated diagnostic guides for [DeQuervain's Disease \(Tenosynovitis\)](#) and [Macroductyly](#).

Central China Hand Surgeons' Conference

IFSSH Educational Grant Report Central China Hand Surgeons' Conference (June 2026)

The Central China Hand Surgeons' Conference was held in Hefei, Anhui, China on 13–14 June 2026. This event was partly supported by the IFSSH Educational Grant. This event was attended by about 160 hand surgeons in Anhui Province and its surrounding areas. The invited international faculty were Professor David Warwick (United Kingdom), Dr Koji Moriya (Japan), and Dr Faduah Salazar (Guatemala). Invited faculty also included expert hand surgeons from Taiwan, Jiangsu Province, Shandong Province, and Anhui Province.

The meeting had a range of educational formats, including two international symposia, four instructional courses, free paper sessions, challenging case discussions, journal club, book club, expert debates, round-table discussions, and hands-on workshops. These formats provided opportunities for lectures, presentation of original research, case-based learning, technical discussion, and review and discussion of most recent journal and book contents.

The scientific program covered common and challenging topics in hand surgery, such as wrist disorders and instability, peripheral nerve compression, tendon and nerve repair, microsurgery, soft-tissue reconstruction, bone infection, hand fractures, WALANT surgery, and management of complex upper-extremity trauma. Throughout the meetings, discussion focused on surgical indications, operative techniques, management of complications, and current evidence in clinical practice.

One symposium highlight was the recent advancement in treating peripheral nerve compression and atypical nerve compression in the upper extremity. Another highlight was a symposium on treatment of wrist disorders organised by 4 Taiwanese colleagues led by Professor Jui-Tien Shih. Other course highlights included how to treat hand fractures effectively and efficiently, and recent advances in extensor and flexor tendon repairs.



The Central China Hand Surgeons' Conference in Hefei, Anhui on 13-14 June 2026



Professor David Warwick delivering a lecture on scaphoid fractures.



Dr Faduah Salazar discussing complex upper-extremity reconstruction.



Dr Koji Moriya lecturing on advances in flexor tendon repair.



The Journal Club led by Dr Shu Guo Xing in the evening of the first day of the Central China Hand Surgeons' Conference in Hefei, Anhui on 13 June 2026



The Book Club session led by Dr Jing Chen in the evening of the first day of the Central China Hand Surgeons' Conference in Hefei, Anhui on 13 June 2026.



Interactive discussion following the scientific sessions in Hefei, Anhui.



Expert round-table discussion on hand fractures and soft tissue coverage of the hand led by Dr Shu Guo Xing



Group photo of Taiwan Hand Surgeon Team attending the Central China Hand Surgeons' Conference in Hefei, Anhui, 13 June 2026

Hands-on workshop on tendon repair and lymphatic vessel anastomosis in Zhengzhou, Henan.

Interactive discussion between faculty and the audience, and between the audience themselves was an important part of the meeting. Questions from the audience followed every lecture, and the case discussion sessions generated extensive exchange between faculty and participants. In the Journal Club led by Dr Shu Guo Xing, three articles on wrist fractures from the Journal of Hand Surgery (European) were reviewed and discussed. The Book Club led by Dr Jing Chen has focused on discussions of the chapter on scaphoid fracture in the new book "Current Practice in Hand Surgery". The Journal Club and Book Club were held as two evening sessions and were attended by roughly 100 hand surgeons on the first day of the Meeting. The expert debates and round-table discussions attracted hot debates and participation from both senior surgeons and young surgeons.

The international faculty traveled north after the Conference in Hefei, Anhui, and attended the Meeting of Association of Chinese-speaking Hand Surgeons United (ACU) and Jixia Forum in Zhengzhou, Henan. It was attended by 350 participants including hand surgeons, residents, therapists and nurses onsite, with online live streaming to many more hand surgeons.

Overall, the IFSSH-supported program directly reached more than 500 onsite participants and approximately 2,500 online participants. More importantly, it provided surgeons in Central China with direct access to an international faculty, which was the principal objective outlined in our original application. The program also strengthened professional connections between Chinese hand surgeons and international colleagues and created opportunities for future collaboration in education and clinical practice.

The IFSSH co-sponsorship grant was used to support the international travel expenses of the invited international faculty. All the activities inside China were supported by local hosts. The international faculty could contribute to multiple educational activities in Hefei and Zhengzhou, thereby extending the impact of the IFSSH and maximising the educational benefit. Local accommodation, domestic transportation, conference facilities, and expenses related to Chinese faculty were supported by the local organising committee and conference sponsors, as outlined in the original proposal.

The Organising Committee appreciates the continued support of IFSSH. The participation of the international faculty contributed to academic exchange between Chinese and overseas hand surgeons and supported continuing education in hand surgery. We hope to continue working with the IFSSH on future educational activities in China..

Jialiu Fang, MD

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Email: 610292694@qq.com



Society and Federation Reports

FINNISH SOCIETY FOR SURGERY OF THE HAND (FSSH, SUOMEN KÄSIKIRURGIYHDISTYS RY SKKY)

Celebrating 50 Years of Excellence: A Historic and Action-Packed Era.

The years 2024–2026 have been both deeply emotional and exceptionally active for The Finnish Society for Surgery of the Hand (FSSH, Suomen Käsi­kirur­giyhdistys ry), marking a period of groundbreaking milestones and a half-century of excellence.

The recent momentum reached a historic peak in late 2024, when the first-ever hand transplant was successfully performed in Finland.



Fig. 1: Course photo from the 2025 International Wrist Arthroscopy Course in Finland.

This monumental achievement was followed by another major milestone in the summer of 2025, when The Finnish Society for Surgery of the Hand successfully hosted the prestigious international FESSH Congress (Federation of European Societies for Surgery of the Hand) in Helsinki.

Amidst these triumphs, the society also experienced profound sorrow. In December 2025, the community mourned Professor Martti Vastamäki (1943-2025), Pioneer in Hand Surgery and the President of the 1995 IFSSH Congress in Finland. His immense legacy will always be held in the highest honor.

Driven by this rich heritage, Suomen Käsi­kirur­giyhdistys ry entered 2026 with immense proactive energy.

Throughout the year, the Society has organised medical education, including advanced theoretical courses, comprehensive hands-on cadaver workshops, and highly regarded international wrist arthroscopy courses held in the specialised cadaver laboratories in Tampere, Finland (Figure 1). The next International Wrist Arthroscopy Course will be held on 21–22 April 2027 in Tampere, Finland. More detailed information and registration are available on our Society's homepage: <https://fssh.fi/>.

The pinnacle of this energetic period took place in September 2026, alongside the annual Wrist Master course in Turku, Finland. The Society celebrated its milestone 50th anniversary with a magnificent gala at the historic Turku Castle. Against the spectacular backdrop of the medieval fortress and accompanied by grand trumpet fanfares, members and guests raised a toast to five decades of excellence, marking a golden chapter in the history of Finnish hand surgery.

Heidi Vastamäki, MD., PhD, Docent in Hand Surgery The Treasurer and the IFSSH Delegate of the Finnish Society for Surgery of the Hand (fssh.fi)

heidi.vastamaki@fimnet.fi

JAPANESE SOCIETY FOR SURGERY OF THE HAND (JSSH)

PHISOS 2026 from Okinawa to Tokyo: When a Typhoon Could Not Stop Global Collaboration

On 8 August 2026, pediatric hand surgeons from around the world gathered in Tokyo, Japan, for the fourth meeting of the Pediatric Hand International Society of Surgeons (PHISOS) (Figure 1). PHISOS is an invitation-only international community of surgeons dedicated to improving care for children with hand and upper-limb conditions. Founded in 2018, the society brings together specialists who treat congenital differences, brachial plexus and peripheral nerve injuries, trauma, post-traumatic deformities, spasticity, and sports injuries. Members are selected not only for their contributions to the field, but also for their collegiality, commitment to collaboration, and dedication to children's well-being.



Fig. 1: PHISOS 2026, originally scheduled to be held in Okinawa, was relocated to Tokyo due to a typhoon.

The founding members are Lorenzo Garagnani, Francisco Soldado, Dan Zlotolow, Kevin Little, and Paula Pino (Figure 2). Previous PHISOS meetings were held in Windsor, UK, in 2019, with Lorenzo Garagnani serving as President; Bardolino, Italy, in 2022, with Massimo Corain as President; and Bonita Springs, Florida, USA, in 2024, with Aaron Berger as President.

The fourth meeting was originally planned for Okinawa, Japan.



Fig. 2: The PHISOS Founding Members, 2018. Paula Pino (Chile), Lorenzo Garagnani (UK), Francisco Soldado (Spain), Dan Zlotolow (USA), and Kevin Little (USA)

For two years, we had been preparing to welcome our colleagues to Okinawa. Every detail, including the social program, was planned with great enthusiasm. However, shortly before the meeting, a typhoon struck the region (Figure 3), resulting in widespread flight cancellations. With little time to spare, we made the difficult decision to move the meeting to Tokyo. Securing a new venue on such short notice was a major concern. Fortunately, Össur Japan, one of the sponsors and a provider of prosthetic and orthotic products, generously offered its Tokyo office as the venue and provided comprehensive support for the online setup. Thanks to their support, we were able to hold the meeting in a hybrid format, for which we are truly grateful. In addition, Ms. Sae Tsuji, a bronze medalist in the 400 meters at the Rio 2016 Paralympic Games and an athlete affiliated with Össur Japan, gave a presentation on upper-limb prostheses for our international guests, making the meeting even more meaningful (Figure 4).

The theme of the meeting, “Shaping Children’s Hands, Connecting the World,” reflected both the scientific program and the spirit of the event. Sessions extended well beyond the clinical management of congenital differences, addressing genetics, patient registries, spasticity, and nerve injuries and disorders (Figure 5). We also invited a consultant pediatric anesthetist, who gave a presentation on the effects of anesthesia during development.

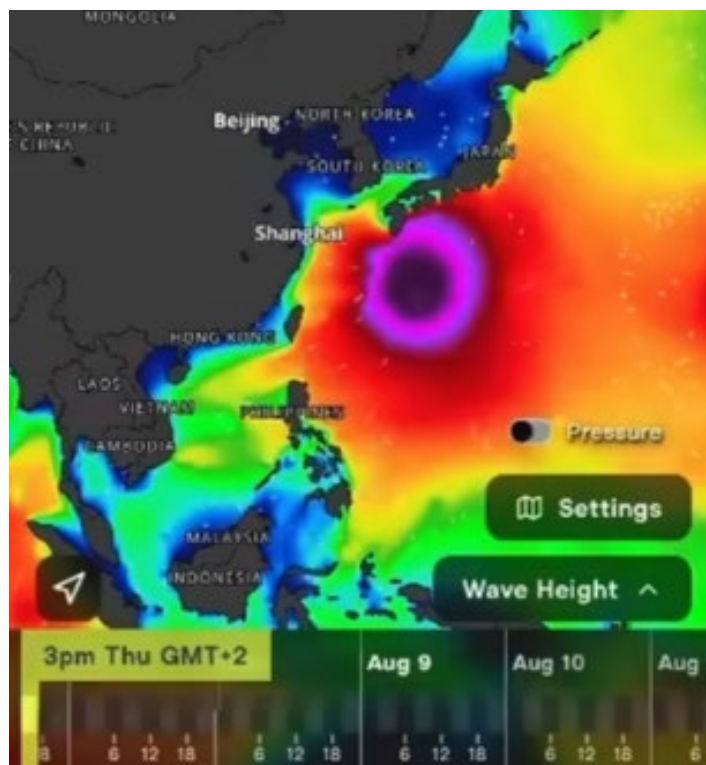


Fig. 3: A typhoon struck Okinawa on the day of the meeting, and all flights to and from Okinawa were canceled.



Fig. 4: Ms. Sae Tsuji, a bronze medalist in the 400 meters at the Rio 2016 Paralympic Games and an athlete affiliated with Össur Japan, gave a presentation on upper-limb prostheses.

KLS Martin, another sponsor, presented on 3D planning and patient-specific guides and implants, while Össur Japan spoke about upper-limb prostheses. Discussion was active throughout the day, both in person and online. At one point, We were concerned that we might not finish before the venue closing time, but we managed by shortening the breaks (Figure 6).



Fig. 5: Sessions extended well beyond the clinical management of pediatric hands.



Fig. 6: Group photo, the PHISOS 2026. Although the meeting was changed to a hybrid format at short notice, the discussions were so lively that the program ran behind schedule.

Although PHISOS is normally a members-only meeting, we invited Japanese hand surgeons and physicians from the Philippines who had previously trained at our hospital to participate as visitors. Bringing these colleagues together with PHISOS members created new connections and made the meeting even more meaningful. Participants traveled to Japan from the United States, Canada, the United Kingdom, Israel, Switzerland, Egypt, and other countries.

Many arrived in Japan before the meeting with their families and visited Kyoto, Osaka, the Tohoku region, and other destinations. We were especially pleased to see how much they enjoyed their time in Japan. Despite the unexpected venue change caused by the typhoon, we were able to hold a wonderful and successful meeting thanks to all the participants and sponsors. Through the remarkable global connections fostered by PHISOS, we will continue to strengthen our relationships, share knowledge and ideas, and improve care for children with congenital hand differences.

Once again, we would like to express my heartfelt gratitude to everyone for their support, friendship, and participation.

Takehiko Takagi, MD, PhD

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New Innovation for Endoscopic-Assisted Surgery for Thoracic Outlet Syndrome: What We Have Learned from 1,750 Procedures

Thoracic Outlet Syndrome (TOS) results from compression of the brachial plexus and/or subclavian vessels, causing various upper-extremity symptoms. Because these symptoms are often nonspecific and overlap with those of other disorders, TOS remains challenging to diagnose. Surgical treatment for TOS includes scalenectomy and first rib resection via supraclavicular, transaxillary, or infraclavicular approaches. These procedures are technically demanding because of the deep operative field and the proximity of critical neurovascular structures.

At our institution, Dr. Yoshiyasu Ito initially performed first rib resection for TOS using an open trans-axillary approach. However, this approach provides limited visualisation of the deep thoracic outlet and its critical neurovascular structures. To overcome this limitation, Dr. Kozo Furushima introduced endoscopic-assisted first rib resection (EA-FRR) in 2012. The magnified endoscopic view allows direct visualisation and protection of the brachial plexus and subclavian vessels during first rib resection and scalene muscle release (Figure 1).

By the end of 2025, approximately 1,750 EA-FRR procedures had been performed at Keiyu Orthopaedic Hospital. This extensive clinical experience has also contributed to advances in the diagnosis of TOS.

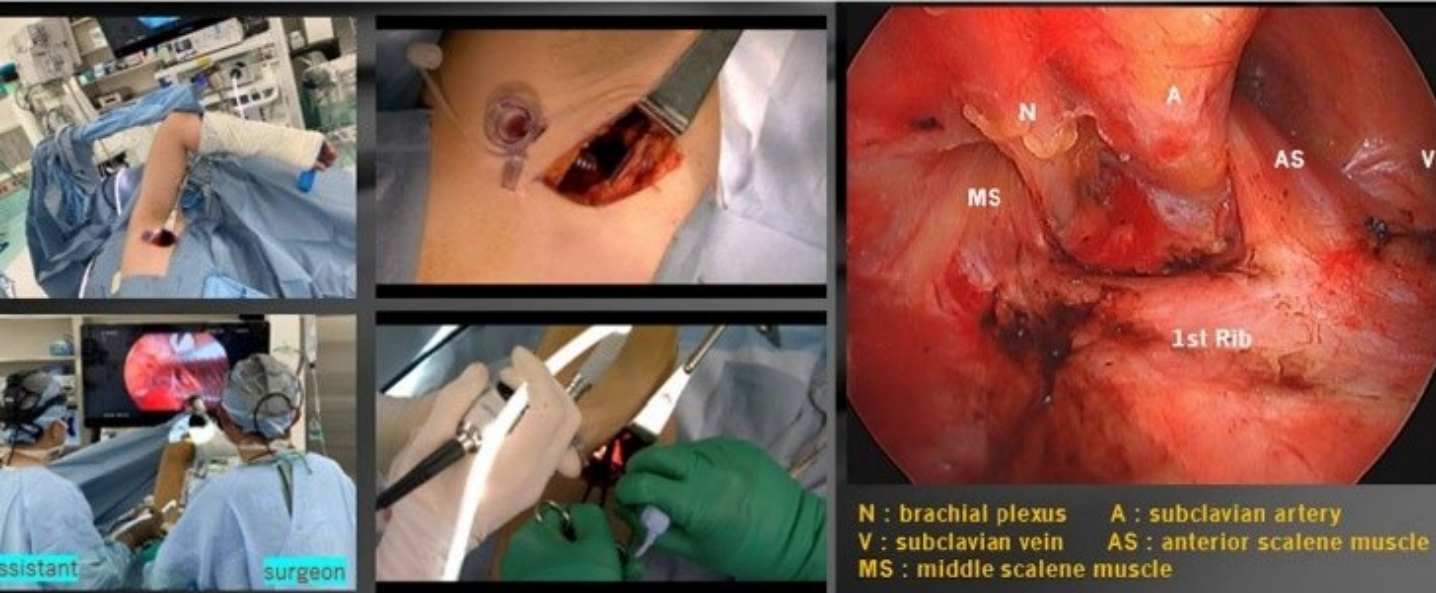


Fig. 1: Endoscopic-assisted first rib resection and direct visualization of the thoracic outlet.

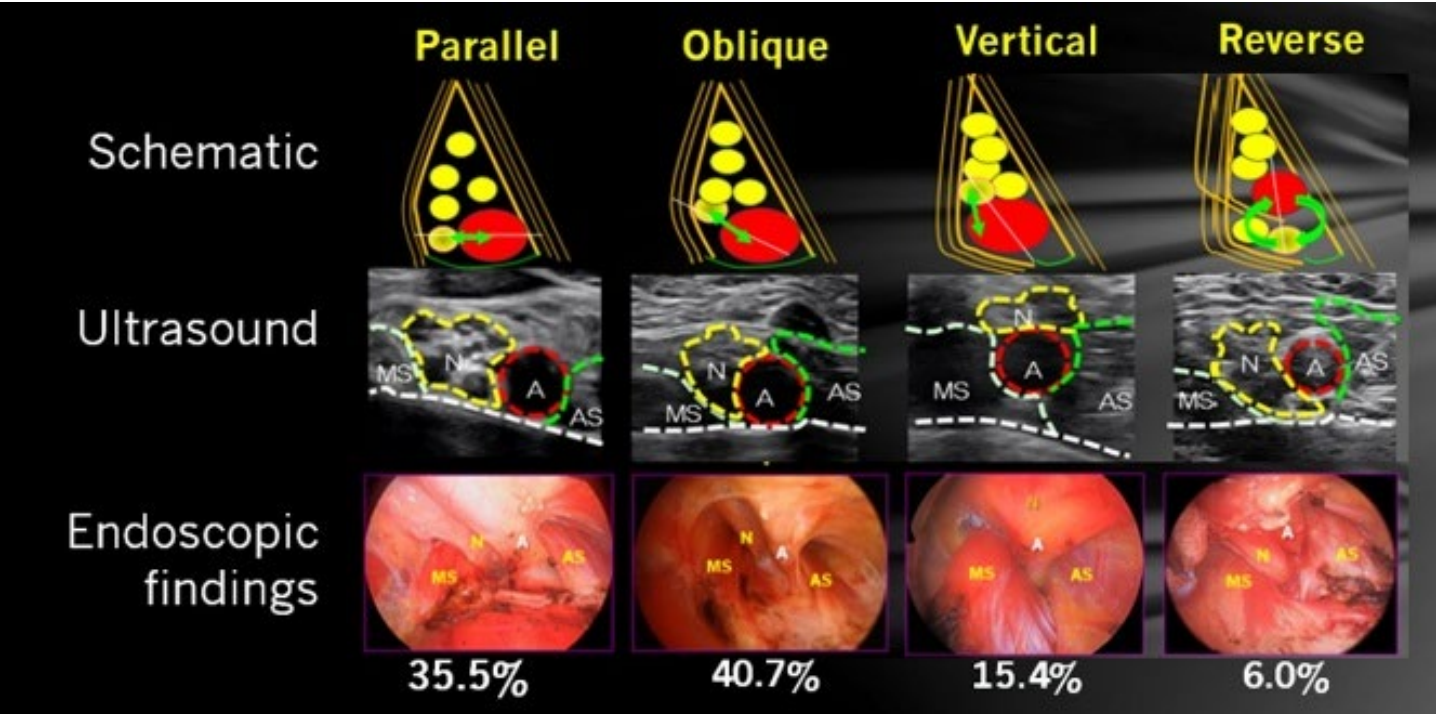


Fig. 2: Neurovascular bundle configurations identified by endoscopic observation and ultrasonography.

Ultrasonography is particularly useful for dynamic assessment during arm movement. We evaluate the interscalene distance (ISD), the relationship between the brachial plexus and subclavian vessels, and changes in subclavian arterial flow with arm position. CT angiography shows the relationship between the clavicle, first rib, and neurovascular structures, as well as vascular compression.

Combined with ultrasonography, it helps identify not only whether compression is present but also where and when it occurs. One important finding from Furushima's extensive surgical experience was the identification of reproducible neurovascular bundle (NVB) patterns under direct endoscopic visualisation.

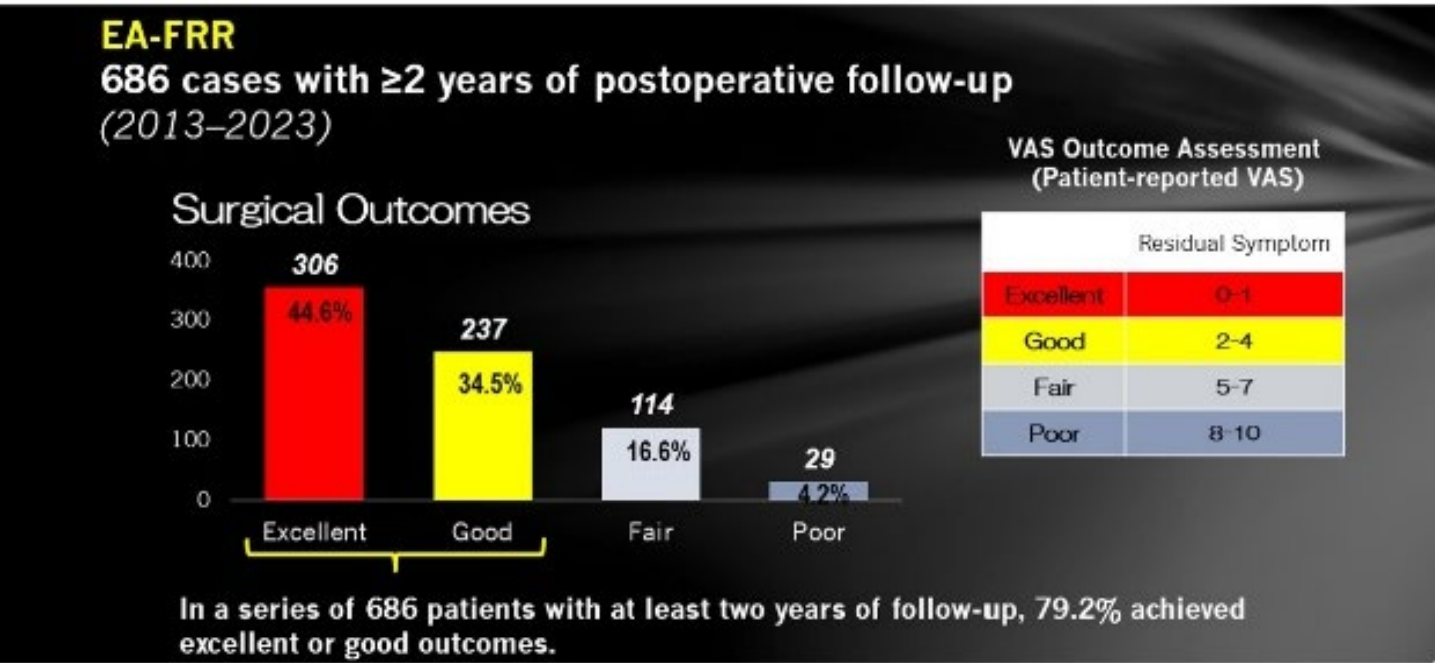


Fig. 3: Clinical outcomes after endoscopic-assisted first rib resection.

Based on these intraoperative findings, Furushima and colleagues classified NVB configurations into four types: parallel, oblique, vertical, and reverse (Figure 2). These patterns can also be assessed preoperatively using ultrasonography, linking intraoperative anatomy with noninvasive diagnosis. Understanding these anatomical variations may help surgeons anticipate the location of critical neurovascular structures and perform decompression more safely. Clinical outcomes following EA-FRR have also been favorable.

The magnified endoscopic view allows clear identification and protection of the brachial plexus and subclavian vessels during decompression. Among 686 patients with at least 2 years of follow-up, 79.2% achieved excellent or good outcomes: (44.6% were excellent and 34.5% were good). Fair and poor outcomes were observed in 16.6% and 4.2%, respectively (Figure 3). However, these favorable outcomes depend not only on surgical technique but also on accurate diagnosis, appropriate patient selection, and identification of the site and mechanism of compression.

Over more than a decade, our experience with EA-FRR has provided new insights into TOS. Through more than 1,750 procedures, repeated endoscopic observation revealed consistent NVB patterns and dynamic mechanisms of compression. These findings have been integrated with ultrasonography and CT angiography, linking surgical findings with preoperative diagnosis. Thus, EA-FRR has improved not only the surgical treatment of TOS but also our understanding of its anatomy, diagnosis, and pathophysiology. By combining clinical examination, dynamic imaging, and direct surgical observation, we hope to further improve the diagnosis and treatment of TOS.

Masahiro Maruyama and Kozo Furushima
Keiyu Orthopaedic Hospital, Tatebayashi, Gunma, Japan

Norimasa Iwasaki
National Delegate of JSSH

Satoshi Ichihara
IFSSH Executive Committee Member at Large (Asia-Pacific Region)

THE HONG KONG SOCIETY FOR SURGERY OF THE HAND (HKSSH)

The New Council of the Hong Kong Society for Surgery of the Hand (HKSSH) 2026-28

In accordance with the Memorandum and Articles of Associations of HKSSH, the Annual General Meeting was held on 7 March 2026 at the Eaton Hotel, Hong Kong.



The new council was elected as follows:

President:

-Dr. YAU Leung Kai Edmund

Vice-president:

-Dr. YIP Ka Yan Emily

President-Elect:

-Dr. FOK Woon Man Margaret

Honorary Secretary:

-Dr. LEE Syn Yuk Michelle

Honorary Treasurer:

-Dr. CHOW Esther Ching San

Council Member:

-Dr. KOO Siu Cheong Jeffrey Justin

Council Member:

-Dr. MAK Chu Kay Michael

Council Member:

-Dr. LAM Yuk Yu



Events Over the Past Year

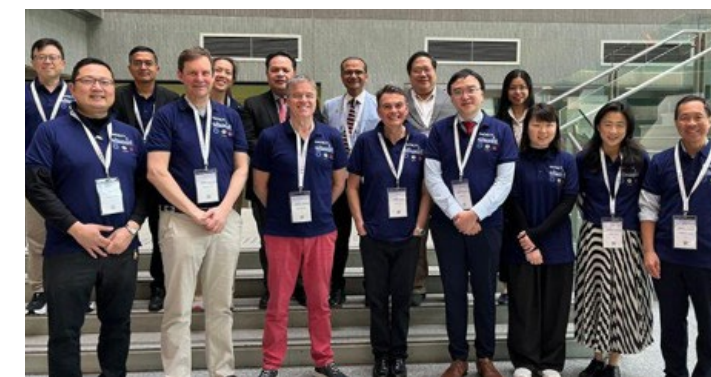
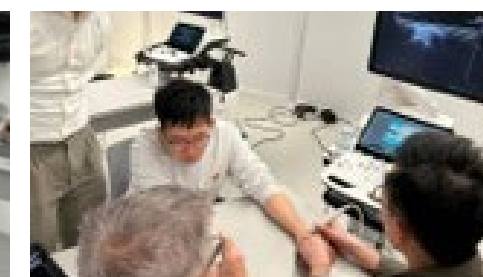
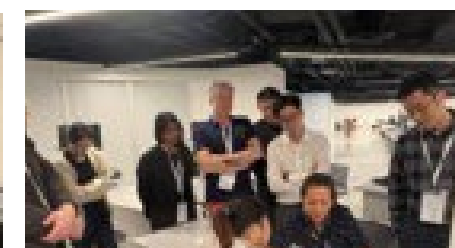
The three day course was successfully held on 4-6 March 2026 in Innocentre, Hong Kong. It covered a whole breadth of hand surgery topics with lectures, practicals and discussion groups. We had international and regional faculties, who contributed vastly to the success of the course. The feedback was awesome from the participants, the faculties as well as the organizing committee.



APFSSH-FESSH Academy Foundation Course 4-6 March 2026 (Hong Kong)

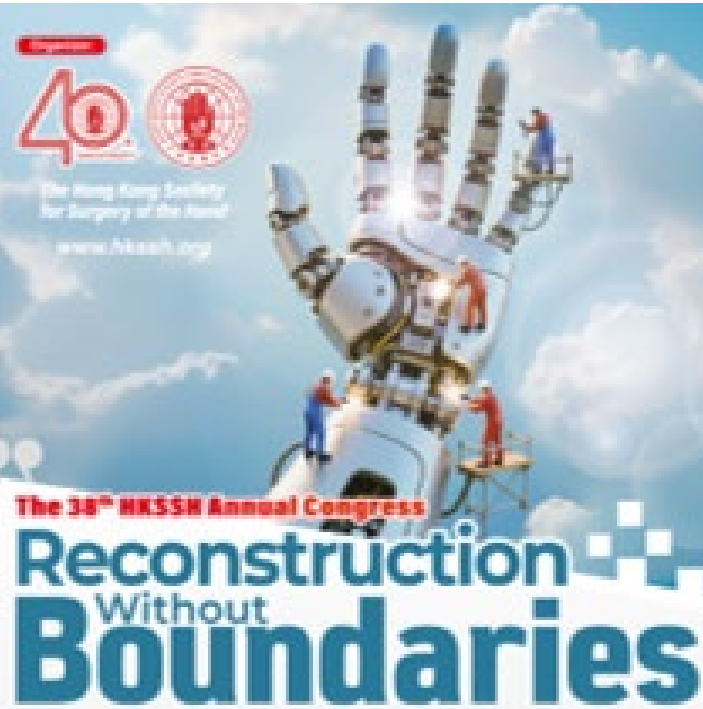
Common day-in-day-out hand conditions, as well as rare but essential hand cases were covered. Discussions ranged from simple tendon repair to difficult reconstructions, congenital hand differences, traumatic bone, joint and soft tissue destruction and reconstruction, degenerative diseases of various hand and wrist joints, the use of ultrasound practically in diagnostic and therapeutic purposes, hands on experience on ultrasound machines, fragment-specific implants, mounting of external fixator across finger joints etc were taught and ideas were exchanged between hand surgeons from different countries.

Everyone benefitted from the course by contributing and discussing their innovations on these conditions. We would like to express special thanks to IFSSH and APFSSH for sponsoring the course, and APFSSH for sponsoring members society to join this course.



38th HKSSH Annual Congress 7-8 March 2026

The 38th HKSSH Annual Congress was successfully held on 7-8 March 2026 in Eaton Hotel, Hong Kong. The theme was "Reconstruction Without Boundaries". This year celebrates the 40th Anniversary of HKSSH. We were honoured to have the British Society for Hand Surgery (BSSH) as our guest society. There were various symposiums across two different halls at the hotel.



Concurrent to the main lectures, running in parallel were workshops on elbow trauma and replacement, robotic microsurgery experience, as well as a wound workshop on negative pressure wound therapy. Surgeons, nurses as well as therapists, from local and overseas, all gave positive feedbacks at these sessions. The booklet celebrating the 40th Anniversary of HKSSH were given to all participants as a souvenir. It contains history of the society, photos of past events and messages from all Past Presidents, as well as notes from hand surgeons across different generations. For members who wish to own a copy, please email our secretariat and provide a valid mailing address. We can post them to you on demand.



The 1st Hong Kong Hand Small Joint Arthroplasty Cadaveric Workshop 27 June 2026

The first Hong Kong Small Joint Arthroplasty Cadaveric Workshop was successfully held on 27 June 2026 in the Orthopaedic Learning Centre (OLC) in Prince of Wales Hospital. We were honored to have invited Dr Daniel Herren from Switzerland, and Dr Eva Maria Baur from Germany, as well as local experts to share their experience on small joint arthroplasty in the hand with us.



Each participant was given the opportunity to have a go at performing the TOUCH CMCJ Arthroplasty on a cadaver.

The invited speakers and instructors shared the surgical tips and tricks on different approach to the finger joints, as well as their experience on small joint arthroplasties with the participants. Dr Jeffrey Koo talked about the management of hand fractures. Participants were also able to try the plates and implants on the cadavers. It was a fruitful day of education and hands-on work for everyone.

USG-guided Surgery in Hand, Wrist and Elbow
Cadaveric Workshop 28 June 2026

The USG-guided Surgery in Hand, Wrist and Elbow Cadaveric Workshop was held on 28 June 2026 in the Orthopaedic Learning Centre (OLC) in Prince of Wales Hospital.

USG-guided Surgery in Hand, Wrist, and Elbow

A Cadaveric Workshop on Sono-Surgery

DATE

28 June 2026

TIME

0830 - 1300

VENUE

Orthopaedic Learning Centre,
Prince of Wales Hospital

COURSE DIRECTOR

Dr. Michael Mak

COURSE ADVISOR

Prof. Law Sheung Wai

INVITED FACULTY

Prof. Yasuaki Nakanishi, Nara Medical University, Japan
Dr. Alex Ng, Hong Kong

ORGANIZED BY

SUPPORTED BY



Dr Yasuaki Nakanishi from Japan shared his expertise and techniques with participants on USG-guided hand surgeries. Dr Alex Ng gave a lecture to highlight the sonographic parameters of carpal tunnel syndrome. Dr Michael Mak shared his experience on MIS knife on soft tissue releases. Participants were able to practise these skills on the cadavers afterwards.



HKCOS Scientific Meeting 2-3 May 2026

The theme of the HKCOS Scientific Meeting 2026 was Primary Care Foundations and Translational Advances. HKSSH was invited to speak about Upper Limb Disorders in Primary Care. Council members shared our knowledge to primary care and Orthopaedic doctors about hand numbness, ulnar wrist pain, common tendinopathy in hand and wrist, and pigmented nail lesions. We attracted a considerable group of audiences to learn about these very common problems we see in every day practice.

Hand and Wrist Fracture Fixation Course &
HKSSH Hand Preparatory Course for FRCS Exam 2026

HKSSH organized a Fracture Fixation Course and a Preparatory Course for FRCS Examination for this year's exit examination candidates on 23 Augst 2026 in The Stryker APAC Training Centre. Participants learned about principles of hand fracture fixation, and also broadened their exposure to the latest technologies and implants. Active members of HKSSH became tutors at the Preparatory Course, showing candidates common and important hand conditions in day-in-day-out practices, as well as common questions in exit examination.



Hand and Wrist Fracture Fixation Workshop

PROGRAM

- Management of complex hand and wrist fractures
- Hands-on workshop on hand and wrist fracture fixation
- Get fix for distal radius fractures
- Get fix for hand fractures
- Distal radius fracture: Current practice and management plan
- Fingers and metacarpal plate

REGISTRATION INFO

Registration Fee: \$500 (member early bird), \$700 (non-member early bird), \$800 (member regular), \$900 (non-member regular)

Early Bird Deadline: 31st July 2026

Registration Link: [www.hkssh.org.hk/registration](#)

HKSSH Hand Preparatory Course for FRCS Exam 2026

Simulated Viva Sessions

Topics: all you need to know in hand surgery

Participants: 30 candidates (Max)

Only for 2026 Exit exam candidate

Date: 23rd August, 2026

Time: 09:00 - 17:00

Venue: Stryker APAC Training Centre, 9th Floor, 12 Talook Woon Road, Tsimshatsui, Hong Kong

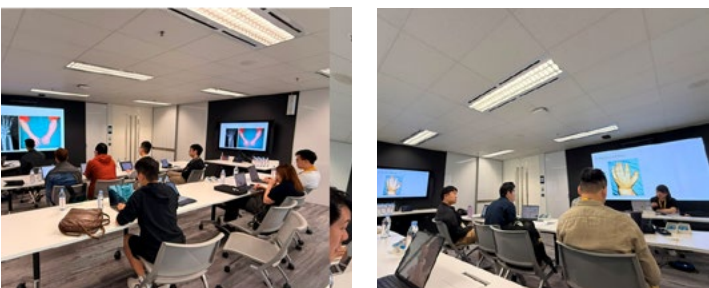
Lunch, Snacks, Drinks included

Registration Fees: \$600 (Member Early Bird), \$700 (Non-member Regular), \$720 (Member Regular), \$820 (Non-member Regular)

Early Bird Deadline: 31st July 2026

CME: Pending

Enquiry: [hksshmember@hkssh.org.hk](#)



Upcoming Events

HKSSH conducts regular Saturday Inter-hospital Meetings with the Hong Kong College of Orthopaedic Surgeons (HKCOS) for all Orthopaedic specialists and trainees to share interesting cases about hand surgery. We also organize twice-yearly certificate courses to educate trainees, specialists, therapists and nurses on specific hand surgery topics.



HKSSH will be a supporting organiser of the International Conference of Chinese Rheumatologists (ICCR 2026) on 28-29 November 2026 at the Cordis Hotel Hong Kong (Mong Kok). Our members are encouraged to submit papers and posters and would enjoy complimentary seats at the event.



Our Annual Congress is happening on 13-14 Mar 2027 at the Mira Hotel, Hong Kong. Please SAVE THE DATE and come to HK to join this meaningful event. Abstract submission is now opened! We welcome papers from local and overseas!



GUATEMALAN ASSOCIATION OF HAND SURGERY

The year 2026 has reaffirmed the commitment of the Guatemalan Association of Hand Surgery (Asociación Guatemalteca de Cirugía de la Mano, AGCM) to advancing Hand Surgery education throughout Central America.

Since 2025, the Association has regularly organised virtual educational activities in collaboration with fellow IFSSH Member Societies and colleagues from around the world. These initiatives seek to strengthen the bonds of friendship, collaboration, and academic exchange between the Guatemalan Association of Hand Surgery and Hand Surgery organisations worldwide.

Although this project may sound ambitious, it represents a carefully planned long-term effort. Our vision is for Guatemala to become an active participant in the global development of Hand Surgery while sharing with the Central American region the knowledge and experiences that can be gained from colleagues practicing in countries with healthcare systems, resources, and clinical realities very different from our own.

Academic Activities 2025-2026

During 2025-2026, in addition to the Association's regular monthly in-person academic meetings, we have sought to broaden the educational and professional development opportunities available to our members.

Virtual activities have been organised with several Hand Surgery associations and internationally recognised colleagues. Whenever possible, access to these activities has been extended throughout the Central American region, with the goal of promoting education beyond national borders.

Among the countries, organisations, and internationally recognised colleagues who have participated in these activities are:

Philippines

- Dr. John Pua
- Dr. Dr. Raymar Sibonga

Singapore

- Dr. Mark Puhaindran
- Dr. Sandeep Sebastin
- Dr. Robert Tze
- Dr. Wee Leon Lam
- Dr. Soumen Das De

Other Countries

- Dr. Jing Chen— China
- Dr. Efrain Farias — Mexico
- Dr. Carlos Lopez — Colombia
- Dr. David Warwick — England
- Dr. Fu-Chan Wei — Taiwán
- Dr. Fidel Cayón — Ecuador
- Dr. Jin Bo Tang — China
- Dr. Donald Lalonde — Canada

International Wrist Arthroscopy Society (IWAS)

- Dr. Ahlam Arnout — France
- Dr. Lorenzo Merlini — France
- Dr. Bruno Souza — Brazil

Several additional virtual activities remain to be completed during the current year, while preliminary planning for next year's program is already underway.

The AGCM remains open to all Hand Surgery associations and colleagues who are interested in supporting education in our region. We welcome organisations and individuals who share this vision to contact us so that we can coordinate joint academic activities and continue strengthening international collaboration within the Hand Surgery community.



Fig. 1: Some of the Virtual Activities of the AGCM

First Central American WALANT Course

On 18-20 March 2026, AGCM hosted the First Central American WALANT Course. The course was coordinated in collaboration with Dr. Donald Lalonde, who travelled to Guatemala to teach the technique in person during a full day of academic activities.

In addition to Dr. Lalonde's lectures, participants had the opportunity to experience both performing a WALANT block and receiving one themselves. This firsthand experience can fundamentally change a physician's perspective on the technique and provide a better understanding of what the patient experiences during WALANT surgery.

To complement the academic component, two additional days were dedicated to hands-on activities. Participants were actively involved in patient evaluation, WALANT anaesthesia, and definitive surgical treatment using sterile field techniques.

The course was intentionally limited to 20 participants, allowing for a highly personalised educational experience. This format provided sufficient opportunity for participants to discuss questions directly with Dr. Lalonde and with members of the Association who are already familiar with the technique.

At the conclusion of the course, a farewell lunch provided an opportunity for participants to continue exchanging experiences and to strengthen the personal and professional relationships established during the meeting.

One of the most encouraging outcomes of this first course has been its impact beyond the educational event itself. Three procedure rooms in different regions of Guatemala are currently undergoing the approval process, with the goal of implementing WALANT-based procedures because of this initiative.



Fig. 2: WALANT Course

Building on this experience, another Central American WALANT course is planned for the 2028–2029 period, and colleagues from throughout the region are already invited to become part of this future experience.

First Central American Tendon Course and Second AGCM Congress

As part of the final major academic activities of this period, the AGCM is pleased to invite colleagues from Guatemala, Central America, and beyond to participate in one of our major educational initiatives.

The First Central American Tendon Course has been organised in collaboration with Dr. Jin Bo Tang, as part of an effort to maintain and advance the knowledge of those involved in the definitive treatment of tendon injuries of the hand and upper extremity in the Central American population.

Registration remains open; however, the number of participants is intentionally limited. Our goal is to create a personalised educational experience that allows participants to take full advantage of Dr. Jin Bo Tang's extensive expertise.

As with the WALANT course, the program will combine several complementary educational components:

- A formal academic component with lectures and discussion.
- An academic and practical component involving real patients.
- Individual hands-on practice using previously prepared tendon models.

This approach is intended to bridge the gap between theoretical knowledge and surgical practice while providing participants with direct access to international expertise.

Master's Degree Program in Hand Surgery in Guatemala

One of the most important developments in Hand Surgery education in Guatemala this year has been the creation of the first Master's Degree Program in Hand Surgery.

The program was established in response to the need for more specialists who can provide appropriate Hand Surgery care in the different regions of Guatemala and throughout Central America. At the same time, it seeks to provide training in an environment that is accessible and aligned with the healthcare realities that graduates will encounter in their future practice.

The program was founded by Dr. Juan Carlos González, former President of the AGCM. It has currently begun with two master's students at Hospital Roosevelt in Guatemala City, with a two-year training period designed to strengthen and refine their clinical and surgical skills.

Since the program was established by Dr. González, the Association has been an integral part of the educational process and provides ongoing academic support.

The program takes advantage of the experience of Association members who are willing to share their knowledge with the trainees. The students are also encouraged to participate in the academic activities organised by the Association, providing them with additional opportunities to learn from colleagues with different areas of expertise and clinical experience.

Our members.

This is also an appropriate moment to recognise and thank our active members, whose commitment has made the Association's educational activities during 2025–2026 possible.

Their continued participation and dedication to medical education have allowed the AGCM to expand its academic program and undertake increasingly ambitious educational projects for the benefit of Hand Surgery in the region.

Active Members of the Guatemalan Association of Hand Surgery

- Dr. Federico Rosales Arzú
- Dr. Leonel Foncea
- Dr. Samuel David Wugh
- Dr. Ernesto Cofiño
- Dr. Roberto Ríos
- Dr. Juan Carlos González
- Dr. Marco Sánchez
- Dr. Fernando Romero
- Dr. Gabriel Hernández
- Dr. Francisco Hernández
- Dr. Luis Urzúa
- Dr. Carlos Quintero
- Dr. Giovanni López
- Dr. Heidy de León

- Dr. Lucía Domínguez
- Dr. Allan Guerrero
- Dr. Giovanni Cuc
- Dr. Javier Orozco
- Dr. Jorge Pérez
- Dr. Kevin Rodas
- Dr. Margarita Monterrosa
- Dr. María José Camey
- Dr. Vivian Tecú
- Dr. William Morales
- Dr. Faduah Salazar

Looking Ahead

We believe that geographical location, differences in resources, or the challenges faced by our healthcare systems should not prevent young surgeons from having access to excellent teachers, contemporary knowledge, and meaningful educational experiences.

Our aspiration is that each new generation of Hand Surgeons will have better teachers, better educational opportunities, and better tools than the generation before them.

Through education, collaboration, and international friendship, we hope to contribute to the continued development of Hand Surgery in Central America and to strengthen Guatemala's connection with the global Hand Surgery community.

Dr. Faduah Salazar

President

Guatemalan Association of Hand Surgery (AGCM))



Fig. 3: Some of the In-person activities of the AGCM. After an educational activity there is always time for camaraderie and friendship between our associates.



SPANISH SOCIETY FOR SURGERY OF THE HAND (SECMA)

Under the leadership of Dr Roberto Sánchez Rosales, the Spanish Society for Surgery of the Hand (SECMA) has consolidated its position as one of Europe's leading national hand-surgery societies. With 658 members across its membership categories, SECMA brings together a dynamic and committed professional community that actively contributes to scientific, educational, and institutional initiatives at both national and international levels. Through this sustained engagement, the Society continues to strengthen its voice, visibility, and contribution to advancing hand surgery.

Education and training

Training remains at the center of SECMA's activity. The Spanish Diploma in Hand Surgery (DECIM) continues to provide a structured route for professional development; nine candidates successfully completed the most recent edition. The programme supports the Society's commitment to high training standards and to developing the next generation of hand surgeons. By combining a defined curriculum with a rigorous assessment process, DECIM offers a nationally recognised framework for surgeons who wish to

deepen their expertise in the full breadth of hand surgery.

SECMA's educational programme has also included a Research Methodology Course held in Albacete on 30 January 2026, directed by Dr Roberto Sánchez Rosales, and attended by 20 participants. A further Research Methodology Course was delivered in Zaragoza in February in collaboration with SARCOT, with 18 participants. These courses addressed the essential principles of research design, critical appraisal, and the practical steps needed to turn clinical questions into high-quality scientific projects. They reinforced SECMA's aim of helping members integrate sound research methods into everyday practice.

The SECMA Institutional Course, directed by Dr Pau López-Osornio, took place in Madrid in December 2025. It was well received and gave members an opportunity to update their knowledge, discuss relevant clinical challenges, and engage directly with colleagues and faculty. The course offers a comprehensive theoretical and practical format, combining lectures with hands-on cadaveric practice of the techniques covered in the theoretical sessions. Participants highlighted its practical value and relevance in the post-course surveys, confirming the course's important role within SECMA's educational calendar and its value as a forum for continuous professional development.



Communication and outreach

SECMA has developed a new Society website that more clearly reflects its identity, activities, and values. The renewed platform provides members with a more accessible, user-friendly entry point to the Society's information, resources, and initiatives, while strengthening communication with the hand-surgery community.

SECMA Academy, the Society's YouTube channel, continues to offer free access to a growing collection of educational videos created by SECMA members. Its content addresses the full spectrum of hand surgery, from diagnostic assessment and decision-making to treatment, surgical techniques, and postoperative care. By making this material readily available, the channel supports practical learning and extends the reach of the Society's educational activity beyond conventional face-to-face formats.

Research and publication

The Ibero-American Journal of Hand Surgery (RICMA) remains one of SECMA's principal scientific assets and an important forum for disseminating hand-surgery research across Spanish-speaking and international communities. The journal is entering a new phase under the editorial leadership of Dr Rafael Sanjuan, whose direction will bring a renewed editorial approach and a clear strategic focus on achieving PubMed indexing.

This new stage aims to strengthen the journal's scientific standards, editorial processes, and international visibility, while encouraging high-quality submissions from Spain and abroad. In parallel, SECMA continues to promote clinical research, registry-based projects, and collaborative initiatives that generate shared knowledge and improve patient care.

SECMA National Congress in Valencia

The XXIX SECMA National Congress was held in Valencia from 22 to 24 April 2026, under the presidency of Dr Carratalá. The meeting was an outstanding success, recording SECMA's highest attendance in recent years since the Sitges Congress. The participation of leading international figures added considerable scientific strength to the programme and enriched the exchange of experience across the different areas of hand surgery.



The Congress created a lively setting for scientific debate, with dedicated opportunities for discussion and interaction among participants, faculty, and invited speakers. This combination of broad participation, international expertise, and open scientific dialogue made the Valencia meeting a particularly significant event for SECMA.

International Relations and Cooperation

International engagement has remained a major focus of SECMA's activity. Within FESSH, Spanish representatives attended the Advanced Course in Budapest in October 2025 and the Foundation Course

in Poznań in February 2026. The Society has also disseminated opportunities, including the FESSH Research Grant, Innovation Shark Tank, and Research Fellowship programmes, among its members.

SECMA made a significant contribution to the scientific programme of the FESSH Congress held in Basel in June 2026. The Society took an active role in the meeting, including a session on neuropathic pain chaired by Dr Casañas. During the congress, the 2026 FESSH Giant Award was presented to Dr Francisco del Piñal, recognising his outstanding contribution as a leading figure in SECMA and in hand surgery.

Collaboration with the American Society for Surgery of the Hand (ASSH) has also been strengthened. Drs Fernando Dávila and Ana Verdejo participated in the International Travelling Fellows Program. SECMA has additionally been invited to participate as an International Guest Society at the ASSH Congress in Boston, offering members valuable opportunities for scientific exchange and professional networking.



Dr Roberto Sánchez Rosales and Dr Francisco del Piñal.

SECMA at the 81st ASSH Annual Meeting in Boston

SECMA participated as the International Guest Society at the 81st Annual Meeting of the American Society for Surgery of the Hand (ASSH), held in Boston in September 2026. The Spanish delegation made a strong contribution to the meeting, with nearly 60 registrations, including eight residents in training, and 24 speakers participating in scientific sessions, courses, and hands-on cadaver laboratory workshops.

The meeting was a unique experience for SECMA members. ASSH extended a warm welcome to the Society at an institutional breakfast, where Dr. Kevin Rumball, Chair of the International Guest Society Committee, delivered an engaging talk highlighting Spain's important and crucial role in the American struggle for independence from Britain.

ASSH also provided a dedicated space for SECMA's ePoster presentations. Members contributed actively to the scientific program through oral presentations, sharing their work and experience with an international audience. The breadth of Spanish participation and the hospitality of our American colleagues made this a particularly memorable occasion for scientific exchange and professional friendship.

SECMA at the XXIX Portuguese Congress of Hand Surgery

SECMA also participated as an invited society at the XXIX Portuguese Congress of Hand Surgery, held in Estoril, Portugal, from 24 to 26 September 2026. The meeting offered a welcoming setting in which to reconnect with old friends and build new friendships. An outstanding atmosphere and a high-quality scientific program made the Congress a rewarding experience for the Spanish delegation.

Spanish participation included a keynote lecture, international panel discussions, scientific presentations, and session moderation, with a particular focus on carpal disorders, scaphotrapezotrapezoid (STT) osteoarthritis, thumb carpometacarpal osteoarthritis, fractures, and wrist arthroscopy.

The SECMA panel, "STT Osteoarthritis: State of the Art," was moderated by Drs. Clarisa Simón Pérez and Eduardo Vaquero. With contributions from Spanish specialists, the session provided a comprehensive overview of STT osteoarthritis, covering diagnosis, nonoperative treatment, and surgical options.

Dr. Carlos Irisarri delivered a keynote lecture on avascular necrosis of the carpal bones, sharing his experience in this field. Drs. Eduardo Blanco and Javier Yáñez Calvo participated in the ILA group panel on metacarpal and phalangeal fractures. The wrist arthroscopy session was moderated by Drs. Vicente Carratalá and Delgado.

These contributions reflected SECMA's commitment to international collaboration and strengthened the close scientific and personal ties between the Spanish and Portuguese hand surgery communities.



Dr. Clarisa Simón, Secretary of SECMA, and the President of the Portuguese Society for Surgery of the Hand.

Young Surgeons

SECMA continues to encourage the active involvement of younger members in the Society's scientific and educational activity. Their participation in courses, collaborative projects, and international initiatives is essential to the continued renewal and development of Spanish hand surgery.

The webinar programme for young hand surgeons has also been maintained, offering an accessible setting for focused learning and discussion. These sessions enable early-career colleagues to address relevant clinical topics and exchange perspectives with peers and invited faculty.

A promotional poster for a SECMA webinar. The top section features the SECMA logo and the text 'SOCIEDAD ESPAÑOLA DE CIRUGÍA DE MANO'. Below this, it says 'PRESENTA' followed by 'WEBINAR' in large letters, and 'Conociendo al ligamento Lunoparamidal' in a script font. The date and time are '15 junio | 21hs ESP' with a Spanish flag icon. The speakers listed are 'PONENTES: FRANCISCO LUCAS GARCIA, ANTONIO GARCIA-JIMENEZ' and the moderator is 'MODERAN: BEATRIZ FERNANDEZ BRAN, PEDRO FUENTES'. A QR code is present with the text 'Inscripción gratuita' and 'info: secma@secma.es'. At the bottom, there are four small portraits of the speakers and moderator.

SECMA webinar for young hand surgeons

Looking ahead

The next SECMA National Congress will be held in Las Palmas de Gran Canaria from 21 to 23 April 2027, under the presidency of Dr Isidro Jiménez. SECMA also looks forward to continuing its work in education, research, communication, and international collaboration, building a strong, inclusive, and forward-looking community for hand surgeons.



Dr Roberto Sánchez Rosales and Dr Isidro Jiménez

EGYPTIAN SOCIETY FOR SURGERY OF THE HAND AND MICROSURGERY (ESSHM)

With its rich history as a leader in the medical field and a pioneer in hand surgery, Egypt has always been a bridge between tradition and innovation.

Hand surgery in Egypt has evolved as a specialised field, merging orthopaedic, plastic, and reconstructive surgery to address injuries, congenital anomalies, and conditions affecting hand functionality.

"From Vision to Innovation", a theme crowning the 20th Annual International Conference

The journey of hand surgery in Egypt is a testament to the country's rich history in medical advancements and its progressive aspirations. On 17 March 2027, the Egyptian Society for Surgery of the Hand and Microsurgery (ESSHM) will celebrate its 20th Annual International Conference.



Fig 1: the "Nash Naam award" competition which was launched by Professor Nash Naam is now a yearly tradition of the annual ESSHM conferences and it was the start of rising stars in the field of hand surgery in Egypt

Over four days, the conference will feature an outstanding, comprehensive, and up-to-date scientific programme of expert lectures and interactive sessions, together with two highly competitive contests: the Nash Naam Award (Fig 1) and the Junior Hand Surgeons' League. The meeting will be followed by a high-level cadaveric wrist course covering wrist arthroscopy as well as open soft-tissue and bony procedures of the wrist.

The Past: Roots in Ancient Medicine

Egypt's legacy of surgical practice dates back to ancient times. The Edwin Smith Papyrus (circa 1600 BCE) demonstrates that early Egyptian physicians were pioneers in surgical technique, including the treatment of fractures and dislocations; it documents two cases of humerus fracture, one closed and one open [1].

The Present: A Developing Specialty

Being regarded as the Godfather of Hand Surgery in Egypt, Professor Wael Mansour Fahmy trained with Guy Pulvertaft in the UK (Figure. 2). Back home, he started practicing and teaching hand surgery. At the Maadi Military Academy, he established a replantation laboratory in 1970 and a microsurgery laboratory in 1979.



Fig. 2: Professor Wael Mansour Fahmy "the godfather of hand surgery in Egypt"



Fig. 3: Professor Nash Naam "the man behind the foundation of the ESSHM"

He established the Eastern Mediterranean Hand Society, which became a member of the International Federation for Societies for Surgery of the Hand (IFSSH). Professor Fahmy was honored as a "Pioneer of Hand Surgery" by the IFSSH in 1998. His dream was to establish a society that gathers all Egyptian surgeons interested in hand surgery. The ESSHM officially started in September 2007.



Fig. 4: The founding members of the ESSHM in September 2007

Professor Nash Naam (Figure 3) visited Egypt in 1997, where he had a vision of establishing a hand surgery society in Egypt. He contacted many plastic as well as orthopaedic surgeons to encourage them to fulfill his vision, which was finally established in September 2007 (Figure 4).

Professor Abdel-Hakim Abdallah Massoud was the first president of the ESSHM (Figure 5) which established a great start at its 1st Annual International Conference, where the American Association of Hand Surgery (AAHS) was the guest society. Throughout the following versions of the ESSHM annual meetings, a great number of distinguished hand and microsurgery pioneers were the guest faculty (Figure 6).

In September 2025, because of the very rapid progress and active constructive participation of Hand and Microsurgery units of Upper Egypt in the field of hand surgery, both nationally and internationally, the 1st Upper Egypt Hand and Microsurgery meeting was launched in Minia city.

As the main theme of the meeting was "WALANT in Hand Surgery; The State of the Art", the meeting had Professor Don Lalonde as the keynote speaker and guest faculty.



Fig. 5: Professor Abdel-Hakim Abdallah Massoud "the first president of the ESSHM"



Fig. 6: Group photo of the 1st Upper Egypt Hand and Microsurgery Meeting; Minia University Conference Hall, Minia, Egypt, 3-5 September 2025.

Being a world-class and game-changing hand surgeon, Professor Lalonde enriched this meeting with his vast and enormous experience in the field of WALANT. Some of the WALANT world experts were also invited, including Professor Amir Adham Ahmad and Professor Egemen Ayhan (Figure 7).

ESSHM represents a thriving community of over 280 members, including orthopaedic and plastic surgeons and physiotherapists. Recognized by IFSSH and the Federation of European Societies for Surgery of the Hand (FESSH), ESSHM has positioned Egypt as a leader in regional education and innovation.



Fig. 7: Some of the international guest faculty at the ESSHM meetings.

Today, hand surgery in Egypt integrates advanced techniques to address trauma, nerve injuries, and congenital hand differences. Major institutions such as Ain Shams, Al-Azhar, Alexandria, Assiut, Kasr Al-Ainy, Mansoura, Minia, Sohag, Suez Canal, and Zagazig University Hospitals host specialised hand surgery units, and Egypt has emerged as a regional hub for advanced training in hand and microsurgery. Notably, the Hand and Microsurgery Unit at Assiut University has launched two specialised fellowships in the past three years; one in hand surgery, the other in microsurgery. Recently, Cairo and Zagazig Universities have launched professional hand and microsurgery diplomas.

The Future: Aspirations and Innovations

The future of hand surgery in Egypt is promising, driven by a growing number of affiliates of the ESSHM, a rising number of professional hand and microsurgery units, technological innovation, enhanced training programs, and expanding access to care, including telemedicine and AI, robotics and advanced prosthetics, and regenerative medicine. Continued investment in healthcare infrastructure and research-friendly policy will be essential to achieving these goals.

The ESSHM Dream

ESSHM is dedicated to uniting hand surgeons from across Africa and the Middle East, fostering collaboration, and advancing the field of hand surgery regionally and internationally. As the driving force behind the Pan Arab Federation of Societies for Surgery of the Hand (PAFSSH), ESSHM has played a pivotal role in bridging global and local expertise. PAFSSH's inaugural meetings were held alongside ESSHM's annual gatherings in Cairo in April 2017 and April 2018. In 2024 ESSHM further reinforced its regional leadership by hosting the landmark African Societies of Surgery of the Hand (AFSSH) meeting.

ESSHM's influence continues to grow internationally, marked by prestigious invitations to represent the region as a guest society, including the Annual Meeting of the American Association for Hand Surgery (AAHS) in California, USA (January 2022) and the 44th Brazilian Congress of Hand Surgery in Florianópolis, Brazil (April 2024).

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Past President of the American Association for Hand Surgery [AAHS]

Past President of the American Association for Peripheral Nerve [ASPEN]

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Past Secretary General of the ESSHM

Re-published Article

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Further Knowledge on Featured Topics

Anatomical predisposition and neurological vulnerability to brachial plexus birth injury: a contemporary narrative review

Hugo OH Beaumont^{1,2}, Akira Wiberg^{1,2,3}, Hazel Brown^{1,2,4} and Tom J Quick^{1,2,4}

Abstract

Erb’s palsy, or brachial plexus birth injury (BPBI), is an injury sustained at birth to a vulnerable nervous system which even with the best care leaves many children with permanent impairments, growth retardation and pain. Established risk factors include maternal diabetes, increased foetal weight, shoulder dystocia and instrumental delivery. Yet these variables do not reliably predict which individual children will sustain injury. We propose an additional, largely neglected factor: developmental anatomical predisposition of the neonatal brachial plexus, with anomalies similar to those implicated in neurogenic thoracic outlet syndrome (nTOS) later in life. These include cervical ribs, aberrant scalene attachments and variant plexus branching – each capable of narrowing the supraclavicular corridor and concentrating mechanical strain during delivery. Such anatomical variants may lower the injury threshold and confer a ‘neurologic vulnerability’ when exposed to the forces of delivery. This may help explain why some infants sustain injury under normal obstetric conditions while others do not. We further propose that neonatal BPBI and adolescent nTOS represent distinct phenotypic expressions of a shared anatomical vulnerability, with a patterned molecular basis involving *Hox* gene regulation of axial skeletal patterning during embryogenesis. These insights carry direct clinical implications: in neonates undergoing brachial plexus exploration, recognition and decompression of anatomical compression may complement or replace standard nerve grafting strategies. We outline a research agenda including anatomical phenotyping, familial screening, biomarkers and prospective cohort studies to quantify this predisposition and integrate it into peripartum decision-making alongside conventional risk factors.

Level of Evidence: Level V

Keywords

Anatomy, birth injury, brachial plexus, Erb’s palsy, predisposition, vulnerability

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Introduction

Brachial plexus birth injury (BPBI) presents at a rate of 0.4–4.6 per 1000 births worldwide and can have a significant negative impact on a child’s health-related quality of life (Akel et al., 2013; Dardas and Shah, 2021; Malessy and Pondaag, 2009). Despite modern obstetric care, outcomes for individuals and families remain suboptimal (Dorich et al., 2024; Yau et al., 2018). Identifying the risk factors for this injury and preventing injury remain ongoing challenges. Classical teaching emphasizes excessive traction on the presenting part during delivery complicated by shoulder dystocia as the principal aetiology (Dardas and Shah, 2021; Iffy, 2014). However, shoulder

dystocia is relatively common compared with the incidence of BPBI, and plexus injury is also documented in deliveries without recognized dystocia or

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Correction (August 2026): This paper was updated online to correct the sentence “Complete cervical ribs were found in five of the forty-two infants studied (approximately 12%), and in more than a third of the subgroup of fourteen infants with partial or total lesions (Becker et al., 2002).”

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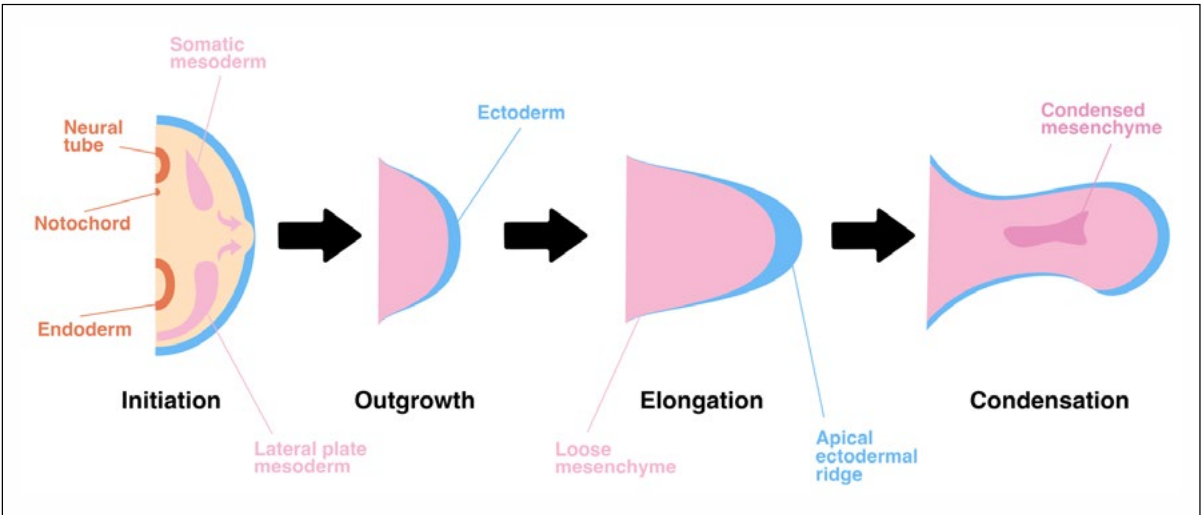


Figure 1. Stages of early limb bud development: initiation of limb bud growth from somatic and lateral plate mesoderm, outgrowth, elongation and condensation in which zones are formed which will eventually form musculoskeletal elements of the limb.
Adapted from AL-Qattan et al. (2009) and Sermeus et al. (2022).

even after Caesarean section (Mollberg et al., 2005). These inconsistencies imply that the magnitude of obstetric force alone cannot fully account for the risk or severity of injury.

Considerable efforts have been made to reduce the forces applied to the head and neck of children during deliveries complicated by shoulder dystocia; however, many children still live with the lifelong impacts of BPBI (Blom et al., 2022). Surgical intervention and rehabilitation have a role, but the results are variable and often remain unsatisfactory to those living with BPBI and their families. Prevention of injury must be the responsibility of all working in this field.

Classical risk models for BPBI have focussed on maternal diabetes, estimated foetal weight, shoulder dystocia and the use of instruments (Mollberg et al., 2005). These factors are clearly contributory, yet they explain surprisingly little at the level of an individual birth. Many babies with one or more of these features never sustain a plexus injury while others are injured in deliveries that appear routine (Mollberg et al., 2005). The pattern and severity of lesions also vary widely, from transient upper-trunk weakness to pre-ganglionic avulsion, suggesting that the same external forces meet different internal thresholds. Taken together, these observations indicate that current explanations do not fully account for the observed variation. In adult brachial plexus injury, anatomic variation is recognized as feasibly being a contributing factor to both acute injury and in chronic compressive conditions of the brachial plexus (neurologic

thoracic outlet syndrome, nTOS) (Benes et al., 2021; Patel and Smith, 2023).

The concept of developmental anatomical predisposition offers a possible explanatory model. Variants that narrow or alter the thoracic outlet and supraclavicular plexus corridor may focus or increase local strain during traction, lowering the threshold at which injury occurs. These same variations are familiar to peripheral nerve and thoracic outlet surgeons, as they contribute to the development of nTOS. Unlike obstetric forces, these anatomical features exist from early foetal development, creating the environment upon which delivery forces act.

This review examines the evidence for developmental predisposition in BPBI and considers how this framework could influence prevention of injury, clinical assessment and operative management.

Embryology of the brachial plexus

During early human development, the brachial plexus arises from the anterior (ventral) primary rami of spinal nerves C5 to T1 (Moore and Dalley, 2018). In parallel, around the fourth to fifth week of gestation, the embryo forms the upper-limb buds from the lateral plate mesoderm, which begin as ‘paddle-shaped’ mesenchymal outgrowths covered by ectoderm (Figure 1) (McQueen and Towers, 2020; Vargesson and Tickle, 2025).

As the limb bud enlarges, motor axons from the ventral roots extend into the mesenchymal core of the bud; soon after, sensory fibres from neural

crest-derived dorsal root ganglia follow, resulting in a primitive nerve network supplying the developing upper limb. Simultaneously, mesodermal somites and lateral-plate mesoderm differentiate to form the skeletal, muscular, vascular and connective-tissue structures of the shoulder girdle and neck, including the future ribs, clavicle region, prevertebral musculature such as the scalenes and the subclavian and axillary vessels (Miller and Detwiler, 1936).

Mesodermal condensations corresponding to the fifth to seventh cervical ribs initially form during embryologic development and then regress to end up as transverse processes owing to their interaction with the brachial plexus nerve roots. The formation of a cervical rib is an expression of an error in this neur ectoderm–mesoderm signalling, probably involving *Hox* gene expression (Galis, 1999; McNally et al., 1990). The standard patterns of brachial plexus anatomy are set by dynamic gene regulation networks during embryogenesis and the interaction between nerve root outgrowth and the simultaneous development of skeletal, muscular, vascular and connective tissues (Burke et al., 1995; Horan et al., 1995; Zuniga and Zeller, 2020). Variation in the development of any of these anatomical structures (for instance, rib formation, somite segmentation, or vessel position) naturally leads to variation in the pattern and path of the brachial plexus (Miller and Detwiler, 1936).

Biomechanical basis of injury

Finite-element modelling has provided insight into how mechanical loads are transmitted to the neonatal plexus. Wright and Grimm (2024) demonstrated that small differences in anatomy can change how strain is distributed along the upper trunk under identical external loads. Their work showed that anatomical constraints can increase local deformation during traction. Iaconianni et al. (2024), using computer simulations of shoulder dystocia manoeuvres, demonstrated that lateral flexion, rotation and traction produce patterns of strain consistent with clinical BPBI. These models support the observation that traction and compression are sufficient to injure the plexus, producing the spectrum from neurapraxia to avulsion.

Clinical findings reinforce these biomechanical data. Pondaag et al. (2011) observed a strong association between birthweight and injury severity, suggesting that shoulder–pelvis fit and the complexity of extraction manoeuvres influence force transmission. However, high birthweight or dystocia does not always lead to injury. This suggests that another factor – neurologic susceptibility – may be necessary to fully explain the mechanical threshold for injury.

Developmental anatomy as a predisposing factor

Cervical ribs and first rib anomalies

A prospective study of 1138 women referred for an advanced ultrasound examination at a mean gestational age of 20.6 weeks found echogenic structures at the level of the seventh cervical vertebrae in 65% of fetuses, which were interpreted as rudimentary cervical ribs (Schut et al., 2026). Corroborating this high prenatal incidence, Bots et al. (2011) identified cervical ribs in around 40% of electively aborted fetuses, even in the absence of other abnormalities. It has been suggested that these cervical ribs may disappear by fusing with the vertebral body during postnatal growth (Chernoff and Rogers, 2004). However, Becker et al. (2002) identified complete cervical ribs in infants with BPBI at a greater proportion than the general population, and argued that these narrow the supracostoclavicular interval, predisposing adjacent nerves to traction injury. Complete cervical ribs were found in five of the forty-two infants studied (approximately 12%), and in more than a third of the subgroup of fourteen infants with partial or total lesions (Becker et al., 2002). By modifying the anatomy of the region around the brachial plexus, a cervical rib may alter the direction of the vector of the stretching force, increasing its alignment to the axis of the most vulnerable brachial plexus bundle (Alfonso, 2011). Desurkar et al. (2011) reported congenital lower plexus palsy in neonates with non-ossified cervical ribs, the only identifiable abnormality.

These findings suggest that cervical ribs have a high prevalence in neonates, and both ossified and cartilaginous variants can distort plexus routing and predispose to injury. Population-level data reinforce the biological plausibility: cervical ribs occur in around 1% of the general population but in nearly 30% of patients with thoracic outlet syndrome (Maślanka et al., 2023). Exostoses of the first rib have also been reported to cause compression of the brachial plexus in neonates, resulting in BPBI, although this has only been described once (de Turckheim et al., 1991).

Variant branching and scalene anomalies

Cadaveric studies in fetuses and infants demonstrate substantial variation in plexus branching, root divergence and fascicular relationships (Kirik et al., 2018; Uysal et al., 2003). These influence the curvature and anchoring points of the plexus, creating regions where traction forces may be concentrated. Connolly and Auchincloss (2021) outlined the embryology of first rib and scalene development, showing how anomalous insertions and fibrous bands contribute to corridor

narrowing. Tense and hypertrophic scalene muscles have been identified as likely contributing factors in nTOS in the paediatric population (Rehemutula et al., 2015). These anomalies closely mirror the intraoperative findings in nTOS in adults, and similar patterns are increasingly recognized during neonatal BPBI explorations (Al-Hashel et al., 2013; Becker et al., 2002).

Neurologic vulnerability

The finite element studies discussed earlier focused on angles of traction. However, narrowing around the plexus or tethering of the plexus owing to abnormal anatomy are likely to produce similar responses. There are no experimental data to date on this. A dual-factor model may explain the observed clinical variability: an infant with significant anatomic neurologic vulnerability exposed to dystocia forces may sustain BPBI. Another infant with the same developmental variant but an uneventful birth may remain asymptomatic. In some individuals this vulnerability may remain asymptomatic, only manifesting clinically following growth-related anatomical change or a secondary mechanical or inflammatory insult, resulting in symptoms subsequently labelled as nTOS. We propose that neonatal BPBI and adolescent nTOS represent distinct phenotypic expressions of a shared underlying anatomical vulnerability.

Not all BPBI cases result from neurogenic vulnerability. However, infants with these anatomical risk factors probably require significantly less strain to sustain an injury compared with those with normal anatomy. This is evident in those who develop nTOS in later life, where very few present in the absence of predisposing anatomy (Redman and Robbs, 2015).

Developmental pathogenesis and genetic susceptibility

Developmental biology supports the concept that congenital narrowing of the thoracic outlet, such as cervical ribs, elongated C7 transverse processes, aberrant costoclavicular morphology or scalene-band anomalies, is not a random occurrence but a patterned developmental variant with a definable molecular basis. Vertebral and rib identity in the spine is regulated by *Hox* genes, which control somite segmentation and the capacity of a vertebra to form a rib (Burke et al., 1995; Wellik, 2009). *Hox* genes are a family of transcription factors which were first described in fruit flies for their ability to cause segmental homeotic transformations of the body plan (Lewis, 1963). Changes in the expression of these genes can produce predictable alterations in experimental models, including complete or partial rib formation on cervical vertebrae and morphological

changes of the first thoracic rib (Burke et al., 1995; Rancourt et al., 1995; Wellik, 2009). Loss of function in *HoxB-5* and dysregulated expression of *HoxB-6* induce cervical rib formation in mice, disrupting the normal C7–T1 boundary (Rancourt et al., 1995). Broader disruption of the *Hox* code have been shown to remodel axial patterning across multiple vertebral levels (Burke et al., 1995). These findings provide a biologically coherent explanation for the familial clustering of cervical rib and first-rib anomalies that clinicians increasingly observe in BPBI and nTOS populations (Goeteyn et al., 2021).

Although specific pathogenic variants are rarely identified clinically, radiographic population studies consistently demonstrate heritability in cervical rib prevalence, consistent with polygenic modulation of these developmental pathways rather than single-gene causation (Galis et al., 2025; Partiot et al., 2020). Patients with TOS and cervical ribs have also been found to have more miscarriages than those without, which may be explained by disturbance of the expression of multiple genes, including *Hox* genes (Schut et al., 2020).

Taken together, these developmental and molecular findings reinforce the clinical observation that congenital neurogenic vulnerability factors arise from patterned embryological processes rather than incidental variation. They provide a plausible biological process for familial clustering and strengthen the concept of a congenital ‘susceptibility phenotype’ present before birth. This framework aligns with the broader thesis of this review: that BPBI arises not solely from obstetric mechanics but from the interaction between delivery forces and a pre-existing anatomical predisposition that is biologically determined during axial patterning in early embryogenesis. Identification of this predisposition may allow for extra precautions to be taken during deliveries to decrease the incidence of BPBI (Tzou et al., 2014).

Clinical implications

Diagnostic challenges and clinical assessment

Brachial plexus birth injury frequently results from complex biomechanical forces during delivery, many of which are beyond the delivering clinician’s control (Chater et al., 2004). Consequently, understanding the contribution of anatomical predisposition is likely to become a key component of prenatal assessment. However, familiar findings such as supraclavicular fullness, focal tenderness or Tinel’s sign over the scalene interval are not feasible in this population. While targeted imaging of the brachial plexus is not standard assessment in any clinical setting, Tzou et al. (2014) report that cervical ribs can be identified during the

prenatal screening sonography. Cai et al. (2022) demonstrated that magnetic resonance imaging (MRI) can also be used to diagnose foetal vertebral anomalies with improved accuracy over ultrasound, although no cases of cervical rib were reported. Regarding the brachial plexus itself, MRI may demonstrate supraclavicular crowding or plexus tenting, but these signals are often lost in the T2 high-signal assessment. The cervical spine at birth is often not ossified sufficiently for it to be possible to identify cervical ribs or elongated transverse processes on radiographs (Lustrin et al., 2003). Identification of these anatomical abnormalities with focussed screening in pregnancies with known risk factors (macrosomia, previous shoulder dystocia or maternal gestational diabetes) could further assist in informing the risk of BPBI and shoulder dystocia in attempted vaginal delivery (Crofts et al., 2012). If a genetic marker for these anatomical variations were identified, existing prenatal tools (such as expanded carrier screening, cell-free DNA, chromosomal microarray analysis and next-generation sequencing) could be used to guide decision-making for mothers and obstetricians (Makhamreh et al., 2025).

Surgical considerations and management strategies

In the select cohorts which undergo neonatal brachial plexus exploration, surgeons often do not actively seek or recognize these characteristics of anatomic variation in the traumatized surgical field (Desurkar et al., 2011; Rehemutula et al., 2015; Tzou et al., 2014). The primary aim of the surgeon is to identify the level and severity of the nerve injury within a scarred surgical field lacking normal anatomy (Bahm et al., 2007). However, it is clinically plausible that a percentage of these cases involve anatomical findings analogous to adult nTOS, which may serve as a significant contributory factor. In such cases, it could be argued that decompression and neurolysis may be beneficial in the place of standard neuroma resection or nerve grafting. While prospective data are lacking, surgical teams report improved nerve excursion and reduced secondary tethering when anatomical compression is addressed at the time of reconstruction. This approach is biologically logical: a recovering nerve swollen within a narrow corridor is vulnerable to chronic entrapment physiology (Mackinnon, 2002).

Conclusion

We propose that developmental anatomical variation may contribute to neurologic vulnerability in the aetiology of BPBI. This concept offers a potential explanation for why some infants with recognized obstetric risk factors sustain injury while others do not, and

may account for the range of severity observed in some neonates.

Consequently, this topic merits discussion within the hand surgery and obstetric communities. Introducing anatomical assessment into neonatal examination should be considered. Further research is needed to explore whether anatomical variation does in fact confer neurologic vulnerability. Future studies might investigate whether biological markers during pregnancy signal such a vulnerability to aid obstetric decision-making. Additionally, exploring whether clinical markers in parents, such as signs of nTOS or anatomical variation, correlate with foetal risk may offer the potential to enhance prenatal diagnostic accuracy, refine operative management and improve long-term outcomes.

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What is it like to provide hand care in a war zone?

Mary Barnes, Oksana Myronenko, Andrii Lysak, Khrystyna Tsap, Romana Kolomiya, Oleg Rukavitsyn, Max Palamarchuk.

Mary Barnes shares several stories of surgeons, medics, and therapists in war-torn Ukraine. The stories are both moving and insightful, detailing the challenges faced by these brave health professionals on the frontline of war.

In November of 2025, I had the great honour to visit Ukraine and meet the therapists and doctors who provide hand care.

In addition to teaching hand therapy, orthotics and 3D printing courses in Kyiv, Ivano-Frankivsk and Kolomyia, I was able to meet and offer treatment suggestions to wounded soldiers. Air raid sirens were a frequent occurrence during my visit, keeping the population on edge. Although I did not experience power outages as Russian missile and drone strikes on energy infrastructure are so common that most hotels have generators and bomb shelters.

The most profound part of the experience was meeting these dedicated individuals who provide care in circumstances few of us can even imagine



Oksana Myronenko, MD, Hand Surgeon

My visit was organised by Oksana Myronenko, MD, Hand Surgeon, who treats patients in Kyiv, Western Ukraine, and the frontline in Eastern Ukraine.

Dr. Myronenko fled her home in Eastern Ukraine with her husband, orthopaedic surgeon Stanislav Lobach, and their two children. Her mother, Nataliia Sokolovaks, was killed by enemy fire in Bucha in March of 2022, while attempting to evacuate after Russia's full-scale invasion.

Dr. Myronenko created the Nash Sokil Foundation in her mother's honour. The foundation provides medical and social support for soldiers and internally displaced persons (IDP). Much of Dr. Myronenko's work is provided without compensation.

Andrii Lysak, MD, Hand Surgeon

Dr. Lysak: "Until the end of 2023, I worked as a hand surgeon in the department of Microsurgery and Reconstructive Surgery of the Upper Extremity at the National Institute for Trauma and Orthopaedic Surgery of the National Academy of Medical Sciences of Ukraine in Kyiv. At the end of 2023, the new microsurgery department was established, and I became the head of the Reconstructive Microsurgery and Orthopaedic Surgery department at the Main Medical Clinical Centre of the Ministry of Internal Affairs of Ukraine, also in Kyiv.



Before the Russian invasion, my primary area of interest was peripheral nerve and brachial plexus surgery.

Currently, over 90% of my patients are wounded soldiers. I focus on training so that other surgeons can also perform these surgeries. We have nearly everything we need - not fancy equipment, but all the essentials required for 95% of cases. Our cases are funded by the government. Depending on the pathology, soldiers stay in rehabilitation anywhere from a few weeks up to years in cases of complex injuries and staged reconstruction."



Andrii Lysak performing surgery (left) and at the IFSSH/IFSHT Triennial in Washington, DC (right)



Khrystyna Tsap, PT

Khrystyna: "I work at the UNBROKEN Rehabilitation Centre, which is part of St. Panteleimon Hospital. It is a state-owned hospital.

Before the full-scale invasion, I worked with patients with musculoskeletal disorders – both adults and children – just as I do now. However, today most of my patients are those with mine-blast injuries.

I began working with wounded soldiers in March 2023. I believe that specialists in Ukraine have already adapted to the workload; it is not always easy, but we must carry out our mission.

Speaking about our rehabilitation centre specifically, we have many resources to provide high-quality rehabilitation for patients with any diagnosis.

In Ukraine, rehabilitation for soldiers and veterans does not have strict time limits – it continues as long as needed to achieve the best possible recovery. Rehabilitation may last from two weeks to several years, depending on the severity of the injury, the type of treatment, and individual needs.

The UNBROKEN Rehabilitation Centre is funded through the support of local authorities, international partners, and charitable contributions.

In our rehabilitation centre we work in multidisciplinary teams.

Overall, we provide a full cycle of rehabilitation services, including:

- surgery and revision operations after injuries.
- prosthetics of upper and lower limbs (including high-technology prostheses).
- psychological and psychotherapeutic support.
- physical therapy and occupational therapy.
- speech and language therapy, as well as cognitive rehabilitation after traumatic brain injuries.
- social support and vocational guidance.

We accompany soldiers from the moment of surgery through their entire recovery until they reach the maximum possible level of function and independence.

The war has changed the lives of every Ukrainian, making us stronger and more resilient. Despite daily tragedies and the challenges of everyday life, Ukrainians do not lose their spirit. These are difficult times, but I am grateful that I can be useful to society and support those who defend us."

Romana Kolomiya, OT

Romana: "I have been working as an assistant occupational therapist since 2024 at the Municipal Institution "Ivano-Frankivsk Regional Hospital for War Veterans". Our institution specialises in the treatment and rehabilitation of military personnel and civilians who need long-term medical and rehabilitation care.

Before the full-scale invasion, the hospital accepted military personnel who participated in the Anti-Terrorist Operation/Joint Forces Operation (ATO/JFO), as well as civilian patients.

The diagnoses were diverse - from chronic diseases to injuries, but their complexity was significantly inferior to the cases we work with today.

The flow of patients in the hospital has always been high, but with the beginning of the full-scale invasion it has increased significantly. Along with the number of patients, the complexity of the injuries has also increased. Most often, we work with military personnel who have received mine and explosive injuries after being hit by First-Person View (FPV) drones, which significantly complicate the rehabilitation process. A significant number of patients have high amputations of the upper and lower extremities. There are also burn injuries and polytraumas.

The workload on specialists has increased at least twice, and in some cases three times. The department works very intensively, largely due to the team's enthusiasm and motivation to achieve a positive end result for each patient. We are sufficiently provided with materials and are always open to receiving new resources. In addition, specialists regularly undergo training courses to improve their skills.

Rehabilitation of military personnel occurs cyclically. It usually lasts from 21 days to several months. Often, patients are transferred from one department to another depending on the stage of treatment, and the final stage is usually the rehabilitation department.

The institution is financed through the National Health Service of Ukraine (NHSU).

The municipal institution "Ivano-Frankivsk Regional Hospital of War Veterans" has the following departments: surgical (including for trauma patients), therapeutic, outpatient, and rehabilitation.

A multidisciplinary team works in the rehabilitation department: doctors of physical and rehabilitation medicine (PRM), physical therapists, occupational therapists, assistants of occupational therapists and

physical therapists, rehabilitation nurses, psychologist, psychiatrist, and junior medical staff. This approach allows for comprehensive work with the physical and psychological recovery of military personnel.

Personally, this work has become a serious challenge for me and at the same time a point of professional growth. Psychologically, I have become more resilient, I have learned to make decisions quickly, as logical as possible and adapted to specific injuries, to ensure more effective and faster recovery of patients.

I am constantly learning and developing in the field of rehabilitation and psychology, because a deeper understanding of the patient's condition directly affects the positive outcome of treatment.

Today, the biggest problem remains the shortage of personnel. The hospital urgently needs additional specialists because the workload on the staff remains extremely high."





Oleg Rukavitsyn, DPT

Oleg: "I am currently working in a large hospital. Before the invasion, I mostly treated patients with back or joint pain, degenerative joint diseases (such as osteoarthritis), and patients after various injuries or surgeries (total joint replacements, ACL reconstruction, meniscus resections, etc.)."

We see a large number of wounded soldiers. The problem is that our hospital does not have sufficient funding for treating military personnel, because it is a private hospital with high treatment costs. Rehabilitation usually lasts from 2 to 6 months.

Treatment and rehabilitation are usually funded by charitable foundations, or the soldiers pay for it themselves with a discounted rate.

We have both occupational therapists and physical therapists. The difference is that occupational therapists primarily work with the upper extremity and cognitive impairments, while physical therapists work with everything else.

Personally, this experience has given me exposure to working with severe combat-related injuries. Our biggest current need is funding for the treatment and rehabilitation of wounded soldiers."



Max Palamarchuk, Medical Student

Max: "I work at the Kyiv Institute of Rehabilitation, a multidisciplinary medical and rehabilitation center in Kyiv, Ukraine. We function as an outpatient rehabilitation clinic, but because of the war, our work often resembles hospital-level intensity. We provide complex rehabilitation for civilians, veterans, and active-duty soldiers returning from the frontlines with traumatic injuries."

Before the full-scale invasion, our clinic treated a typical spectrum of musculoskeletal, neurological, post-surgical, and chronic pain cases - sports injuries, spine disorders, stroke, orthopaedic surgeries, post-fracture rehabilitation, and occupational overuse injuries. Upper-extremity cases were commonly related to tendinopathies, nerve compressions, fractures, and post-operative stiffness - similar to American outpatient rehabilitation settings.

Since February 2022, a large portion of our patients are wounded Ukrainian soldiers with polytrauma, upper-limb amputations, nerve and tendon injuries, massive soft-tissue damage, burns, and complex blast-related trauma. The workload has increased dramatically.

We expanded our team, extended working hours, added new treatment lines, and created specialised rehabilitation programs for amputees and complex upper-extremity cases. Eighty-eight is the average number of patients per day.

Supplies remain a challenge. We rely heavily on donations, medical partners, and international humanitarian support, because the government does not cover rehabilitation at the level required for modern war injuries. Equipment, splinting materials, prosthetic components, and advanced modalities are often in short supply.

Rehabilitation duration varies widely.

- For severe upper-extremity trauma, initial rehab typically lasts 6–12 weeks, followed by several cycles of repeated care.
- For amputees, rehab can take months, depending on stump condition, prosthetic access, nerve pain, and psychological readiness.
- Many soldiers require lifelong follow-up, especially those with nerve injuries, CRPS, contractures, or multiple limb loss.

Throughout its history, the Kyiv Institute of Rehabilitation has never received government funding. All our work - especially wartime rehabilitation - has been made possible exclusively through donors, charitable organisations, and private contributions. This includes international NGOs, Ukrainian grassroots fundraising, and individual supporters who help us keep therapy free for wounded soldiers. We are actively seeking sponsors to help us continue our mission. Today, the need is greater than ever.

The number of severely injured soldiers - amputations, nerve and tendon injuries, complex upper-extremity trauma, burns, blast damage - continues to grow. We provide all rehabilitation for soldiers free of charge, and we do everything we can to ensure they receive world-class care aligned with modern international standards.

Our team includes physical therapists, occupational therapists, kinesiotherapists, rehabilitation physicians, psychologists, and prosthetic specialists.

In Ukraine, roles of PTs and OTs often overlap, but we try to align our practice with international standards:

- PTs focus on movement restoration, gait, strength, biomechanics, neuro-musculoskeletal recovery, prosthetic gait training, and cardiopulmonary conditioning.
- OTs focus on upper-extremity function, ADLs, fine motor skills, splinting, cognitive rehab, hand therapy, and functional reintegration.

For soldiers, we also provide:

- Hand therapy and splint fabrication
- Post-amputation rehabilitation
- Pain management (manual therapy, TECAR, shockwave, laser, neuromodulation)
- Psychological counseling
- Gait & balance diagnostics
- Virtual reality therapy
- Neuromuscular re-education programs
- Return-to-duty / return-to-life functional training

The war has affected me personally. Many of the soldiers and civilians who come to us are my age - young people who, in another life, would be focused on building their futures, not recovering from life-altering injuries. Seeing my peers endure such suffering reshapes the way I see the world. Even the simplest daily tasks now carry the weight of the war: every walk to work, every study session, every ordinary moment is shadowed by air-raid sirens, news from the front, and the knowledge that people my age are fighting, being wounded, and rebuilding their lives from zero.

One experience that changed me profoundly involved a woman just five years older than I am. She carried deep psychological trauma and did not trust male physical therapists because of what she had lived through. Together with our clinical psychologist, we tried to find a bridge - something safe, and outside of traditional therapy.

We began offering her individual guitar lessons as a form of gentle re-entry into connection and trust. I was the first male she was able to open up to. That moment - watching her slowly allow herself to connect again reminded me that rehabilitation is not only about restoring physical function.

Our greatest and most urgent need is the creation of a dedicated inpatient rehabilitation unit. As the number of severely wounded soldiers continues to grow, we face cases that require continuous, round-the-clock rehabilitation, medical monitoring, complex pain management, and intensive multidisciplinary care that cannot be fully provided in an outpatient setting. An inpatient unit would allow us to admit the most complex patients - amputees, those with multiple limb injuries, severe nerve damage, burns, and polytrauma - and deliver the level of care their recovery truly demands. Establishing this unit is critical for improving long-term outcomes, accelerating functional recovery, and ensuring that every defender receives comprehensive, uninterrupted rehabilitation.

Most importantly, we need sustained global awareness. The war has not ended, and the number of severely injured soldiers continues to rise. Their recovery depends on the world not turning away."



Mary Collier Barnes has been a Certified Hand Therapist (CHT) for over 25 years and an Occupational Therapist for over 40 years. She has taught in person hand therapy, orthotics course and 3D printing in Ukraine, Chile, Argentina, Ecuador, Mexico, Kenya, Guatemala, Greece, Taiwan, and Vietnam. She volunteers with SurgiCorps International and other organisations.

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IFSHT NEWSLETTER - REACH

Issue 2 of volume 6 of the IFSHT newsletter is available on the IFSHT website. Please click the link below to read!

<https://ifsht.org/publications/>

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

We call on hand and upper limb therapy clinicians and researchers to submit any contributions for consideration to:

Informationofficer@ifsht.org.



UPCOMING EVENTS

The Joint APFSSH-APFSHT Congress will be held in May 2027 in Seoul, South Korea. Online submission for Abstracts is now open! For more details visit the website <https://www.apfssh2027.com/>

The next joint IFSSH and IFSHT Triennial Congress will be in Singapore in 2028. The website is live for more information.

Further details can be found at:

<https://www.sshs.sg/ifssh2028>



Venice Awaits



2nd IFSSH Mid-Term Course 2027 4-8 April 2027 | Venice Lido, Italy

There are conferences you attend for the scientific programme, and there are meetings that become memorable because of the people you meet, the ideas you exchange and the place in which they take place. The 2nd IFSSH Mid-Term Course, taking place from 4-8 April 2027 in Venice, Italy, aims to bring all of these elements together.

A program built around learning and interaction

The Mid-Term Course has been designed to offer much more than a traditional lecture-based meeting. The scientific program combines plenary sessions, hands-on workshops, Meet the Masters sessions, Focus Sessions, expert panels and interactive case discussions, allowing participants to approach important clinical topics from different perspectives.

The program covers a wide range of areas in hand surgery, including trauma and reconstruction, wrist surgery and arthroscopy, microsurgery, peripheral nerve surgery, tendon surgery, joint replacement, infections, congenital conditions and degenerative disorders, among others.

One of the highlights of the course will be the opportunity to learn directly from experienced specialists through the Meet the Masters sessions.

These sessions are designed to encourage interaction and discussion, providing participants with an opportunity to ask questions and exchange experiences rather than simply listen to a lecture.

The Focus Sessions will offer a more concentrated look at selected topics, while the hands-on workshops will provide an opportunity to complement theoretical knowledge with practical experience.

The program also places a strong emphasis on real-life clinical problems and decision-making. Through case discussions, expert panels and the Clinical Challenges and Surgical Solutions sessions, participants will have the opportunity to explore challenging situations, discuss different approaches and learn from the experience of colleagues from around the world.

With such a diverse program, participants can build their own educational experience according to their clinical interests and make the most of their time in Venice. Explore the full scientific programme at

www.ifsshvenice2027.com/#topic.

Meet our keynote speakers

The program features keynote speakers and experts from different parts of the world, bringing together a wide range of experience and expertise in hand and upper-limb surgery.

The keynote speakers are:



Greg Bain (Australia)

With extensive expertise in hand and wrist surgery, arthroscopy, anatomy, biomechanics and reconstructive surgery, Greg Bain will bring his broad clinical and academic experience to the program.



Elisabet Hagert (Portugal and Qatar)

An internationally recognised specialist in hand, wrist and peripheral nerve surgery, Elisabet Hagert will contribute her expertise to the scientific program and discussions.



Donald Lalonde (Canada)

Known internationally for his work in Wide Awake Hand Surgery, Donald Lalonde has played an important role in advancing approaches that allow many hand procedures to be performed without general anaesthesia.



Amy M. Moore (USA)

A leading specialist in peripheral nerve surgery and research, Amy M. Moore brings extensive experience in both clinical practice and medical education.



Francisco del Piñal (Spain)

Internationally recognised for his work in hand surgery, arthroscopy and microsurgery, Francisco del Piñal will be among the leading experts sharing his experience in Venice.



Zeng Tao Wang (China)

With extensive expertise in hand surgery and an active role in the international hand surgery community, Zeng Tao Wang will also contribute to the course faculty.

Registration

Registration is now available at the standard rates:

- Surgeons: €700
- Young surgeons (born in or after 1992): €375 **early rate extended until 20 November**

The registration fee includes access to the scientific sessions, the exhibition area, as well as CME credits and certificate of attendance. Read more about how to register at www.ifsshvenice2027.com/#registration

Venice: the perfect setting for an international meeting

The course will take place on the Lido of Venice, offering a setting that combines the convenience of a dedicated conference venue with easy access to the historic centre of Venice.



After a day of lectures, workshops and scientific discussions, participants can step outside the conference environment and explore the city's canals, squares and historic streets.

Venice also offers countless possibilities for experiencing the city beyond its most famous landmarks. Participants can discover Murano and Burano, take a gondola or private boat tour, visit artisan workshops, explore hidden neighbourhoods or enjoy traditional Venetian food and wine.

The course website also provides information about excursions and experiences available to participants, making it possible to combine the scientific programme with a little exploration of Venice:

www.ifsshvenice2027.com/#excursion

Plan your stay on time

If you are planning to join us in Venice, there is one thing we strongly recommend doing early: booking your accommodation.

Venice is an exceptionally popular destination, and availability can become increasingly limited as the travel season and the course dates approach. Staying close to the venue can also make the course experience considerably easier, particularly for participants attending several consecutive days.

A selection of partner hotels close to the Palazzo del Casino is available through the official course website.

Visit the accommodation section of www.ifsshvenice2027.com/#hotels and make your hotel arrangements as soon as possible.

Join us in Venice!

Explore the programme, discover the faculty, check the registration options and book your accommodation at: www.ifsshvenice2027.com

We look forward to welcoming the international hand surgery community to Venice in April 2027.



Upcoming IFSSH/ IFSHT Congress



23-27 October 2028 Singapore

Discover Singapore beyond the Congress: Gardens by the Bay – where nature meets innovation

While attending the IFSSH-IFSHT 2028 Congress in Singapore, take the opportunity to visit one of the city's most extraordinary attractions: Gardens by the Bay. Located in the heart of Marina Bay, this award-winning nature park offers a unique combination of spectacular landscapes, cutting-edge sustainability, and unforgettable architecture.

Spanning over 100 hectares on reclaimed land, Gardens by the Bay was created as part of Singapore's vision to become a "City in Nature." Since opening in 2012, it has become one of the country's most visited attractions, welcoming millions of visitors each year from around the world.

The gardens are best known for their iconic Supertrees – towering vertical gardens reaching up to 50 metres in height. Covered with thousands of plants from across the globe, these remarkable structures are not only visually striking but also serve practical environmental functions, including collecting rainwater and generating solar energy. In the evening, they come alive during the spectacular Garden Rhapsody light and music show, creating an unforgettable experience against Singapore's skyline.

Visitors can also explore two remarkable conservatories. The Flower Dome, the world's largest glass greenhouse, recreates the climate of Mediterranean and semi-arid regions and showcases ever-changing floral displays throughout the year.



Next door, the Cloud Forest features a lush mountain landscape crowned by one of the world's tallest indoor waterfalls, offering a refreshing escape into a mist-filled tropical environment.

Whether you have a free afternoon between scientific sessions or wish to unwind after a busy day at the congress, Gardens by the Bay provides the perfect setting to experience Singapore's commitment to innovation, sustainability, and world-class design. Just a short walk from Marina Bay, it is an inspiring destination that perfectly reflects the city's vision for the future.

Two Years to Go - Singapore 2028!

The countdown has officially begun - only two years to go until the IFSSH-IFSHT 2028 Congress in Singapore!

Exciting preparations are already underway for what promises to be an inspiring international gathering of the hand surgery and hand therapy community. Under the theme "Towards Sustainable Hand Surgery and Therapy," the Congress will bring together experts, researchers and healthcare professionals from around the world for a world-class scientific and educational experience.

While the programme is still being developed, there is already plenty to look forward to - and more details about the scientific programme, faculty, important dates and opportunities to get involved will be shared in the coming months.

We are also preparing sponsorship and partnership opportunities for organisations interested in supporting this landmark event, with further information to be announced soon.

So, stay connected and follow the journey to Singapore! Subscribe to our newsletter and follow us on Instagram @ifssh_ifsht2028 for the latest news, updates and announcements.

Two years to go - we can't wait to welcome the international hand surgery and hand therapy community to Singapore in 2028!





FESSH PRAGUE 2027

2-5 JUNE



Theme: **Hand Surgery in the Ageing Population**

Venue: O2 Universum

Abstract submission by 15 November 2026

Registration from January 2027

Congress presidents: Aleš Fibír and Radek Kebrle

fessh2027.com

FESSH-EFSHT Congress 2028
28 June—1 July 2028
Strasbourg, France
Sybille Facca, Philippe Livernaux

FESSH Congress 2029
30 May—2 June 2029
Porto, Portugal
Pedro Negrão

FESSH-EFSHT Congress 2030
5—8 June 2030
Edinburgh, UK
Wee Lam

NOF Congress 2026 in Copenhagen, Denmark in November 2026



NOF Congress 2026

November 11-13, 2026
Copenhagen, Denmark



SCIENTIFIC MEETING 2026

4-6 NOVEMBER 2026 - EDINBURGH



with Guest Society:
American Association for Hand Surgery



7th International Conference for Surgery of Upper Limb Spasticity
Towards a Global Consensus

25 – 27 FEBRUARY 2027
SINGAPORE

Academia, Singapore General Hospital
21 College Road, Singapore 169856



Caroline Leclercq
Congress Chair

Wee Leon Lam **Sze Ryn Chung**
Conference Organizers

Registration is open

Singapore General Hospital
SingHealth

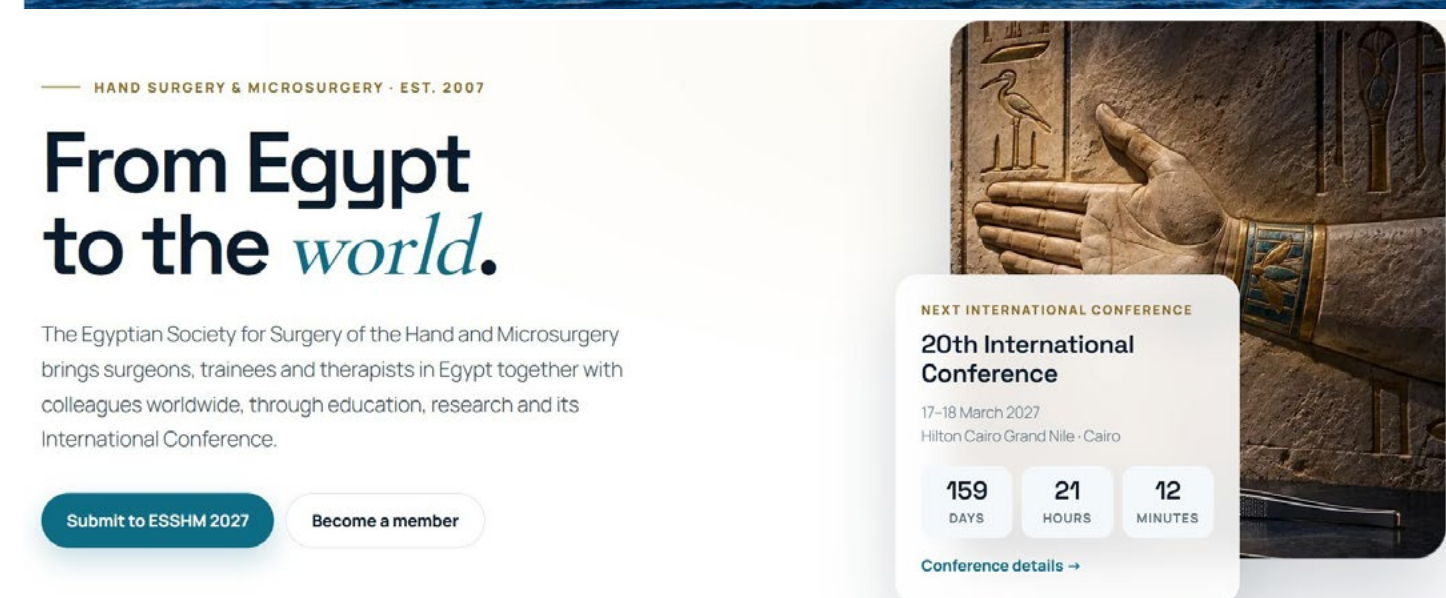
SingHealth DukeNUS
ACADEMIC MEDICAL CENTRE
MUSCULOSKELETAL SCIENCES



6th European Symposium on Pediatric Hand Surgery and Rehabilitation

26–27 August
Oslo 2027

pediatrhand2027.com

HAND SURGERY & MICROSURGERY · EST. 2007

From Egypt to the world.

The Egyptian Society for Surgery of the Hand and Microsurgery brings surgeons, trainees and therapists in Egypt together with colleagues worldwide, through education, research and its International Conference.

[Submit to ESSHM 2027](#) [Become a member](#)

20th International Conference
17–18 March 2027
Hilton Cairo Grand Nile · Cairo

159 DAYS **21** HOURS **12** MINUTES

[Conference details →](#)



2027 AAHS ANNUAL MEETING
JW MARRIOTT MIAMI TURNBERRY | AVENTURA, FLORIDA

AAHS AMERICAN ASSOCIATION FOR HAND SURGERY

BSSH GUEST SOCIETY THE BRITISH SOCIETY FOR SURGERY OF THE HAND

