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ADVANCES IN REHABILITATIVE TREATMENT



The Hand *and* Neurology

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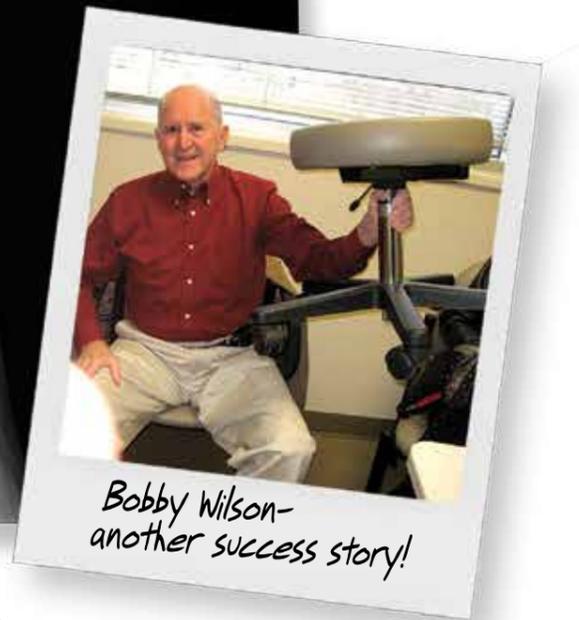
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The revolutionary Distal Radius Ulna Joint wrist prosthesis by Aptis.



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Checklist for Holistic Management

For a very long time I have struggled to find an answer to a concerning trend, which seems to become more frequent.

This trend becomes more obvious the more patients I see for so-called "second opinions", as well as complicated cases that are referred to me.

The issue is that one sees an increasing number of patients who have been "over serviced", or inappropriately treated.

The challenge was to identify the cause or reason for this inappropriate handling of these patients' ailments.

It became clear that the answer was indeed simple. The problem mostly does not lie in a lack of training, knowledge or skill, but in not seeing the bigger picture, evaluating the odds against the benefits and/or deciding what is best for a particular patient.

We are trained to make a diagnosis; and (any) diagnosis we **will** make! But this is often where we miss the point; it is in choosing the right, holistic option for the patient sitting right in front of me at this moment, which can only be based on an **honest** and correct diagnosis.

Why are we in medicine neglecting a very simple method to help us avoid unnecessary mistakes or oversights, which other professions have used for many years?

Pilots use check lists as an essential necessity to ensure the safety of the aircraft and passengers. The build environment (eg. architects, quantity surveyors, builders) cannot design, plan or build any construction without check lists. All successful venture capitalists use check lists before investing in start-up enterprises.

As a hand surgeon who has been in medical practice for 48 years, I found the following 10 point mental check list invaluable to insist me in an attempt to reach a honest diagnosis in the first place, and only then, to offer a holistic management plan for my patients:

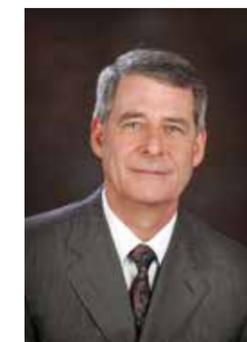
- Have I **listened** to my patient's complaints? (not the opinion of others, for example physiotherapists, relatives or colleagues)
- Do I have all the relevant **background information**? (e.g. work, hobbies, sports, music etc.)
- Have I **physically examined** my patient?
- Have I made a **provisional clinical diagnosis**?
- Do I really need **further investigations** to confirm my clinical diagnosis? (will this add more information)
- If so, which ones are **realistic**? (sonar, X-rays, electro conductions, bloods, MRI, scans)
- Have I, in simple objective terms, **explained** the diagnosis to my patient? (using models, drawings, diagrams, scan images)
- Have I discussed all the **management options**, including the possible risks? (observations, ointments, medicines, appropriate modalities of hand therapy, splints, surgical options)
- Have I explained the difference between "a **serious condition**" (something needs to be done) and "an **annoying condition**" (no urgency to do anything)?"
- Am I sure my suggested management will **benefit the patient**, even with the known possible complications? (scarring, stiffness, implant failure, infection, rehabilitation etc.)

This is not a flow chart, or flow diagram but a mental check list to ensure that all the important bases have been covered.

"A correct diagnosis will help in reaching the most optimal management, but an incorrect diagnosis will lead to an incorrect management"

All the very best for an enjoyable and meaningful 2018 !

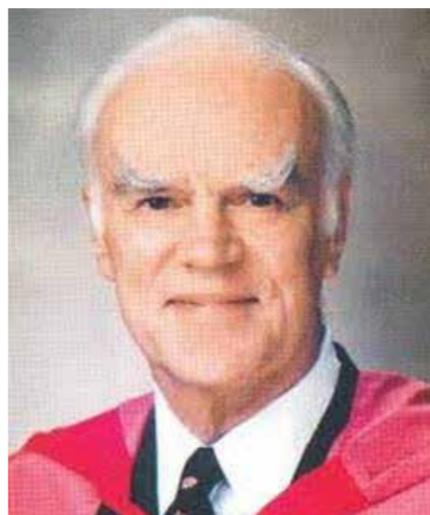
Ulrich



Ulrich Mennen

Editor: IFSSH Ezine
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Adrian E Flatt (1921 - 2017)



Surgery (American) from 1980-1991. He trained 50 hand surgery fellows in Iowa City, Norwalk, Connecticut, and Dallas, Texas.

He was named a Pioneer in Hand Surgery by the International Federation of Societies for Surgery of the Hand in 1992.

As a high school student, I read an article in Time magazine about Dr. Adrian Flatt's work at the University of Iowa where he had developed metal MCP joints. I used the Time article as the basis of a science project, never supposing that our paths would cross.

As a resident, I read his books on 'The Care of Minor Hand Injuries', 'Care of the Arthritic Hand', and 'The Care of Congenital Hand Anomalies'. Each was practical and highly readable by the novice.

He became famous for his technique of making molds of hands of children with congenital hand disorders. He also made numerous hand castings of accomplished individuals (presidents, athletes, artists, medical colleagues, etc) which now fill the lobby of the Baylor University Hospital in Dallas.

Adrian Flatt was born in England and raised in India. While he attended medical school at Cambridge University, he volunteered at the Royal London Hospital in London during the blitz bombing in WWII. After training in orthopaedic and plastic surgery in England, he became a physician in the Royal Air Force parachute rescue team in Sri Lanka. He made 18 parachute jumps as a young physician. He first came to the US on a Fulbright Scholarship. He assumed a faculty position at the University of Iowa in 1956.

Dr. Flatt became an ASSH member in 1958. He served as ASSH president from 1975-1976 and was the Editor of the Journal of Hand

Dr. Flatt and I corresponded and spoke often over many years. He was always encouraging, upbeat and insightful. He often nudged me to write more and share my thoughts with others. We are all the better since he so willingly shared his knowledge with us all.

His inspiring teaching of hand anatomy to medical students at Texas Southwestern Medical School earned him the Teacher of the Year honors on 7 different occasions.

Many years ago, Dr. Flatt anonymously contributed a substantial sum to an AFSH fund that has underwritten the costs associated with the ASSH Residents and Fellows Conference for many years. After several years of prodding, he reluctantly allowed the ASSH to add his name to the conference title.

He was a remarkable man who lived a full life by any measure.

Adrian E Flatt passed away on 14 October 2017 at the age of 96 years.

Terry Light, MD,
Past ASSH President

Ridvan Ege (1925 - 2017)



(TSSH).

From 1967 – 1993 he was the Chairman of the Department of Orthopaedic Surgery and Traumatology at Ankara University Medical School before his retirement in 1993

Prof Ege was honoured as a 'Pioneer of Hand Surgery' at the 6th IFSSH Congress in Helsinki, Finland, in 1995.

Still full of energy after his retirement, he established the Ufuk University in 1999.

Ege published 92 books on Hand Surgery and Orthopaedic Surgery, as well as 304 scientific articles.

He was the chairman and organiser of the 8th IFSSH Congress in 2001 in Istanbul.

Still not done, at the age of 80, he was Chairman of SICOT (International Federation of Societies of Orthopaedic Surgery and Traumatology) in 2005.

Prof. Ridvan Ege passed away in 8 June 2017

Haluk Ozcanli M.D
On behalf of the Turkish Society for Surgery of the Hand

Ridvan Ege was born in Denizli, Turkey in 1925. He qualified as a Medical Doctor in 1948 and received the General Surgery Board Certificate in 1955. He then completed his Orthopaedic Surgery residency in the USA between 1955-1959.

Dr Ege then became the Director of Orthopaedic Surgery in the Gulhane Medical School between 1959-1967. Between 1963 and 1964 he did a Hand Surgery Fellowship at the New York Columbia University under Dr. Robert E. Carrol.

Back in Turkey, he established the Turkish Society of Orthopaedic Surgery and Traumatology in 1964. In 1967 Dr Ege founded the Turkish Society for Surgery of the Hand



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Some stories of Adrian Flatt (1921 - 2017)

When the ASSH meeting was held in Chicago in 2003, Dan Nagle and I were asked to talk about the History of Chicago Hand Surgery. We spent the summer editing photos and videos and refining our text. A rehearsal the day before our presentation, while the stage was being constructed around us, was judged "boring." We needed to shorten our presentation. We were despondent. Overnight we edited out several minutes of video and text. Our final rehearsal of the new script was held at 6 AM on the morning of the opening ceremony. When we finished our presentation to an empty auditorium, we heard a lone individual applauding. When we realized that it was Adrian Flatt, we were ecstatic. He said that he enjoyed our presentation very much. At that point, I felt that if Adrian Flatt liked it, I didn't care what anyone else thought. We confidently went forward with our show at the opening ceremony in front of 1500 attendees. The audience vigorously applauded the final presentation – I was most pleased that Adrian liked it.

Terry Light, MD, Past ASSH President

Terry Light, ASSH Past-President has written a wonderfully moving account of his associations with Adrian Flatt. Others will provide factual details of his remarkable life. What follows is a series of "Adrian Flatt stories", some undoubtedly apocryphal. Those in which I was involved are true, at least to a fading memory.

I first met Dr Flatt at the Derby Hand Course conducted by Frank Burke in the UK, in 1981. He and Richard Smith formed a formidable teaching duo at this week of intimate learning for an audience of 50 or so, of which I was one. Richard Smith, metaphorically, amputated both my index and little fingers as a punishment for answering that my little finger was the least useful and the one which I could most do without. If I was not embarrassed and humbled enough, he then feigned to misunderstand my question as to whether there was an increase in degenerative changes in those born with a congenital scapholunate or lunotriquetral synostosis. This in response to a discussion of the prevalence of such changes following surgically performed intracarpal arthrodeses for carpal instability. It was fun enough and effective for the purpose of teaching. However, Adrian Flatt noticed my discomfort and spoke to relieve it. He proceeded to explain to

Richard Smith, without condescension and in perfect English, the meaning of my question. I was a very grateful, young trainee.

During that meeting I learnt of "two stories" which have entered folklore. The first we all know. Wassel, at the completion of his Fellowship in Iowa City, was approached by Dr Flatt who questioned whether he had contributed anything of worth to hand surgery during his Fellowship. In the following week he produced the Wassel classification of thumb duplication, a classification which remains in use today. To my knowledge, Wassel made no other significant contributions to the world of hand surgery. Some would prefer the naming of this classification to be altered to Flatt's classification of thumb duplication. (My apologies to Wassel if I have unintentionally caused offence).

Before this, during his training as an orthopaedic registrar in the UK, Adrian Flatt had been Senior Registrar to Sir Reginald Watson-Jones, one of the more famous orthopaedic surgeons of that time. Such was his power that when Mr Flatt apologetically informed the great man that he was moving to Iowa City in the United States, Sir Reginald forbade him. It was not until Adrian had embarked

upon the Queen Mary for the United States that Sir Reginald realised that Mr Flatt had disobeyed him, behaviour which he could not countenance, nor understand. Sir Reginald, as an older man, was also known for fracturing his pelvis during a game of "Oswestry billiards" at the Robert Jones and Agnes Hunt Orthopaedic Hospital outside Oswestry in Shropshire.

In this game the protagonists place their hands on a billiard table. A name is called and that person must take possession of a moving billiard ball, which has been propelled at speed against the cushion of the table, before the ball comes to a stop, whilst being prevented from doing so by the other players, who may move around the table whilst keeping their hands in contact with the table. Their aim is to prevent the named player from retrieving the moving ball. A thrust from one right hip sent Sir Reginald, whose name had been called, tumbling into the, fortunately unlit, fire place. The culprit remains nameless. Certainly not Adrian Flatt. I suspect that the game is rarely played now.

My next involvement with Adrian Flatt was in 1985, when as editor of the JHSA, he returned a manuscript I had offered for publication, along with scathing comments from the reviewers. Of course, I took offence to this and responded with a long explanatory letter to Dr Flatt. His reply was a delight. He informed me that if my manuscript had been as elegantly and pithily written as was my letter, undoubtedly it would have been

published.

As an editor, Adrian was also responsible for telling us that our profound and worthy efforts should be placed in a drawer for a number of weeks, then re-examined for the many faults which would become apparent, before submission. On receiving criticism from reviewers, we should follow the same process. He certainly anticipated the current tendency for many to respond in anger and immediately, through email or twitter, when criticised. The time in a drawer, and the time it took to write a letter in response was enough time to allow immediate resentments to pass. What an outstanding piece of advice this was, insightful, understanding and gentle.

In 2004, Adrian Flatt and Harold Kleinert attended another hand meeting in Derby, this time to celebrate the retirement of Frank Burke. Frank had spent Fellowships with both in the US. They were his teachers as they were mine. At the time of Frank's retirement, both were still working. Harold Kleinert presented a talk "My first 50 years of hand surgery". Adrian Flatt's topic was "My life as a medical student in London during the Blitz". The audience was enthralled by both men. In the evening, with England's summer smiling, a group of us, led by Adrian and Harold, headed to the nearby local pub for refreshments before dinner. I was following immediately behind the two and what a sight they offered. One, upright, almost rigid with the gait of a soldier, or an English gentleman; the other

sauntering with a broad-based mid-Western country stride. They were as different as chalk and cheese. At no stage during this meeting, nor during this walk, did one try to outdo the other - the elegance and confidence of two talented men. At least, until they reached the environs of the pub. I heard Harold say to Adrian in his laconic, American drawl "In what year were you born Adrian?" "I was born in 1921. I am 82" was the reply in a precise and clipped English accent. "I am also 82" said Harold. A silence followed. Then, this: "Well, in what month were you born?" asked Harold. "I was born in August" replied Adrian. "Well, I was born in October" said Harold, "which means that you are older and, therefore, you should enter the hotel first". "Well thank you. Harold" said Adrian, "I appreciate your courtesy". Without batting an eye and with not so much as a slight upturn of the lips, Harold then informed Adrian that as he was entering the hotel firstly, he was responsible for buying the first round of drinks for everyone. That was the only round of drinks we had before dinner. Nevertheless, Adrian was his normal gracious self.

Our paths have crossed many times. There are too many stories to tell. He has been a teacher, mentor and friend to me, as he has been to so many. We will miss him.

Michael Tonkin



I am pleased to report the IFSSH continues to grow. We are now a Federation of 59 societies from 57 nations and we look forward to welcoming many more hand surgery societies into the IFSSH family.

The IFSSH is dedicated to promoting the dissemination of hand surgery knowledge around the world. The IFSSH is uniquely positioned to pursue this goal given the financial health of the organization and the breadth of its membership. One way the IFSSH can help educate hand surgeons is through the Harold Kleinert Visiting Professorship. The IFSSH Committee on Educational Sponsorship (CES) has funds available to underwrite a visiting professorship to interested hand surgery units and is anxious to receive applications. This Professorship provides funding for hand surgery centers to bring a well-known hand surgeon to their unit. I strongly encourage our members to consider this opportunity.

The IFSSH Committee for Educational Support (CES) also looks forward to receiving applications for financial support of other educational endeavors such as regional courses, outreach programs including education and medical missions, grants for fellowships and attendance at the IFSSH Triennial meetings.

Full details are available on the IFSSH website - <http://ifssh.info/fellowship-grants.html>

Speaking of the website, we continue to work on the website upgrade. The upgrade will make the website more user friendly, increase its functionality and contain more IFSSH archival information. We will keep you informed as this upgrade process evolves.

This year the 2018 Delegates' Council Meeting will be held in conjunction with the FESSH congress which will take place June 13-16 in Copenhagen. We will forward the full details of the IFSSH Delegates' Meeting to all delegates in the near future.

I encourage the hand surgeons of our member societies to take the time to peruse the IFSSH Ezine. This quarterly communication is unique and serves as a conduit for the exchange of information within the world hand surgery community. The Ezine contains informative articles on clinical issues as well as updates on the many accomplishments of our member societies. We sincerely appreciate the member societies' contributions and of course we are indebted to Professor Ulrich Mennen for his Editorship of the IFSSH Ezine. By the way, if you do not already receive the Ezine, please subscribe (free of charge) via the website - <http://ifssh.info/ezine.html>.

Once again, I encourage you to take advantage of the many educational program funding opportunities offered by the IFSSH.

On behalf of the IFSSH Executive Committee I wish you a Happy New Year.

Future Meetings:

Triennial IFSSH Congresses

XIVth IFSSH – XIth IFSHT Congress – Berlin, Germany

17-21 June, 2019

www.ifssh-ifsht2019.com

XVth IFSSH – XIIth IFSHT Congress – London, United Kingdom

2022 (Dates to be confirmed)

National and Regional hand surgery meetings

Please see announcements in the Ezine and listed on the IFSSH website.



Daniel J. Nagle MD

Secretary General IFSSH

Geoffrey Raymond Fisk

MRCS; LRCP; MB BS; FRCS Ed; FRCS Eng; MPhil

1916 – 2007



Geoffrey Fisk was born in Goodmayes, Essex on 26 May 1916. He studied medicine at St. Bartholomew's Hospital in London and later continued postgraduate training there.

Shortly after the outbreak of World War II, he was posted

to Addenbrooke's Hospital in Cambridge to assist in the establishment of an Accident Centre for the treatment of military and civilian casualties. He later joined the Royal Air Force Medical Branch at Northallerton where he came under the influence of Guy Pulvertaft. There he designed the "Lead Hand" for securing the hand on the operating table during surgery. This device is used universally although its origin is often not known by the user (Lancet 1948).

His first consultant appointment was to the Seamen's Hospital in Greenwich, London where he established a Hand Service. In 1952 he was awarded a Fulbright Fellowship at St. Louis, Missouri, in Professor J. Albert Key's Service. He was later appointed orthopaedic surgeon to the Harlow Group of Hospitals setting up a Hand Service there also. He designed a camera for use in the Accident Department.

He was an early member of the curiously named Second Hand Club, the precursor of the British Society for Surgery of the Hand (BSSH). Fisk was a Founder Member of the BSSH and its President in 1981.

Fisk has been honoured by being appointed Hunterian Professor at the Royal College of Surgeons (London) on three occasions (1951, 1968 and 1978) during his consultant career, and his discourse in 1968 dealt with carpal instability and the fractured scaphoid, describing wedge grafting for non-union. He has lectured widely and written extensively on the biomechanics of the wrist joint and the history of development of Hand Surgery. He has shared in the training of senior registrars on the Bart's Rotation Training Programme and on his retirement in 1981 some thirty trainees had obtained consultant appointments.

After retirement from consultant practice he took up the study of Anthropology and obtained his MPhil at Darwin College in Cambridge University. While studying at Witwatersrand University, he described a severely fractured calcaneus partly united to the talus in a 22 million year old fossil Australopithecine hominid from Sterkfontein, South Africa.

Fisk (originally spelled Ffyske) had many interests, including gardening and classical music. He owned a copy of the first editions of Andreas Vesalius' *Fabrica* (1543) as well as Adrian Spigelius' *Opera* (1645). He died on 10 November 2007 at the age of 91.

Geoffrey Raymond Fisk was awarded the "Pioneer of Hand Surgery" title in 1998 at the Seventh International Congress of the IFSSH in Vancouver, B.C., Canada.

Wael Mansour Fahmy

MCh(Orth), FRCS(Eng)

1928 – 2003



Wael Fahmy was born in Cairo on 3 August 1928, to Mansour Fahmy, a philosopher, and Insaf Serry, an educator. In 1952, he graduated from Ein-Shams Medical School, Cairo, Egypt. He received a diploma of surgery in 1956, and a diploma of orthopaedic surgery in 1959. In

1963, he earned the Fellowship of the Royal College of Surgeons of England (FRCS Eng), and a master's degree in orthopaedic surgery from Liverpool in 1965. During this time, he received his initial training in hand surgery at Harlow-Wood Orthopaedic Hospital, in Nottinghamshire, by Guy Pulvertaft.

General W. M. Fahmy served the Egyptian Medical Corps until 1983. During that time, he conducted Hand Surgery clinics at the Helmhah and Maadi Military Hospitals where he experimented with intermediate vessel revascularization in dogs during the early seventies.

Dr. Fahmy was then appointed Professor of Orthopaedic Surgery at the Military Medical Academy in Cairo, where he established a microsurgical laboratory for small animals with the purpose of conducting workshops that would help surgeons from all over the region to develop skills in the fields of their applications. He devised twin microscopes with separate foot pieces to allow two surgeons to work simultaneously on cases of multiple re-implantations.

Professor Fahmy has participated in numerous society activities. He is Founder Member and Secretary General of the Egyptian Hand Club. He served as Council Member of the Egyptian Orthopaedic Association for over 15 years, and was elected President in 1992. During this period, he supported the expansion of audio-visual facilities for sub-specialized fields, including hand surgery. Meanwhile he upgraded his private service to an Institute level where trainees and researchers frequently utilized the library and microsurgical laboratory facilities.

In 1980 he formed, with dedicated expatriates, the Egypt & Eastern Mediterranean Society for Surgery of Hand, for the purpose of joining the IFSSH. Since that time he has been the Editor of the Eastern Mediterranean Hand Bulletin, a newsletter that also provided a computerized data base for hand problems. In later years his focus was on computer programming methods to join together management rules by weights of confounders. The weights were derived by linear regression of age, duration, type and location of lesion. He was simultaneously verifying by meta-analysis, the linear correlation.

He organised the Satellite Congress to Egypt before the 4th IFSSH Congress in Tel Aviv, Israel in 1989.

Wael Fahmy passed away on 29 December 2003.

At the Seventh International Congress of the IFSSH in Vancouver, Canada in 1998, Wael Mansour Fahmy was honoured "Pioneer of Hand Surgery"

The Hand: a Neurologist's perspective

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**“Often the hands will solve a mystery that the intellect has struggled with in vain.”
- Carl G. Jung**

Many pathological processes will affect the hand and this is often viewed from a specific vantage point depending on the medical speciality involved. The hand as a diagnostic area in clinical evaluation of a patient has great significance for the neurologist. It also presents a link between neurology and various other specialities. There is no clear scheme according to which neurological evaluation of the hand must be done but general guidelines as in table 1 can be helpful.

In this paper, neurological aspects will be highlighted while others such as primary orthopaedic and rheumatological causes of hand pathology including trauma will not be dealt with in any detail. Each of the main headings encompass large volumes of information; just broad outlines will be discussed.

Table 1 Conditions affecting the hand	
• Brain: Upper motor neuron pathology (brain-hand link)	
• Spinal cord:	- Myelopathy - Radiculopathy
• Movement disorders	
• Anterior horn cell pathology (ALS)	
• Neuropathy	- Generalized neuropathy - Entrapment neuropathy
• Trauma	
• Brachial plexus pathology	- Trauma - Brachial plexus neuritis - Thoracic outlet syndrome
• Vascular pathology	
• Myopathy	
• Systemic diseases affecting the hand	- Auto immune pathology - Vascular pathology - Arthritic disease
• Orthopaedic conditions	
• Psychogenic disorders	

The brain-hand link

Many conditions affecting the central nervous system find unique expression in the hand. Lesions of both the brain and spinal cord will produce uniquely recognizable hand posturing.

Spasticity

Central nervous system (CNS) damage can induce deformities of the limbs due to muscle spasticity and then tendon retractions. The intrinsic muscles of the hand ie. the interossei muscles, the adductor digiti minimi, and to a lesser degree the lumbrical muscles are mainly involved. This often leads to a wrist flexion. The position of the fingers is variable. The fingers can be flexed, making a tight fist around the thumb.



Spastic hand secondary to ischaemic brain damage

There are multiple causes of spastic deformation of the hand but cerebral palsy (CP) (1) and stroke are the most common. The functional and structural changes that take place are due to adaptive plasticity of the CNS to offset or improve functions compromised by the pathological insult. Early detection and classification of hand abnormalities in CP can guide therapies.

From a therapeutic perspective, the spastic hand is significant because of the option to treat with Botulinum toxin (2). EMG guided injections of Botulinum toxin often alleviate the symptoms and facilitate remedial therapy.

Spinal cord lesions

Depending on the level and completeness of spinal cord lesions a mixed upper and lower motor neuron weakness pattern can be observed in the hand. Radicular pathology from the C6-T1 roots affects the hand.

1. Cervical Myelopathy

Cervical myelopathy can be caused by various pathological processes resulting in compression of the spinal cord. The clinical picture varies according to the level of cord involvement. Patients present with neck pain and paraesthesia in a non-dermatomal pattern but also weakness in the upper extremities combined with loss of motor control due to weakness and often spasticity in the lower extremities, resulting in gait impairment. In advanced disease, there may be global wasting of the hand intrinsic muscles, loss of active interphalangeal joint extension, and flexed posturing of the metacarpophalangeal joints in the ulnar 2 or 3 digits (3).

2. Cervical Radiculopathy

Cervical radiculopathy (CR) causes dysfunction of a spinal nerve root, presenting as pain and dysaesthesia in a dermatomal distribution. This can be due to degenerative cervical spondylosis or foraminal stenosis, cervical disc herniation, and traumatic or degenerative instability. The seventh cervical nerve root is most commonly involved, followed by the sixth cervical nerve root (3).

2.1 C6 radiculopathy can cause pain and dysaesthesia radiating from the neck to the anterior arm, the lateral aspect of the forearm, the first dorsal web space, and into the thumb and index finger. It normally does not cause significant motor problems in the hand (4).

2.2 C7 radiculopathy may cause dyasesthesia radiating from the neck into the back of the shoulder and arm, the dorsal forearm, and the mid dorsal hand. Patients may also exhibit

weakness of wrist flexion, and finger extension (4).

2.3 C8 radiculopathy can cause dysaesthesia radiating down the medial borders of the arm and forearm and into the ulnar digits.

The sensory disturbance can mimic ulnar nerve entrapment at the elbow; but would affect the forearm which is preserved in patients with ulnar nerve entrapment. Loss of intrinsic muscle strength in the ulnar nerve distribution as well as weakness in the median and anterior interosseous nerve distributions can be observed in patients with radiculopathy (4).

Movement disorders

Hand function can be compromised due to lesions of the basal ganglia. Various conditions can affect the basal ganglia including cerebral palsy and primary movement disorders.

Cerebral palsy

In cerebral palsy, the predominant motor abnormality is spasticity; but can include dyskinetic (dystonia or choreo-athetosis) and ataxic cerebral palsy (2). This can make treatment very difficult since therapy should be aimed at reduction of the spastic elements as well as the abnormal movements.



A Patient with writes cramp. Note the wrist extension, support of the arm with the other hand and the abnormal grip of the pen.

Dystonia

In primary dystonia, the best-known example is the task specific dystonia such as writer's cramp (5). In this condition, the hand posture becomes abnormal while performing a specific task while under all other circumstances the hand is completely normal both in physical evaluation but also in function. In writer's cramp, the patients tend to have an abnormal grip of the pen and abnormal posturing of the hand and arm when writing. Treatment of focal dystonia of the hand is very difficult and although Botulinum toxin does provide relief for some patients, it can induce unwanted weakness compromising other hand functions (6).

Tremor

Various causes for hand tremors are recognized. Hand tremors can vary from being mildly bothersome to incapacitating. The most frequently occurring hand tremors are essential tremor and Parkinsonian tremors. Studying the tremor in relation to activity, frequency and muscle groups involved can be of help in diagnosing the underlying illness.

Anterior horn cell pathology

Amyotrophic lateral sclerosis (ALS) usually causes insidious loss of function or gradual, slowly progressive, painless weakness in one or more regions of the body, without sensory disturbances. In lower motor neuron (LMN) involvement, fasciculation may occur early on. Patients with upper motor neuron (UMN) involvement generally have increased reflexes. As ALS progresses, muscle atrophy becomes more apparent, and spasticity may compromise function. Muscle cramps are common. The hand muscle wasting affects the 'thenar (radial) hand', including the abductor pollicis brevis (APB) and first dorsal interosseous (FDI) muscles. There is relative sparing of the hypothenar muscles (the abductor digiti minimi (ADM)). This dissociated atrophy of the intrinsic hand muscles is termed the 'split hand' (7). The muscles involved in the split hand are innervated through the same spinal segments (C8

and T1), and FDI and ADM, which are differentially affected, are both ulnar nerve innervated. The reason for this dissociated pattern of weakness is not well understood.



The split hand syndrome in amyotrophic lateral sclerosis (Photo: The split hand syndrome in amyotrophic lateral sclerosis Eisen, Andrew and Kuwabara, Satoshi Journal of neurology, neurosurgery, and psychiatry volume 83, month 11, 2011, pages 399-403) Internet photo

Neuropathy

Neuropathies affecting the hand may be classified somewhat arbitrary into generalized and focal traumatic neuropathies which include entrapment neuropathy.

1. Generalized neuropathies
Neuropathies can affect the hand in many ways. In generalized peripheral neuropathies, the distal appendages are often affected early on and therefore the feet and hands are involved. Peripheral neuropathy, a result of damage to peripheral nerves, causes weakness, numbness and pain (8). Peripheral neuropathy can result from multiple causes some of which are listed in table 2. Many of the neuropathies, however, remain idiopathic.

Table 2 Causes of peripheral neuropathies

Autoimmune diseases
Including Sjogren's syndrome, lupus, rheumatoid arthritis, Guillain-Barre syndrome, chronic inflammatory demyelinating polyneuropathy and necrotizing vasculitis

Metabolic causes including diabetes.

Up to 50% of diabetics develop some type of neuropathy

Exposure to poisons

Toxic substances including heavy metals or chemicals

Medications

Especially chemotherapy, can cause peripheral neuropathy

Infections

Viral or bacterial infections, including Lyme disease, shingles, Epstein-Barr virus, hepatitis C, leprosy, diphtheria and HIV

Inherited disorders

eg. Charcot-Marie-Tooth disease

Trauma or pressure on the nerve

Acute neuropraxia and chronic irritation eg. bangles and watch straps

Tumours

Includes neuromas and pressure on nerves due to tumours in the area and polyneuropathy due to paraneoplastic syndrome

Vitamin deficiencies

Especially Vitamins B-1, B-6 and B-12 and Vitamin E and niacin

Bone marrow disorders

These include myeloma (monoclonal gammopathies), lymphoma and amyloidosis

Other diseases

Renal disease, liver disease, connective tissue disorders and hypothyroidism

2. Entrapment syndromes

Compressive neuropathies are common conditions (9). Some of the compression syndromes are listed in table 3. The symptoms can range from sensory abnormalities, paraesthesia, and pain early on, to motor disruption and permanent sensory loss. Carpal tunnel syndrome is very prevalent but other compression syndromes affecting the hand include entrapment of the Median, Ulnar and Radial nerves (10). Although diagnostic techniques such as radiologic imaging have

been developed to diagnose nerve compression injuries; electro-diagnostic studies are still used widely. Sonography has become sophisticated with high definition images and visualisation of inflammation, so that accurate measurements of the surface diameter of nerves inside and outside of the compressed area give an accurate indication of the compression. This helps the surgeon in planning the extent and nature of the decompression procedure.

Table 3 Compression syndromes of the upper limb

- Common entrapment syndromes
 - Carpal tunnel syndrome (CTS)
 - Ulnar neuropathy at the elbow (UNE)
 - Radial nerve syndrome at the brachioradialis tendon (Wartenberg syndrome)(RNS)
 - Posterior interosseous nerve syndrome at the supinator muscle (PINS)
 - Thoracic Outlet Syndrome
- Rare entrapment syndromes
 - Anterior interosseous nerve syndrome
 - Pronator syndrome
 - Ulnar neuropathy in Guyon's canal

Electrodiagnosis of Chronic Nerve Compression Injuries

Patients are often referred to neurologists with the request to perform diagnostic nerve conduction studies. The broad principles for diagnosis of nerve entrapment will be outlined. The specific entrapment syndromes have specific diagnostic criteria but only the diagnosis of carpal tunnel syndrome will be discussed in detail.

Two types of electrodiagnostic studies are commonly used: nerve conduction studies and EMG.

1. Nerve conduction studies

These are very useful in diagnosing compressive neuropathies.

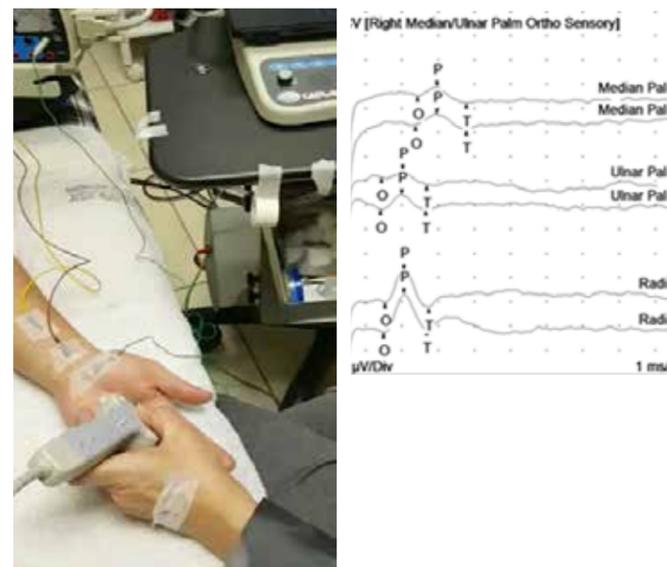
A sensory nerve is stimulated with a handheld

stimulator and the generated action potential is recorded by 2 electrodes on the skin, along the length of a nerve. For purely sensory nerves, recording electrodes are commonly placed proximally along the nerve, toward the spinal cord, yielding a sensory nerve action potential (SNAP).

In motor nerves, the recording electrodes are placed distally on the belly of the target muscle, yielding a compound muscle action potential (CMAP). Information obtained is about the amplitude, latency (delay in response following stimulation), and conduction velocity (latency divided by distance) (11).

Various techniques are available to make the diagnosis of nerve entrapment (12) but standard practice for the diagnosis of carpal tunnel syndrome would include: Median sensory nerve peak latencies are measured and compared to either the ulnar or radial sensory peak latencies in the same hand. (usually orthodromic responses over a short distance, typically 8cm) In borderline results additional testing is used.

If the median sensory response is absent, the median motor onset latency in comparison to the ulnar motor onset latency can help localize the problem.



Median sensory nerve recording and graphs of recorded responses

Site	NR	Onset (ms)	Peak (ms)	P-T* Amp (μV)	Norm Peak (ms)	Norm P-T Amp	Site1	Site2	Norm Delta (ms)	Delta-8 (ms)	Dist (cm)	Vel (m/s)	Norm Vel (m/s)
Left Median/Ulnar Palm Ortho Sensory (Writer - CTS)													
Median Palm		2.0	2.4	20.1			Median Palm	Wrist - CTS	<0.1	2.0	8.0	40	
Median Palm		1.9	2.4	20.2			Median Palm	Wrist - CTS		2.0	8.0	40	
Ulnar Palm		1.4	2.0	38.1			Ulnar Palm	Wrist - CTS		1.4	8.0	57	
Ulnar Palm		1.4	2.0	35.3			Ulnar Palm	Wrist - CTS		1.4	8.0	57	
Radial		1.7	2.2	27.6			Radial	Wrist - CTS		1.7	8.0	47	
Radial		1.6	2.2	23.6			Radial	Wrist - CTS		1.7	8.0	47	
Right Median/Ulnar Palm Ortho Sensory (Writer - CTS)													
Median Palm		2.4	3.0	12.2			Median Palm	Wrist - CTS	<0.1	2.4	8.0	33	
Median Palm		2.4	3.0	13.1			Median Palm	Wrist - CTS		2.4	8.0	33	
Ulnar Palm		1.4	2.0	11.3			Ulnar Palm	Wrist - CTS		1.4	8.0	57	
Ulnar Palm		1.4	2.0	11.5			Ulnar Palm	Wrist - CTS		1.4	8.0	57	
Radial		1.5	2.1	30.0			Radial	Wrist - CTS		1.5	8.0	53	
Radial		1.5	2.1	29.0			Radial	Wrist - CTS		1.5	8.0	53	

Values of recorded responses (in a patient with carpal tunnel syndrome)

2. Electro-myography (EMG)

EMG studies analyse the integrity of muscle function by studying the electrical activity in the muscles during rest and contraction. EMG studies are particularly important to determine whether axonal damage has occurred.

EMG studies involve insertion of a needle electrode in a muscle. Then, the needle is moved around within a muscle to check for fibrillation potentials (indicating loss of innervation).

Next, the needle is kept in a single place to check for fasciculation.

Finally, motor unit potentials (MUPs) are recorded (11). By selective comparison of muscles innervated by the same nerve but different nerve roots, and conversely, a single root expressed by different nerves, a picture of nerve pathology regarding the anatomical location of damage can reasonably accurately be established. Various patterns of the motor unit can also be used to establish re-innervation and thereby to some degree severity of injury and indirectly the prognosis.

Brachial plexus pathology

Brachial plexus injuries have many causes, such as falls, traumatic traction, crushing, penetrating injuries, obstetric complications, thoracic outlet syndrome, tumours and aneurisms (13). Patients often lose hand function, if the lesion is at the level of C7 and lower. In assessment motor function, sensory dermatomal distribution, and reflexes must be evaluated.

Diagnostic evaluation

1. Radiology

This can include a standard AP chest X-rays, to rule out first and second rib fractures potentially indicating damage to the overlying brachial plexus. A neck X-ray should also be obtained to exclude cervical transverse process fractures, which may indicate root avulsion. Magnetic resonance imaging (MRI) is very useful for imaging the post-ganglionic brachial plexus, and for evaluating benign and malignant tumorous lesions. It also provides excellent evaluation of any oedema or fibrosis of the brachial plexus (13).

2. Electromyography (EMG)

EMG can assist in diagnosis of brachial plexus injury, localise the level of the lesion, help estimate the severity of axon loss and eliminate other conditions from the differential diagnosis. Repeat EMG studies, combined with repeat physical examinations should be done to document progression of recovery (14).

Treatment

Treatment of brachial plexus injuries is either conservative or operative. The use of EMG will allow the clinician to ascertain if the damage is degenerative. If this is the case then conservative treatment is indicated. In this period neurologists are often called upon to help provide adequate pain relief, to minimise discomfort and maximise physiotherapeutic potential. If surgical intervention is deemed necessary close cooperation with the surgeon is needed to decide the precise nature and localization of the injury.

Myopathy

Myopathy generally tends to affect proximal larger muscles. Welander described a distal arm myopathy and since then many well-characterized distal myopathies have been described. In Welander myopathy the symptoms have a late onset affecting the hands and gradually distal muscles of the lower extremities. The most-affected muscles are the long extensors of the hands and feet (15). Distal myopathies share the clinical features of preferential muscle weakness in the feet and/or hands. These are a clinically and genetically heterogeneous group of disorders (16).

Other neuromuscular disorders that are important to recognize as they display prominent distal limb weakness can include Myotonic dystrophy (DM) Facio-scapulo-humeral dystrophy (FSH), Inflammatory myopathy and various other myopathic conditions.

Investigations can include serum CK, electromyography and muscle biopsy as well as muscle imaging (17). Based on the combination of age at onset, mode of inheritance, pathology and muscle imaging, the list of possible underlying genetic disorders can be narrowed down allowing for specific genetic testing.



Hands of a patient with Welander's myopathy
(Internet photo no reference)

Psychogenic disorders

Psychological disorders can present with neurologic symptoms or signs, but have no identifiable structural or functional neurological aetiology. These conditions can mimic almost any organic disease (18). Presenting hand syndromes can include pseudo-paralysis, pseudo-sensory syndromes and psychogenic movement disorders syndromes. To distinguish these from organic disease the examiner must observe signs and symptoms or elicit test responses that are non-physiologic and incompatible with organic disease. Treatment falls in the realm of psychiatry.

Conclusion

Examination of the hand in neurology has great significance since this is often revealing of pathology elsewhere in the nervous system. As mentioned earlier hand pathology often forms a nexus between neurology and various other specialities.

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Sports Injuries of the Hand & Wrist

ADVANCES IN REHABILITATIVE TREATMENT - MOJCA HERMAN

Hand and wrist injuries in athletes are common, counting for as many as 25% of all sports injuries (Rosenbaum & Awan, 2017). Athletes of all different levels representing numerous types of sports are referred to our hand clinics every year. Hand therapists need to be able to confidently rehabilitate an athlete who has sustained an injury to the hand or wrist and return them to their sport as fast and safe as possible. The challenge is in designing tailored therapy programs to meet the athlete's sport specific physical needs while adhering to the healing tissue timelines. In a typical hand clinic, it is rare that therapy sessions factor in psychological readiness, communicate in a sports minded language, or incorporate graded sport specific movement patterns. Yet these concepts are fundamental for successful return to sport after injury. It is the goal of this article to introduce these three concepts as progressions on current hand therapy practice for sport-oriented rehabilitation.

The first progression encompasses the guiding framework for informed clinical practice decisions. Hand

therapists have largely adopted an evidence-based practice approach to clinical rehabilitative management (MacDermid, 2004). The progression on this current hand therapy practice is consideration of an additional framework for sport-oriented rehabilitation referred to as psychologically-informed practice. Psychologically-informed practice is a framework that takes into account a patient's psychological makeup, including thinking, emotions, personalities and past experiences (Johnson & Haigh, 2010). This framework can provide important insight to an athlete's perspective, in turn, be a valuable and necessary rehabilitation tool for successful return to sport. There is ample research that has explored the psychological responses in athletes associated with return to sport after injury (Arden, Taylor, Feller, & Webster, 2013). Despite the overall emotion being positive as the rehabilitation process progresses, one of the most prominent emotional responses for return to sport after injury is the fear of re-injury. Additionally, there are other negative emotions such as anxiety, stress and depression that athletes

also report after injury (Covassin, Beidler, Ostrowski, & Wallace, 2015). These negative psychological responses affect adherence, recovery in rehabilitation, confidence, increase risk of injury, moreover, can decrease the likelihood of successful return to sport (Ivarsson, Tranaeus, Johnson, & Stenling, 2017). A simple suggestion for assessing psychological readiness is the utilization of a questionnaire administered during various phases of rehabilitation. An example of such a questionnaire is the injury-psychological readiness to return to sport scale (I-PRRS) (Glazer, 2009). It is a straightforward six question tool that rates the athlete's confidence level from 0 (no confidence) to 100 (complete confidence) on return to sport participation after injury. The reported information gathered is useful to inform the therapist on the athlete's self-perceived readiness to return to sport, furthermore help guide treatment planning and intervention throughout the course of rehabilitation. Embedding hand and wrist therapy in a psychologically-informed practice treatment approach is useful for enhancing an athlete's

psychological readiness for successful return to sport.

The second progression encompasses the need to communicate in a sports minded vocabulary when rehabilitating athletes in a hand therapy setting. Learning to speak the athlete's language within the scope of their sport specific needs is critical for successful rehabilitation and ultimate return to sport. This requires a unique dialogue that is weaved between the physician, coach, hand therapist and athlete. That is, the 'team' of experts surrounding the athlete must be able to universally communicate in a streamlined sports minded language to ensure the athlete returns medically healthy and psychologically ready. Specifically, the referring physician is the medical expert guiding treatment based on decisions on tissue healing parameters. The physician will determine the timelines for the initiation of therapy, frequency of therapy sessions, and the formal clearance for sport reintegration. The medical terminology imparted by the physician needs to be translated into an understandable language for the athlete's commitment to the medical recommendations. The hand therapist is the rehabilitation expert who performs a detailed assessment of the upper extremity deficits, as well as screening for psychological readiness. The evaluation needs be interpreted

and communicated in the context of the athlete's sport and individual timelines. The therapy goals and rehabilitation process must be relayed and executed in a way that the athlete understands the need to continually protect the healing tissue during rehabilitation. The coach is the sport expert who is able to communicate the nuances of the sport while describing sport specific fundamentals and milestones needed for the athlete's safe return. The level of unique and detailed sport and medical communication is ongoing and frequent between the therapist, physician and coach while discussing rehabilitation

treatment session content, patient tolerance, and planning for subsequent sessions. The most crucial relationship is with the therapist and athlete. The athlete needs to teach the hand therapist a language that is unique to them as they describe the sport from their perspective. The athlete will further provide insight to how their injury is impacting normal hand/arm use within their sport. There is a natural synthesis of dialogue as the therapist introduces therapy terms to the athlete, the athlete infuses the therapist with sport language, and the physician and coach impart their expertise. This will

“This challenge can be successfully met by designing creative programs that incorporate automatic graded sport specific movement patterns, advancing the athlete's rehabilitation both physically and psychologically, all while communicating in a unique and detailed sports minded language”

ensure mutual trust and a positive psychological environment for the athlete to thrive.

The third progression encompasses the need for incorporating automatic sport specific movement patterns directly into the treatment sessions. Therapists are skilled at activity analysis when creating a rehabilitation environment that is challenging yet successful. The obvious challenge is in creating a tailored therapy program that adheres to healing timelines while simultaneously honoring the athlete's desire to return to sport at an uncomfortably fast pace. The easiest way to accommodate this transition for the athlete-patient is to incorporate graded sport simulation into the therapy programming. Having the ability for an athlete to engage in sport related tasks will increase adherence and confidence, lessen return to sport timelines and ensure a safer reentry with less risk of injury.



Fig 1. An example of the athlete performing sport simulation by practicing the arm motion in freestyle swimming

In some cases, the athlete's healing tissue is ready to start performing sport simulation as part of the treatment like having the arms simulate swimming strokes, or swinging a golf club or a tennis racket (Fig 1).

In other cases, the healing tissue is ready to tolerate incorporating the athlete's sports equipment in therapy like dribbling a basketball, throwing a baseball on a rebounder, or practicing hockey stick handling (Fig. 2).



Fig 2. An example of incorporating the athlete's sports equipment while practicing graded sport specific movement patterns with a hockey stick

In other scenarios, the healing tissue warrants further protection before engaging in sport specific tasks. The natural and obvious form of protection in this scenario is incorporation of a custom fabricated orthosis. A carefully fabricated orthosis that serves the purpose of protecting the healing tissue while simultaneously allowing the athlete to start graded sport related activities can be extremely beneficial. It is suggested that the

therapist ask the athlete to bring in their sports equipment, and together collaborate in designing the 'best fit' orthosis (Fig 3).



Fig 3. An example of a carefully fabricated custom thumb orthosis that protects the healing tissue while simultaneously allowing the athlete to use their hand in water polo ball handling skills

The ability to incorporate a custom orthosis into the rehabilitation process is an empowering tool for quicker and successful sport integration (Fig. 4)

Of note, it is also critical to continuously educate the patient regarding the risks involved, thus requiring excellent communication and reciprocal trust in this phase of the rehabilitation. Enabling an athlete to start graded sport specific movement patterns earlier than traditionally considered, is a very powerful clinical intervention.

Rehabilitation of hand and wrist injuries in athletes can be challenging for hand therapists. This challenge can be successfully met by designing creative programs that incorporate automatic



Fig 4. Volar and dorsal views of the wrapped custom water polo thumb orthosis

graded sport specific movement patterns, advancing the athlete's rehabilitation both physically and psychologically, all while communicating in a unique and detailed sports minded language. Incorporation of these components in the currently accepted practices of hand therapy will aide in facilitating sport oriented rehabilitation, as well as safe and successful return to sport for the injured athlete.

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About the author.

Mojca, "MO", is a former Olympic Swimmer and graduate of USC's Occupational Therapy Program. She has over 20 years of clinical experience and is currently in her 14th year of private practice in Torrance, California. In her private practice, Mo also provides therapy to elite and professional athletes including: LA Clippers, Lakers, Kings, Dodgers, Anaheim Ducks, Angels and the LPGA. Mo is currently a member of the ASHT Board of Directors, has co-authored several chapters on a variety of hand therapy topics, and annually guest lectures at both USC and CSDUH Graduate Occupational Therapy Programs in the Los Angeles, California area.



Mojca Herman



**“DISTAL RADIO-ULNAR JOINT: FUNCTION, ANATOMY INCLUDING PATHO-MECHANICS”
JOURNAL HAND SURGERY’ (EUROPEAN) MAY 2017, VOLUME 42, ISSUE 4, P338-345**



Jan-Ragnar Haugstvedt

1. What were your main reasons for writing this article?

My doctoral thesis, built on work from the BioMechanics Lab at Mayo, was on DRUJ. I've often been asked to give talks about the anatomy and biomechanics of the DRUJ. Henk Coert, the co-editor of JHS(E) asked me to write this review article for the special DRUJ issue, and by doing so I was able to put in a paper

what I've been presented at many meetings/congresses throughout the last few years. Richard Berger is the one who taught me "everything" about the DRUJ. Martin Langer is a colleague with exceptional talents in illustrating, thus the combination of the three of us I thought would be fruitful.

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

For me, it was important to realize, when I performed my studies, that the foveal insertion of the DRU ligaments is the most important element in DRUJ stability.

"Everyone" knows this by now, but not at that time. I also think it's important to understand that ligamentum subcruentum, the foveal insertion, has fibers coming from many different structures. The anatomy (and biomechanics) is more complex than was thought of from the beginning.

3. What should all hand surgeons

(and or hand therapists) reading your article understand about the findings of your research?

I think the most important thing to understand is that the stability of the DRUJ is complex. If the DRUJ is unstable, there are many different structures that should be addressed (TFCC, UC lig complex, ECU, PQ, IOM, the bony structure and the capsule). Thus you need more than one tool in your toolbox to address DRUJ instability.

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

We have during the last year published on 20 years follow up of TFCC injuries. If more work is to be published, it will be on clinical results of different surgical procedures.

“CHRONOLOGIC AND GEOGRAPHIC TRENDS OF TRIANGULAR FIBROCARILAGE COMPLEX REPAIR”

‘HAND CLINICS’ NOVEMBER 2017 VOLUME 33, ISSUE 4, P593-605



Taichi Saito

1. What were your main reasons for writing this article?

Recently, the anatomy of TFCC has been described in detail, especially the ulnar side which consists of two portions: superficial portion (styloid insertion) and deep portion (foveal insertion). The strategy of TFCC repairs on the ulnar side has thus changed and is well accepted. However, the treatment strategy for other portions of TFCC injuries, such as radial side tears is still controversial. I wanted to describe the chronologic and geographic trend of the repair methods based on published articles which discuss various TFCC repair methods. This is the reason why I wrote this article.

2. What is the most interesting/important result and conclusion of your article?

Most articles published demonstrate the repair of ulnar TFCC tears. In particular, the reports focus on repairing the TFCC by attachment to the fovea. It indicates the importance that the foveal reattachment has been recognized.

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

A number of treatment methods for TFCC tears have been reported, and the treatment strategy of TFCC tears have changed. In particular the treatment for ulnar sided tears should recognise the importance of foveal attachment.

“ANATOMICAL FACTORS CONTRIBUTING TO RADIAL NERVE EXCURSION AT THE BRACHIUM: A CADAVERIC STUDY”

WAYNE A. CHEN, T.DAVID LUO, MICHAEL D. WIGTON, ZHONGYU LI
JOURNAL OF HAND SURGERY (AMERICAN), PUBLISHED ONLINE: NOVEMBER 2017

1. What were your main reasons for writing this article?

Radial nerve palsy is common after prolonged pressure to the nerve such as in Saturday night palsy, blunt trauma associated with humeral shaft fractures, and closed or open reduction of humerus fractures. The mechanism of this relative vulnerability of the radial nerve to a traumatic insult remains unknown. Some authors believe extraneural factors such as the nerve crossing the spiral groove limiting its excursion is responsible. Others think intraneural factors are likely to blame as the radial nerve is “anatomically different” in comparison to the median and ulnar nerves. The main reason for this study was to identify the extraneural vs. intraneural factors that contribute to the vulnerability of the radial nerve at the brachium.

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

The most interesting finding from this study is that the radial nerve has less excursion than the median and ulnar nerves at the brachium, making it more vulnerable to traction injury. Releasing the lateral intermuscular septum significantly improves nerve excursion up to 38%. Compared to the median and ulnar nerves, the radial nerve is similar in terms of

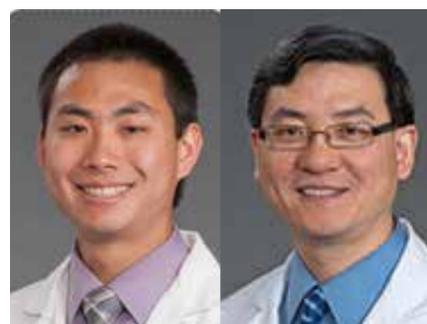
vascularity, nervous, and connective tissue ratio. Therefore, we believe the main cause of the vulnerability of the radial nerve to compression and traction injuries is extraneural tethering mainly at the lateral intermuscular septum. A second interesting finding is that elbow position affects the strain on the radial nerve. Flexing the elbow from neutral to 90° doubled radial nerve excursion. Further releasing the lateral intermuscular septum tripled radial nerve excursion.

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

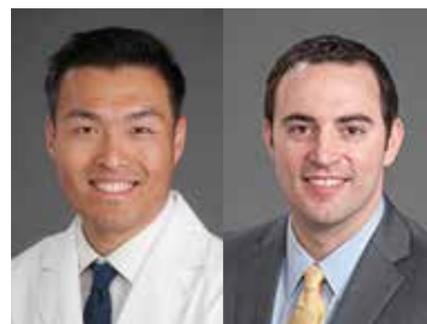
When we perform humeral shaft fracture fixation, prophylactic release of the lateral intermuscular septum may reduce the incidence of radial nerve palsy. Elbow positioning is important in changing the excursion of the radial nerve. When performing closed reduction of humerus fractures, shoulder manipulation or reduction, or nerve gliding exercises, flexing the elbow to 90° reduces the tension to the radial nerve.

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

We are interested in looking at the incidence of radial nerve palsy after open reduction and internal fixation of humeral shaft fractures. We do not have clinical data to support the notion that releasing the lateral intermuscular septum has a protective effect on the radial nerve during humeral fracture reduction and fixation. A randomized controlled study comparing humeral fracture fixation with or without radial nerve decompression would help us to further understand if releasing the lateral intermuscular septum provides protection to the radial nerve during the procedure.



Wayne A Chen John Li-Zhongyu



David Tianyi Luo Michael Wigton

SPOTLIGHT ON IFSHT MEMBER SOCIETY: GUATEMALA

The Guatemalan Association of Hand Therapists (AGTMANO), founded in 2004, became a member of IFSHT in 2015. Lynn Bassini, CHT and the Guatemala Healing Hand Foundation sponsored the Association. The Association works closely with the Guatemalan Hand Surgery Association to organize an annual joint congress.



L to R: Carolina Tejeda, Otty Chin (Members-at-Large), Ileana Aguilar (Secretary General/Founder), Gladys Mendez (Education), Lynn Bassini (Founder), Marta Beatriz Pineda (President/Founder), Maria Del Carmen Sierra (Treasurer), Dr. Gustavo Lopez (Founder), Karla Aceituno (Founder)

ASIA PACIFIC FEDERATION OF SOCIETIES FOR HAND THERAPY

The 7th APFSHT Conference was held with the 11th APFSSH Conference 7-10 November, 2017 in Cebu, Philippines with more than 100 attending. Jose Ramos (organizing chair) worked with the newly formed Philippine Hand Therapists Society and Dr. Seiji Nishimura, APFSHT President (Japan), to prepare the two-day scientific programme. Workshops held after the conference covered Taping of Hand and Upper Limbs by Ms. Charlie Tan (Malaysia) and Hand Splinting sponsored by Orfit Inc.



L to R Front: Seiji Nishimura (Japan); Kent Chang (Taiwan); Hercy Li, President (Hong Kong); Jose Ramos (Philippines); Casie Chan (Hong Kong); Back: Cecilia Li (Hong Kong); Yazid Ahmad Jus (Malaysia); Kris Tong (Singapore); Tan Eng Wah (Malaysia); and Chen Min (Japan)

Dr. Anne Wajon, IFSHT President and guest speaker, joined the executive committee meeting as an advisor. Mr. Hercy Li (Hong Kong) was elected as APFSHT President for 2018-2020 and Mr. Yazid Ahmad Jus (Malaysia) was elected as the President-Elect. The next conference is in Melbourne, Australia in 2020.

AMERICAN SOCIETY OF HAND THERAPISTS MEETING 2017

Anne Wajon, IFSHT president, discussed IFSHT activities with ASHT President Gary Solomon and shared IFSHT news with attendees.

Dr. Wajon and Dorit Aaron (US), co-convenor of the scientific program with Beate Jung (Germany), discussed the upcoming Triennial Congress plans. Therapists in the audience were encouraged to volunteer to be involved in congress planning and to attend the congress. Maureen Hardy and Peggy Boineau, IFSHT EXCO members, assisted in searching for potential speakers for the congress among those speaking at the ASHT meeting.



IFSHT INTERNATIONAL TEACHING GRANT

The IFSHT International Teaching Grant has increased to US \$1500 to provide support to experienced hand therapists who provide hand therapy training in developing countries. For more information visit: www.ifsht.org/page/international-teaching-grants-O.

IFSSH EZINE

The IFSHT contribution to the IFSSH November 2017 EZINE is “Early Active Vector Adjustable Skin Traction (EAVAST) for Phalangeal Fractures” by Jason Fairclough, a physiotherapist and certified hand therapist from Sydney, Australia. The paper describes a traction method for phalangeal fractures using simple splinting principles: http://www.ifsht.org/pdf/issue28_november_2017.pdf.

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

Member Society News

AMERICAN SOCIETY FOR SURGERY OF THE HAND

Become a Member of the American Society for Surgery of the Hand. Apply by 16 March 2018

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

As an International Member, you will receive:

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

International Member applications must be received by 16 March 2018. International Membership Dues are \$350 per year. Apply Now at <http://www.assh.org/About-ASSH/Join-ASSH/Become-a-Member/International-Member!>

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

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

- subscriptions to all ASSH newsletters; and more!

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

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

Join us in Boston!

Members and nonmembers alike are invited to attend the 73rd Annual Meeting of ASSH in Boston, Massachusetts, 13-15 September 2018. The meeting features high quality scientific programming, networking opportunities and a very special event:

ASSH WELCOME EVENT AT FENWAY PARK (INTERNATIONAL RECEPTION)*

ASSH Goes to Fenway! All international attendees are invited to the ASSH welcome event at Boston's historic Fenway Park on Thursday, 13 September 2018, featuring a baseball game between the Boston Red Sox and Toronto Blue Jays (game starts at 7:10 PM). Enjoy food, drinks and the game while gathering with your colleagues. All registered, international attendees will receive one ticket, included with registration (until event sells out). Registration opens in early April! Tickets are limited so please register early to reserve your space!

*Note: This event will replace the traditional international reception that has been hosted at past ASSH conferences.

GERMAN SOCIETY FOR SURGERY OF THE HAND (DGH)

The German Society for Surgery of the Hand (DGH) held its 58th annual congress combined with the 22nd annual meeting of the German Association for Hand Therapy (DAHTH) from the 11th to the 14th of October 2017 in Munich. It was an exceptional meeting with 677 participating surgeons and 224 hand therapists.

The British Society for Surgery of the Hand was the guest Society. Apart from the speakers from the United Kingdom, presenters also came from Germany, Austria, Switzerland, China, Sweden, Romania, France and Italy. It was a vivid and high-quality scientific meeting covering all aspects of hand surgery in 210 presentations, 9 workshops, 9 instructional courses, 8 lunch-workshops, 2 courses on sonography of the hand and 2 courses on the osteosynthesis of fractures of the hand. Impressions of the congress as well as of the enjoyable congress dinner party can be found at: <https://flic.kr/s/aHsmaGwJgY>

The German Society for Surgery of the Hand is very active in planning the 14th IFSSH and 11th IFSHT Triennial Congress 2019 in Berlin. Please note that there was a final change of the congress date. We are delighted that we are now able to host our international guests in Germany from June the 17th to 21st 2019.

The DGH council has decided not to nominate a single congress president but a presidential group with different responsibilities for each member. Prof. Max Haerle will mainly be responsible for the scientific program, Prof. Andreas Eisenschenk will mainly be responsible for the local organization in Berlin and Prof. Jörg van Schoonhoven will be responsible for the communication and coordination with the IFSSH and the IFSHT and together with the PCO (Professional Congress Organization) for the exhibition of the industry. Within the PCO ("Intercongress") Mrs. Denise Schuler will be responsible for the organization of our congress. After having defined the major topics of the meeting we contacted every Member Society of the IFSSH to suggest members for the international scientific committees who

will prepare and organize the scientific program. Next to the traditional scientific sessions, lectures and courses, there will be new formats like an educational day on the Monday prior to the official opening ceremony.

We finally succeeded in integrating the European FESSH Congress into the IFSSH/IFSHT Congress and are looking forward to a combined instructional course on "Distal Radius Fractures and Carpal Instabilities" and the resulting instructional congress book edited by Paco Pinal from Santander, Spain.

The official website <http://ifssh-ifsht2019.com/> is online now, and will shortly present the major topics of the congress. So far the following important dates:

- March 1st 2018 - Start Abstract Submission
- March 1st 2018 - Start Online Registration
- September 30th 2018 - Abstract Submission Deadline
- February 28th 2019 - End of Early Bird Registration

We greatly enjoy preparing an inspiring and memorable congress in 2019 and to host surgeons and their accompanying partners, family members and friends from all over the world and are looking forward to a great number of abstract submissions.

Organizing group consisting of the IFSSH presidential congress group from the German Society for Hand Surgery (DGH), the president of the German Association for Hand Therapy (DAHTH) and members of the professional congress organization "Intercongress" (PCO)



From right to left: Isabell Faad (PCO), Max Haerle (DGH), Denise Schuler (PCO), Andreas Eisenschenk (DGH), Antje Wellbrock-Wicking (PCO), Jörg van Schoonhoven (DGH), Natascha Weihs (DAHTH)

MEXICAN SOCIETY FOR SURGERY OF THE HAND AND MICROSURGERY

Sociedad Mexicana de Cirugía de Mano y Microcirugía, S.C.



The Mexican Society for Surgery of the Hand and Microsurgery (MSHSM) is actively involved to help people with limited resources all over Mexico.

In coordination with the Hand Surgery division at the Instituto Nacional de Rehabilitación (INR) in Mexico City, which is part of the National Health Institutes as well as the government of the Mexican State of Campeche, another pro bono campaign was recently launched. The surgery campaign took place in several stages.



Patient selection was done on 30 November to 2 December. Of the 50 consultations, 17 patients were selected for 24 surgical procedures which were done from 6-9 December 2017.

The medical staff was composed of orthopedic residents, hand surgery fellows and hand surgeons from different areas, working together in 4 surgical teams.

Some of the procedures performed were open carpal tunnel release, syndactyly surgery, tumor excisions, surgical release of scarred skin contractures in patients with burn sequelae, trigger finger release, different kinds of flaps and correction of congenital differences. The follow up of the operated patients was done by a couple surgeons who performed the surgeries, ensuring correct postoperative care.



At the last meeting of 2017, the MSHSM was honored with the attendance of the Secretary of Health of the State of Campeche, who also witnessed the launch of our new website.



These activities encourage also other members of our Society to continue with future outreach campaigns in Mexico which is one of the main goals of our Society.

ROMANIAN SOCIETY FOR SURGERY OF THE HAND

The year 2017 was very busy and productive for the Romanian Society for Surgery of the Hand (RSSH). The RSSH presently has 65 active member. In January, the RSSH was the Invited Society to the American Association for Hand Surgery (AAHS) Annual Meeting, held in attractive and exhilarating Waikoloa, Hawaii. Members of the RSSH were invited to participate as Instructors in various highly interesting and appreciated Instructional courses, in order to present their expertise and discuss Romanian and American techniques and tactical criteria.

The Romanian participants were plastic surgeons (since in Romania hand surgery is mainly performed by plastic surgeons), but also a pediatric orthopedic surgeon and a hand therapy specialist, who presented their points of view. Their presentations were highly appreciated and triggered lively discussions, during the sessions and especially after them, creating new connections and great friendships.

In response to the American warm welcome, the RSSH invited the AAHS in April 2017 to Cluj Napoca, Romania, as guest of our Society's congress: the 11th National Congress of the Romanian Society for Surgery of the Hand, held together with the 12th National Congress of the Romanian Society for Reconstructive Microsurgery, the National Conference of Romanian Association of Plastic Surgeons and the 1st Cluj Napoca International Course on Perforator Flaps. During this joined scientific event 47 faculty members from Egypt, Finland, Greece, Italy, Moldavia, Poland, Serbia, Switzerland, Turkey, and the USA participated, as well as 33 Romanian guest lecturers.

Before the congress, Professor Alexandru Georgescu, the President of RSSH, co-organized together with Julie Adams, Josh Abzug and Peter Murray (AAHS President) another interesting scientific event, the AAHS Pre-congress Course: Advances in Hand Surgery. To this course were invited 18 hand surgeons from USA and

Romania, who shared their knowledge and experience with the Romanian colleagues and the younger generation of residents. Their presentations, founded on years of practice, and their insightful comments opened the ground for discussions and were very well received by the congress participants. During this national event, the Society changed its President: Professor Alexandru Georgescu handed the torch to Associate Professor Zorin Crainiceanu from Timisoara, Romania.



AAHS President Dr. Murray and RSSH President Dr. Georgescu



Dr. Geoffrey Hallock (USA) and Dr. Magdy Nabil Morsy (Egypt) during the Flaps dissection Course



Dr. Windell Merrit (USA)



Dr. Georgescu, Dr. Soucacos (Greece) and Dr. Bumbasirevic (Serbia)

ASSOCIATION OF HAND SURGEONS OF THE PHILIPPINES

It is with great pleasure that I introduce the Association of the Hand Surgeons of the Philippines (AHSP). The AHSP was established in 1984 as a small group of hand surgeons dedicated to the care and surgery of the hand. The AHSP was also one of the founding societies of the APFSSH (Asian Pacific Federation of Societies for Surgery of the Hand). Since then, the membership of the Society has been increasing, as more surgeons take an interest in the art and science of hand surgery. At present, the AHSP has 31 members, mostly with an orthopedic surgery background.

The past year (2017) was a historic year for the AHSP. This was when the AHSP hosted the 11th APFSSH (Asian Pacific Federation of Societies for Surgery of the Hand) Congress in Cebu City 7-10 November 2017. This occasion marked the first time that the AHSP has hosted an international event. The congress was led by Ida Tacata (Congress President) and Emmanuel Estrella (Congress Chair and AHSP President). Four hundred forty three registered participants attended the 11th APFSSH Congress from 25 countries (Figure 1).

A total of 119 talks were delivered with 26 Plenary Talks and 93 simultaneous session talks, covering various topics in hand, wrist and microsurgery. Among the distinguished guests of the Congress were Peter Stern,

Thomas Kiefhaber, John Capo, Scott Kozin, Don Lalonde, Diego Fernandez and Marc Garcia-Elias.

Members of the AHSP would like to welcome 2018 and wish the IFSSH more power. We look forward in participating and establishing closer ties with IFSSH Member Societies in the future.

ITALIAN SOCIETY FOR SURGERY OF THE HAND

(Società Italiana di Chirurgia della Mano) (SICM)

The Italian Society for the Surgery of the Hand, founded in 1962, includes 12 Honorary Members, 835 full registered members, and 40 young members. The majority of the Italian members are Orthopedic Surgeons while Plastic Surgeons are a substantial minority.

The Society Secretariat is based at:
PLS - Via della Mattonaia, 17 - 50121 Firenze FI
Tel. 05524621 Fax. 0552462270
sicm@promoleader.com
Web Site: <http://www.sicm.it>

The Society Journal is "Chirurgia della Mano" and is the official Journal since 1963 (C.G. Edizioni Medico Scientifiche s.r.l.)
<http://www.cgems.it/Cgems-Prodotti-Elenco.asp?Categoria=21>



The participants of the 11th APFSSH in Cebu City, Philippines 7-10 November 2017.

The President-Elect of the Society is Bruno Battiston, Head of the Hand and Upper Limb Department in Torino Trauma Center (CTO) and a new council has been voted under President Roberto Adani from Modena.



Fig 1: Dr Bruno Battiston (President-Elect) (left) and Dr Roberto Adani (President) (right) during the official ceremony of the Italian Congress.

The new SICM council (in office to the end of 2019) develops the education program for residents and surgeons, which is one of the main goals of the Society. (Fig 2)

Training and education of surgeons:

The Italian Society organizes for young surgeons (during the residency program) 3 main courses per year

- Anatomy and Surgery with cadaver dissection course organized into three modules (one week each; anatomy, orthopaedic/hand surgery, plastic/hand surgery);
- Advanced Course in Microsurgery - organized in collaboration with the Societies of Microsurgery and

Plastic Surgery - with 120 hours of practice - again in three weeks during the year;

- 2-3 Hand and Microsurgery Fellowships of 1 year are available in recognized Hand Surgery Centers in Italy.

From 2017, the Society offers an "International Travelling Fellowship in collaboration with the ASSH" to visit prestigious centers in the USA and participate in the Annual Congress of ASSH.

SICM organizes two more dissection courses per year for more experienced surgeons with an International Faculty that joins the Italian Faculty: these two "advanced" courses are in English and last three days. In 2018, we will organize the following two courses in Verona:

1. Elbow Surgery (Anatomy and Clinical experiences - Topics on Anatomical approaches, Arthroscopy, Arthroplasty and Prosthesis, Soft tissues and Nerves);
2. Hand Surgery (Surgical techniques in hand surgery: Ligaments, Tendons, Fractures and Arthroplasty).

These courses are popular with participants coming from all over the world. The programs are available on www.sicm.it

Every year a National Congress is held in a Center of Hand Surgery and in 2017 the chosen city was Modena, which was a great success. The title "Look to the past - to see the future" allowed us to explore all the topics in the field of hand surgery.



Fig 2: The new Council (2017-2019) of the Italian Society of Surgery of the Hand (SICM)

More than 500 people joined the congress including therapists and residents. Many international colleagues enriched the program: A. Bhatia (India), H. Buerger (Austria), M. Calcagni (Svizzera), J. Chang (USA), F. del Piñal (Spagna), K. Fukumoto (Giappone), A. Gilbert (Francia), R. Kebrle (Repubblica Ceca), D. Lalonde (Canada), L. Nagy (Svizzera), O. Reigstad (Norvegia), M. Rizzo (USA), L. Scheker (USA), J.B. Tang (Cina), Z. Wang (Cina)



Fig 3 Some guest speakers at the 55° SICM Congress held in Modena in 2017

P. del Piñal, JB Tang, R Adani, J Chang, M Innocenti



JB Tang, D Lalonde, R Adani, Z. Wang

In 2018 SICM has been invited as guest Society during the Congress of the American Association for Hand Surgery (AAHS) and of the American Society for Surgery of the Hand (ASSH).

All society information and entry criteria are available online: <http://www.sicm.it>.

Pierluigi Tos MD, PhD
International Delegate at the IFSSH of
The Italian Society for Surgery of the Hand (SICM)
pierluigi.tos@unito.it

DUTCH SOCIETY FOR SURGERY OF THE HAND

Nederlandse Vereniging voor Handchirurgie (NVvH)

During last ten years the Dutch Society for Surgery of the Hand has grown to a multi-disciplinary society of almost 250 members including hand therapists, general surgeons, orthopedic surgeons, plastic surgeons, rehabilitation physicians and an anatomist. The Dutch society organizes scientific meetings twice a year. In May 2017 all "ins and outs" about hand fractures were discussed with, among others, Prof Nagy from Zurich.

In November 2017 the Dutch Society celebrated its 45th anniversary in Utrecht, which was a great success. A variety of presentations about innovations in hand surgery were done by international speakers like Prof Bindra, Prof Verstreken, Prof Lindau and Prof Liverneux and by Dutch experts like the anatomist Prof Bleys, radiologist Prof Maas and Plastic surgeon Dr Strackee.

The Dutch Society is much honored that it was elected at the FESSH Congress in Budapest to organize the 2021 FESSH Congress, which will be held in Amsterdam.

The Dutch society is working hard to create a certification "subspeciality in handsurgery". In the Netherlands, hand surgery is practiced by various physicians like trauma surgeons, orthopedic surgeons and plastic surgeons. It is believed that recognition of hand surgery as a subspeciality will improve the care for the patients with a hand problem. The certificate can be obtained if the specialist fulfills the set requirements in the field of knowledge, experience and practice. The certification of the American Society for Surgery of the Hand (ASSH), the European Diploma in Hand Surgery and the "White Book" of the Federation of European Societies for Surgery of the Hand (FESSH) have been used as guidelines when drawing up the requirements. In 2015 the framework for the certification was approved by the members of the Society. The implementation and control system is currently being drafted.

Brigitte van der Heijden
President of the Dutch Society for Surgery of the Hand
IFSSH representative of the Dutch Society for Surgery of the Hand

JAPANESE SOCIETY FOR SURGERY OF THE HAND (JSSH)

The history of JSSH was published in the February 2017 issue of the IFSSH Ezine (#25, p37-38)

61th Annual Meeting of the JSSH
Date and time: April 26-27, 2018
Place: Tokyo
President: Professor. Katsunori Inagaki, Showa University School of Medicine
URL: <http://www.congre.co.jp/jssh2018/index.html>

Secretariat for Japanese Society for Surgery of the Hand
address: c/o Congress Corporation, Kohsai-kaikan Building, 5-1 Kojimachi, Chiyoda-ku, Tokyo 102-8481, Japan
TEL: +81-3-5216-5569
FAX: +81-3-5216-5552
E-mail: office@jssh.or.jp
URL: <http://www.jssh.or.jp/>



Current Board Members of the Japanese Society for Surgery of the Hand

POLISH SOCIETY FOR SURGERY OF THE HAND

Polskie Towarzystwo Chirurgii Ręki

Most of the activities of the Polish Society for Surgery of the Hand are connected with its meetings. This year we had the IXth National Meeting in Krakow. One of the new ideas during this event was to hold a session of the live oral EBHS (European Board of Hand Surgery) examination which was conducted by Martin Richter (Chair of Examination Committee) and Piotr Czarnecki (Polish Member of Examination Board). It was positively evaluated by participants as an excellent example of how the examination looks and works.



Dr Mariusz Bonczar, President of Polish Society for Surgery of the Hand opens the National Meeting which was held this year in Krakow

During this national meeting new elections were held. Dr Mariusz Bonczar is now the President of the Polish Society. During the evening social meeting, two hand surgeons, Prof. Jerzy Jabłeczki from Trzebnica and Prof. Jan Skowroński from Białystok, received special recognition from the Society for their contribution to Polish and international hand surgery.



Microsurgical training during "Academy of Hand Surgery" - periodical courses supported by the Polish Society for Surgery of the Hand



Poster Session during Xth International Poznan Course in Upper Extremity Surgery. This is a well recognized event every year in Poznan and is attended by over 450 surgeons from many countries.

Besides the national meeting there is an ongoing educational project and supported by the Society viz "Academy of Hand Surgery", consisting of 3-4 meetings per year and directed mostly to young residents improving their skills in microsurgery and general knowledge in hand surgery. It organized by Prof. Tomasz Mazurek (Past President of the Society) and his team from Gdańsk.

One of the most important courses had its anniversary last year. The Xth International Poznan Course in Upper Extremity Surgery was organized in Poznan by Prof. Leszek Romanowski and dr Piotr Czarnecki with the team from the Department. It attracted over 450 participants, with 35 speakers, 11 sessions, 5 workshops, cadaver pre-course and poster session. The course keeps its international character and every year invites also surgeons from Eastern Europe.

KOREAN SOCIETY FOR SURGERY OF THE HAND

The Korean Society for Surgery of the Hand (KSSH) was established in 1982. The KSSH has successfully held international hand society meetings, which have included the 4th Congress of the Asian Pacific Federation of Societies for Surgery of the Hand (APFSSH) in 2002 and the 11th Congress of the International Federation of Societies for Surgery of the Hand (IFSSH) in 2010. In addition, the 9th Congress of the World Society of Reconstructive Microsurgery (WSRM) was held in COEX,

Seoul, from 15-17 June 2017. At this exciting event, recent advances in the hand, micro and reconstructive surgery were discussed by experts from 72 countries.



9th Congress of the World Society of Reconstructive Microsurgery (WSRM) 15-17 June 2017

The annual congress of the KSSH took place in November, a time when the autumn leaves are at their most beautiful. The most recent congress (35th) was held as the second iteration of the international meeting from 3-5 November 2017, and was chaired by Dr. Sang Hyun Woo. Two outstanding hand surgeons, Professor Kevin Chung from Michigan University (USA) and Professor Michael Sauerbier from Frankfurt University (Germany) were invited and gave inspirational key-note lectures about the most recent advances in the field of hand surgery. In addition, seven travelling fellows from Taiwan, Japan, Malaysia, Hong Kong, Singapore, and Russia presented interesting topics from their own countries and practices. The 2018 KSSH Annual Congress will take place from 3-5 November 2018, in Seoul. We will ensure that this meeting is educational and interesting for our international participants. The new chairman of the KSSH, beginning in 2018, is Professor Hyun Dae Shin.



35th Congress of the KSSH 3-5 November 2017

On behalf of our chairman and the many KSSH members who will participate at the FESSH 2018 Congress (Copenhagen, Denmark) and the ASSH Congress 2018 (Boston, USA), we look forward to sharing our expertise and passion for hand surgery.



**Art exhibit #2:
Wooden chair (H730 x W400 x D470 mm)
Artist: unknown
Collection: Ulrich Mennen**

Pearls of Wisdom on Questions in Surgery

Many would consider surgical training as a form of an apprenticeship. To that effect, the relationship between teacher and student is an important one. The quality of the interaction between surgeon and trainee in the operating theatre has been linked to the quality of the learning experience.¹ Through decades of involvement in surgical teaching and education, the senior author has observed a pattern in the questions posed by his trainees. These observations have allowed the formulation of a classification for the questions asked by trainees which is presented below.

Classification of Questions	
Type I -	A good question
Type II -	A good question asked at a bad time
Ila - The answer will become clear if the trainee waits for the next step in a procedure	
Ilb - The question is asked at a particularly difficult time during a procedure	
Ilc - The teacher is in a bad mood and any question asked is at a bad time	
Ild - The question is asked to show off knowledge and not to gain it, or to ingratiate the questioner*	
Type III -	A bad question

*Some may query this sub-classification as a Type II question. However, "bad timing" refers to the understanding that at some time the questioner would not have had the knowledge and that at certain times ingratiation through sycophancy is entirely acceptable to the trainer.

The senior author decrees that the teacher has absolute right of determination of not only the appropriate classification of a particular question asked, but also the response to the question. A Type I question may elicit an erudite, pithy, and informative response. Type II questions tend to be met by abrupt, grumpy answers or silence. The response to Type III is erratic and unpredictable and the teacher may well resort to expletives.

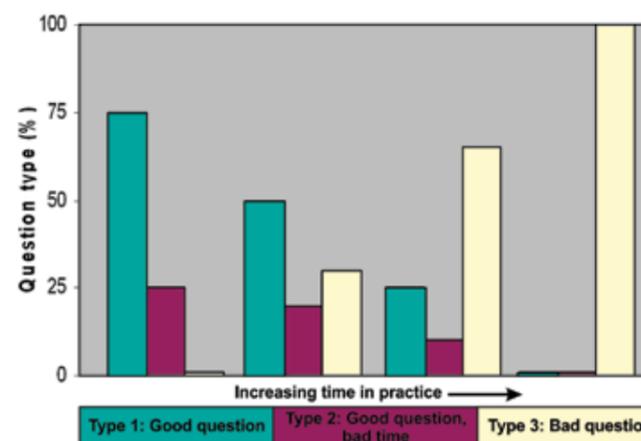
Although there is a humorous side to this classification, there is benefit in its more serious consideration by both the trainer and the trainee. The trainee with an awareness of the classification is more likely to think before asking a question. It encourages the trainee to consider whether the question will be answered in time or whether it should be asked at all, thus avoiding unnecessary questioning during surgery, clinic, or ward rounds. It also forces the trainee to be more thoughtful of the topic, read in advance and consider how else knowledge can be gained. It is too easy to keep asking questions resulting in an unstructured learning experience, and is indicative of a lazy mind.

From the point of view of the trainer, this classification has several benefits. It allows a swift and broad impression of the type of trainee and an insight into their learning style. It also allows monitoring of progress: one would hope for a trainee that asks far fewer Type II and Type III questions and far more Type I questions at the end of their placement compared to the start. Such observations can form part of the subjective assessment of the trainee.

Lyon argues that any academic process needs the formulation of analytical questions, and goes on to

“The senior author decrees that the teacher has absolute right of determination of not only the appropriate classification of a particular question asked, but also the response to the question”

characterise that which makes a good question.² Similarly, Sarti also discusses the benefits of asking good questions and helps to clarify these.³ The MIT Teaching and Learning Laboratory, which aims at strengthening educational efforts in a variety of spheres, defines a good question as relevant, short, clear, and unambiguous.⁴ Emphasis in the education literature tends to focus on how a teacher can best ask questions.⁵ We believe that focusing on how the student should ask better questions



is equally valuable. Leading surgical educationalists^{4,5} are in agreement that the quality of a learning opportunity within the surgical environment is a bilateral process between trainer and trainee. The quality of questions asked by both parties is of crucial importance in maximising this learning experience.

We would commend this classification as a means of improving surgical education. The junior author also finds it of benefit as a tool to use in an effort to avoid irritating the trainer. The senior author believes that the trainer's changing response to questions over time (especially if a larger percentage of questions are being classified as Type II and Type III (Figure 1) may be a useful rule of thumb in deciding when to retire; unless it is obvious that the questioner is an idiot.



Michael Tonkin - Trainer Andreas Fox - Trainee

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Hand Surgery Evidence Update



Special Update The HandSRev database of systematic reviews

Do you struggle to find the most up to date evidence in hand surgery? Systematic reviews provide useful summaries of all the relevant evidence in one place, but searching for systematic reviews is not easy and can be a very time-consuming process.

Now help is on hand with the launch of HandSRev, our mapping of systematic reviews by topic in hand surgery, which is available now on the website of the Centre for Evidence Based Hand Surgery (CEBHS): <http://www.nottingham.ac.uk/research/groups/cebhs/handsrev/index.aspx>

For each topic in HandSRev there is a list of systematic reviews (most recent first), with the titles providing a link for each article (usually leading to the PubMed abstract). The systematic reviews in HandSRev are found by comprehensive, systematic searches of PubMed and NICE Evidence search, which are carried out each month for Hand Surgery Evidence Updates. The reviews in the mapping are those published from 2011 onwards, but the most recent versions of all relevant Cochrane Reviews are included, even if they were published before 2011. We hope you will bookmark HandSRev and make it your first port of call when looking for the best quality evidence in hand surgery. Please tell your colleagues and we welcome your feedback.

Dr Douglas Grindlay
Information Specialist

Dr Alexia Karantana
Clinical Associate Professor in Hand Surgery

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www.nottingham.ac.uk/research/groups/cebhs

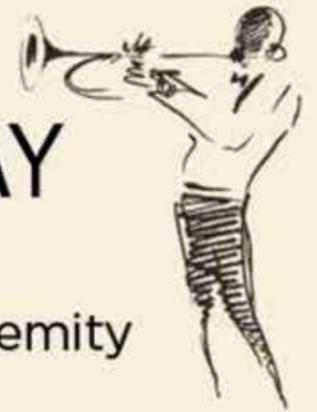


The University of
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2018 SPECIALTY DAY

Agree to Disagree:
Hot Topics in Hand and Upper Extremity



New Orleans, March 10, 2018

To be successful, we must all develop an understanding and familiarity of value-based care and patient-related outcomes research as the fast-paced changes and government interventions in health care impact our practice and our patients.

Join us in New Orleans for the [2018 ASSH/AAHS Specialty Day](#) to explore, in depth, how value is defined in hand surgery and to discuss controversial topics. The faculty will provide evidence-based treatment algorithms for a wide scope of hand and upper extremity problems and open the floor for interactive question and answer sessions to investigate evidence-based recommendations for hot topics such as complications related to obesity and the influence of narcotic use and smoking on hand surgery outcomes.

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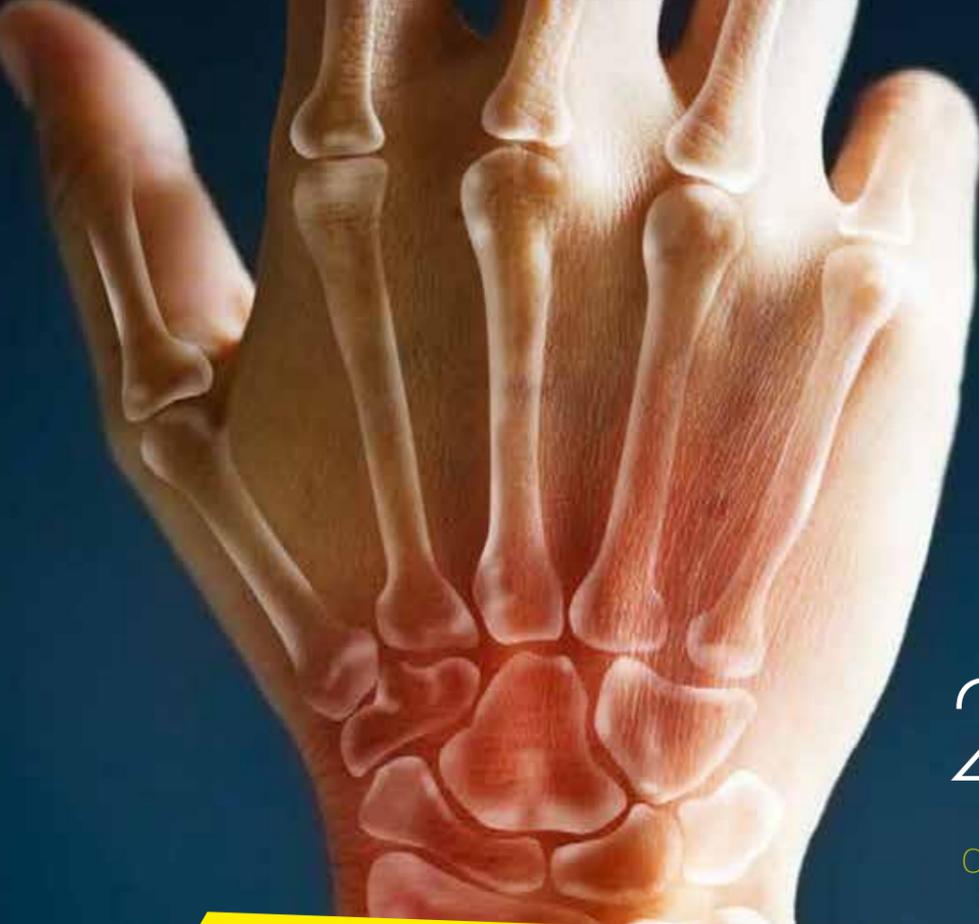


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11-14 March 2020 | Melbourne Australia
Hand Surgery and the Digital Revolution



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16th NATIONAL CONGRESS OF THE TURKISH SOCIETY FOR SURGERY OF THE HAND AND UPPER EXTREMITY

5th NATIONAL CONGRESS OF THE HAND THERAPISTS SOCIETY

MAY 06-09, 2018

COLOSSAE THERMAL HOTEL Pamukkale - Denizli / TURKEY

Dear Colleagues, Hand Therapists and Friends,

It is our pleasure and privilege to invite you to the 16th National Congress of the Turkish Hand and Upper Extremity Society, and the 5th National Congress of the Hand Therapists Society which will be held in Pamukkale, Denizli, TURKEY on May 2018.

We are looking forward to your attendance to our congress where you will also be able to visit Hierapolis-Pamukkale which is a UNESCO World Heritage Site since 1988.

Congress attendees will have the chance to benefit from scientific exchange during meetings and visit one of the natural wonders of our country.

Yours sincerely



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World Symposium of Congenital Malformations of Hand and Upper Limb 2018
 cum 31st Annual Congress of the Hong Kong Society for Surgery of the Hand

Venue: Harbour Grand Kowloon Hotel
 Abstract Submission Deadline: 31 August 2017
 Early Bird Registration Deadline: 31 October 2017

7-10 MARCH 2018
 (WEDNESDAY – SATURDAY)
HONG KONG

ABSTRACT CATEGORIES

Antenatal diagnosis and treatment	Arthrogyposis	Basic research, gene therapy	Cleft hand	Complication of treatment, Keloid
Fingers anomaly	Hypoplastic thumb	Longitudinal deficiency	Overgrowth syndrome, genetic basis	Polydactyly
Rehabilitation and Outcome measure	Syndactyly, Complex syndactyly, Apert syndrome	Transverse deficiency	Use of IT on management of CULA, Telemedicine	HKSSH Annual Congress free papers

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International Federation of Societies for Surgery of the Hand (IFSSH)
www.ifssh.info

International Federation of Societies for Hand Therapy (IFSHT)
www.ifsht.org

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