

# ezine ifssh

CONNECTING OUR GLOBAL HAND SURGERY FAMILY

## IFSSH 2010 CONFERENCE HIGHLIGHTS

- Presidential acceptance speech
- Message from the Secretary General
- Photo essay



**Global gathering of hand surgeons promotes the profession**

# Korea welcomes IFSSH 11th Triennial Conference

**FRACTURES OF THE DISTAL END RADIUS:  
AN HISTORICAL PERSPECTIVE BY  
PROFESSOR JESSE JUPITER**

**IFSSH COMMITTEE  
REPORT:  
KIENBÖCK'S DISEASE**



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# Welcome

to the first edition of the IFSSH electronic magazine, or as it will be called, the **IFSSH ezine** !

In my Presidential Acceptance Speech (see page 10) presented at the IFSSH Congress in November 2010 in Seoul, Korea, you can read about the reasoning behind this ezine venture. In short, we want every member of our 'Hand Family' to participate by contributing in any way s/he feels it would enhance our understanding and insight in our mutual passion which is, of course, the wellbeing of the hand.



Feel free to send your contributions to [ezine@ifssh.info](mailto:ezine@ifssh.info)

Enjoy the reading, enjoy the communication, enjoy the participation.  
The ezine is intended to be a production by you, for you!

"Health unto your Hands"

With sincere regards,

Editor,  
Professor Ulrich Mennen  
President, IFSSH  
[www.ulrichmennen.co.za](http://www.ulrichmennen.co.za)

## IFSSH disclaimer

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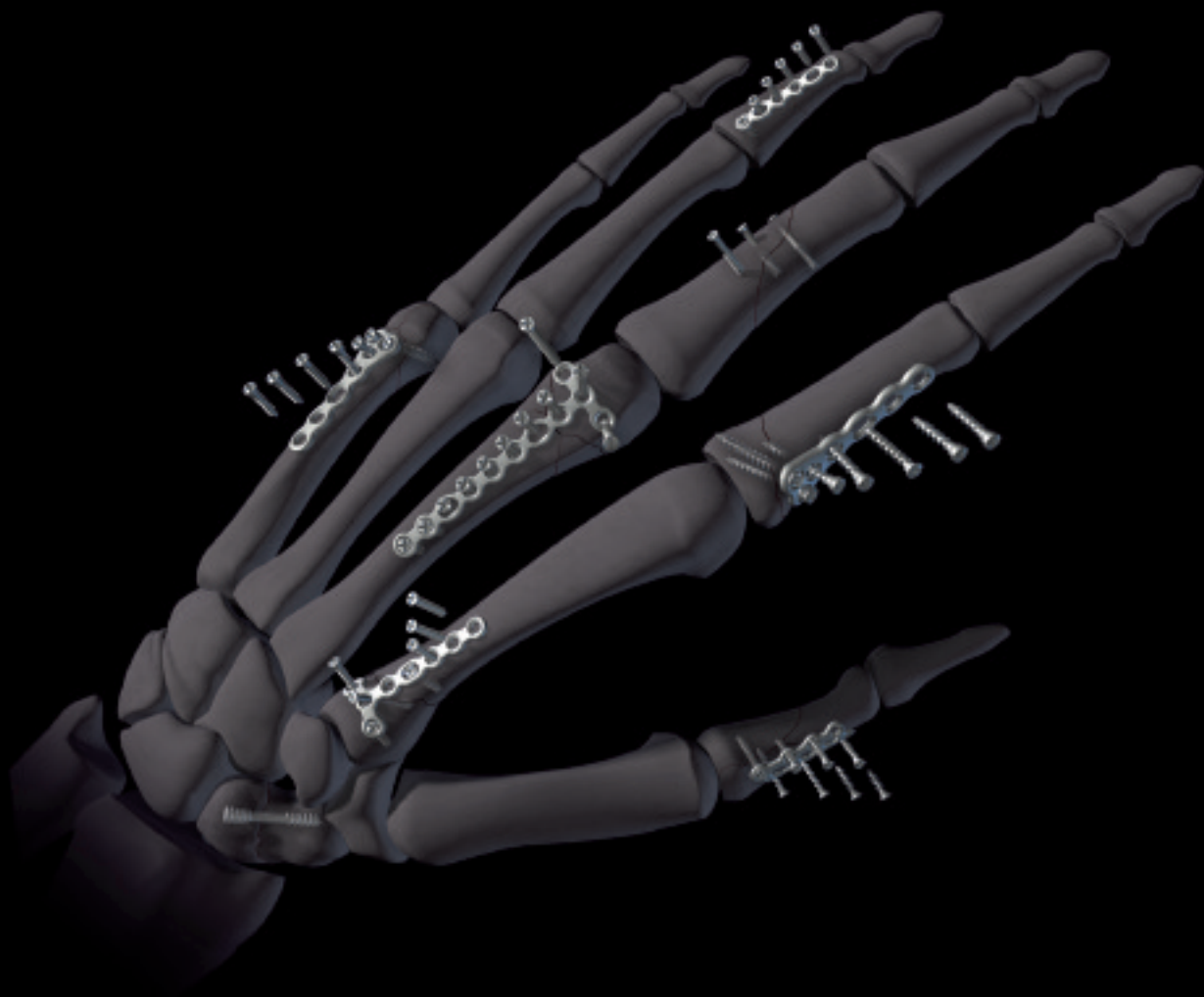
## IFSSH ezine editorial team

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**Deputy Editor:** Professor Michael Tonkin (*President-elect of the IFSSH*)  
**Publication coordinator:** Marita Kritzing (*Apex ezines*)  
**Graphic Designer:** Andy Garside

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# Dear Editor,

I have a ten year old female patient who appears to have developed **de Quervain's tenosynovitis** following a minor injury. Has anyone else seen de Quervain's in children?

Yours Sincerely

*Ian Edmunds*

HORNSBY, Australia

Email: [ianed@bigpond.com](mailto:ianed@bigpond.com)



# Dear IFSSH members, dear friends,

FESSH, the Federation of the European Societies of Surgery of the Hand, consolidates upon the continuity and quality of the contributions of its member nations.

Such a contribution is brought, keeping each specific cultural makeup, within a common language and in the interest of a shared cultural and operational purpose.

FESSH, founded in 1989, has 26 full member countries (Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, The Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovenia, Spain, Sweden, Switzerland, Turkey and The United Kingdom) and 4 corresponding members (Israel, Lithuania, Slovak republic and South Africa).

The full realization of our Federation's European size represents one of the most heartfelt FESSH current objectives, and happens through the harmonization of the formative processes, research, study, information and accreditation in which the Federation takes interest.

In a wider dimension it is our intention to foster the relationship between the International community and us. In this regard, we propose a direct link to our Federation's website where you will find exhaustive information about FESSH initiatives.

I hope that you will find our website a straightforward resource, capable of enhancing the quality, recognition and growth in our area of study.

Prof. Dr. Massimo Ceruso  
FESSH Secretary General



[HTTP://WWW.FESSH.COM](http://WWW.FESSH.COM)





# 11<sup>th</sup> IFSSH Congress, Seoul, South Korea

31 October – 4 November 2010



*TOP: Opening Ceremony: "Daechwita", a performance presented at royal processions military exercises, and triumphant marches in the Joseon Dynasty.*

*ABOVE LEFT: Opening Ceremony: Performances by patients playing a drum and pianos.*

*ABOVE RIGHT: Opening Ceremony: A Welcome Address from Prof. James R Urbaniak, President of IFSSH*





**ABOVE LEFT:** Opening Ceremony: Pioneer Awards.

**ABOVE RIGHT:** Opening Ceremony: Congratulatory Performance I. "Sujecheon" is one of the most representative Korean court music performed for court ceremonies and banquets. "Sujecheon" implies "everlasting life like the sky high".

**RIGHT:** Opening Ceremony: Congratulatory Performance II "Cheyongmu" is one of traditional dance which is originated from the legend Cheoyongrang of the unified Shilla Dynasty and the dance was selected as a court dance in the King Sejong of Joseon Dynasty.

**BELOW:** Welcome reception



**LEFT:** Closing Ceremony: Opening Announcement from Prof. Goo Hyun Baek, General Secretary of IFSSH 2010 Congress.

**BELOW LEFT:** Closing Ceremony: Closing Address from Prof. Moon Sang Chung, Congress Chairman of IFSSH 2010.

**BELOW RIGHT:** Ceremony: Promotion for the next IFSSH Congress, New Delhi, India, 2013, by Dr. Santosh Rath



# 11<sup>th</sup> IFSSH Congress

Seoul, South Korea, 31 October – 4 November 2010

Ulrich Mennen

## Presidential Acceptance Speech

Dr Urbaniak, members of the Executive of the IFSSH, Council Delegates of the member Societies, Prof. Moonsang Chung, Chairman of the Organizing Committee of this 11th IFSSH Congress, Prof. Goo Hyung Baek Chairman of the Scientific Programme and his Committee Members, colleagues and friends:

To be acknowledged by one's peers, is indeed one of the highest honors to be recognized with. At the same time such an honor is also humbling, because of the esteemed office of President of the IFSSH. I am very aware of the exceptional responsibility that goes with this position, and my pledge to you, members of the IFSSH, is to give my best. I thank you, for putting your trust in me.

I wish to pay tribute, to one of the most outstanding Hand Surgeons of our time, a teacher, who will always be remembered by the thousands of students who had the privilege of being taught by him, a researcher, whose unique contributions to the knowledge of hand surgery has become part of the classical collections,

a leader, whose wisdom and insight has guided us over many years, lately as President of the IFSSH, and a friend, whose presence conveys a feeling of warmth and personal interest. As a hand surgery family we would like to thank you, Dr. Urbaniak, for your dedication to hand surgery, which all of us came to appreciate over the years. To me personally, Jim, you have been one of my mentors for almost three decades. Again, I thank you.

Prof. Goo Hyung Baek, with your incredibly able team members, and Prof. Moonsang Chung's respectful leadership, the membership of the IFSSH applaud you, for an unforgettable cultural experience in Seoul, a perfectly organized congress, and for your gracious hospitality which we have all experienced and enjoyed. You have indeed done a brilliant job. When the hosting of the 11th IFSSH Congress was awarded to Korea, I knew that we as the Executive need not be concerned whether this Congress would be a well organized and a successful one. Prof. Baek was always confident that everything would go without a hitch, and it did indeed. To you and your staff,

our sincere thanks!

But, this superbly organized Congress, would have had no hope of success, if you as members, had not come to participate. Attending presentations, engaging in discussions and meetings, sharing experiences, strengthening old friendships and making new acquaintances - to all of you, thank you for your presence and contributions and for making the hand surgery fraternity a happy family.

One of the most prominent brachial plexus surgeons, Algimantas Narakas from Switzerland, uttered the following words, after a remarkable career. "If I were not desperate to do better, how would I know what hope is?" He constantly sought ways to improve on his results, even though during his time, these results were unrivalled. He challenged himself to better his surgical technique, his patient evaluation, his record keeping, and analyzing of his results. This restless dedication, influenced and encouraged a whole generation of hand surgeons, to be perpetually uneasy with their efforts.

Such an inquisitive mind and



*Closing Ceremony: Speech of Incoming President from  
Prof. Ulrich Mennen, New President of IFSSH*

a learning spirit is nourished by us coming together, by cross pollination, by teasing the enquiring mind with challenging thoughts; hence the importance of meetings like these congresses.

In 1980, at the 1st IFSSH Congress in Rotterdam, we as youngsters were in awe, meeting with, and learning from, the giants and pioneers of hand surgery. They were the role models, who inspired us to also achieve the highest level of knowledge, skill and dedication in hand surgery. Our passion was also, to become one of this "elite group of masters".

However, thirty years later, and having attended all eleven IFSSH Congresses, I have the perception, that the impetus of Hand Surgery has shifted away from the so-called "Hand Surgery Specialists". This shift seeks to empower health professionals in general, in the art and science, of maintaining the integrity of the hand.

This is what I would call the 'changing world of hand surgery'. Our aim as the Hand Surgery Family is not to train surgeons to be become "Hand Surgeons" in the first place, but to teach

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Ulrich Mennen

health professionals how to practice basic and good hand surgery.

Although centres of excellence are extremely important to develop and practice better hand surgery, we must not forget that the indigent masses, have as much need of medical, surgical and allied health services, as those who can afford the best, and most modern techniques available. The dilemma becomes more acute if one realizes, that it is the poor masses, who, rely more on their hands, than any other

group. Manual labour, in it's various forms, is all, they can offer, and when injured and diseased, they have no income, or back-up insurance. Isn't it ironic, that it is mainly these manual workers, who are the producers of goods, the manufacturers of merchandise, and the laborers who build structures. These are the people who produce wealth, for the investor and the country. These are the people who get physically hurt, and then loose their jobs, who are unfortunately,



simply, replaced, and who are often, unfairly, seen, as disposable.

Interestingly, the word “surgeon” is derived from the Greek word “cheirourgia”. “Cheir” means hand and “Ergon” means work. Therefore hand worker or manual laborer!

Of all time lost due to injuries at the workplace, 70% is attributable to hand and upper limb injuries. It is thus self evident, that this fact has serious economic implications for the workman, and his country.

The challenge therefore is to bring good quality, hand management to these manual workers in an affordable, and accessible way. Hand Surgery should therefore in reality become part of Primary Health Care.

In my travels to various parts of our global village, I have witnessed remarkable ingenuity in meeting local challenges. At one large hospital hand replantations and micro reattachments were done on a routine basis, and with world standard success rates, using loops attached to an infusion stand, because of a lack of funds for a microscope. In another country, splinting material, made from malleable bark, which is available in abundance from local trees, is used instead of unaffordable, thermo-plastic

material. These are just two examples of the resourcefulness, that does not hinder our colleagues in disadvantaged areas, to practice a relatively high standard of hand surgery and therapy. I have worked in hospitals where the concepts of “disposable” and “once only” materials are non-existent. So-called disposable gloves, swabs and implants are cleaned, sterilized and used again-and-again. The point is that one does not always need the latest technology to produce good quality hand surgery. Or conversely, the newest equipment, does not necessary guarantee acceptable surgical practice.

A number of prominent publications have recently shown that donations, and hand-outs, did not significantly improve the lot and conditions of disadvantaged communities. Some three hundred billion US \$ in aid to Africa over the last fifty years, has unfortunately not shown much improvement in the standard of living. Redundant high tech equipment “pollute” many countries in Africa. These generous gifts have seldom helped to better the quality of healthcare. In fact, the way aid was given, often, suppressed initiative and innovation. Similarly, intellectual and academic aid can stifle self development, research and progress. What has made a difference

however, is the willingness of locals to improve their own circumstances. Appropriate training and education, workshops and practical seminars, are the most effective tools for community upliftment. The quest, to know more, is the key, to progress.

One of the responsibilities of the President of the IFSSH is to organize the activities of its thirty committees. It has been a dilemma of Past-Presidents to obtain reports from all the committees. In an effort to improve communication amongst all our members and our co-workers, and to disseminate the Committee Reports as state of the art documents, I have obtained permission from the IFSSH Exco, and which was ratified by the Delegates Council, to launch an electronic magazine. This electronic magazine, or ezine will be sent quarterly to each member free of charge. This “IFSSH ezine”, as it will be called, will not be, or compete with, any Hand Surgery Journal, but wants to draw the hand surgery family together by enhancing communication via the internet. The IFSSH e-zine contents will feature the following:

- 1 A home page with links to the IFSSH web page, contact addresses, event announcements and links to associated Federations.



- 2 A section for member news regarding their movements, activities and circumstances, and maybe a photo gallery as well.
- 3 Committee reports on specific topics which can be used as the official viewpoint of the IFSSH.
- 4 "Letters to the Editor" section.
- 5 A question-and-answer chapter for those who have interesting or difficult problems and need advice from members who have more experience.
- 6 A list of published articles in peer reviewed journals, with links to these articles.
- 7 An interview section with authors and researchers.
- 8 Case reports and technique tips section.
- 9 An anecdote and tales chapter which could include historical narratives and adventures which are hand related.
- 10 An index which would allow one to source previously published topics
- 11 And finally product news and announcements.

The ezine will be published by the IFSSH and funded by trade advertisements. It will be edited by the IFSSH President and the President-Elect will be in assistance. The

**"I encourage you, never to take anything for granted, and to be diligent in your efforts to improve your own ability to help your patients"**

Ulrich Mennen

technical aspect, will be done by a British company which specializes in electronic page magazines. The aim of the IFSSH ezine is to be an interactive communication medium, which will be used by all members, and should be available to all members of the IFSSH and related Federations, including the International Federation of Societies for Hand Therapy.

This brings me back to the beginning of my address. The inequality in the management and technical know-how of hand conditions can be harmonized by disseminating information through a medium that can reach all members, even those in the most remote areas. The ezine can become a hub for

communication where we can be in continuous interaction with each other.

It should become a tool to spread and share information, as one would expect communication to flow in a family, or a well run company. If you want to receive the ezine, please send your email address to [ezine@ifssh.info](mailto:ezine@ifssh.info) so that we could add your details to the address list. I would also like to urge you to contribute with stories or advice, comment by writing a letter, advertise hand related products or support this exciting venture in any other way you might feel appropriate. Simply send your contribution to this dedicated email address.

In conclusion, I encourage you, never to take anything for granted, and to be diligent in your efforts to improve your own ability to help your patients.

And secondly, we belong to a family of volunteers. This makes us all equally important. We should encourage each other to interact freely, to communicate and to offer advice to others, thereby strengthening our hand family ties. We should all be leaders, and free-thinkers. If this happens, I know, that our vision of a vibrant group of mutually, encouraging and supporting members, will be realized.

I thank you. ■

**Name:** Michael Bailey, Lawrenceville, GA

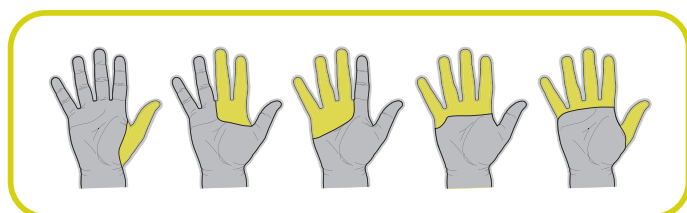
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# Message from the Secretary General, Dr Zsolt Szabo

**O**n behalf of the outgoing and incoming Executive Committees I would like to wish a Happy New Year to all hand surgeons and hand therapists of the world!

We cannot start to plan our new year without recapping the wonderful year of 2010. The work of the last three year term, led by IFSSH President Jim Urbaniak and Secretary-General Michael Tonkin, was perfectly completed by an outstanding 11th IFSSH triennial Congress in November 2010 in Seoul, South Korea. This was superbly organised by Congress President Moon Sang Chung and a high scientific standard was ensured by Goo Hyun Baek, the Scientific Chairman. These programmes made for an unforgettable event and, along with the financial outcome of the congress, will be difficult for future congresses to equal.

During the Seoul Congress new IFSSH officers were elected:

**President:** Ulrich Mennen

**President-Elect:** Michael Tonkin

**Past-President:** James Urbaniak

**Secretary General:** Zsolt Szabo

**Secretary General Elect:** Marc Garcia-Elias

**Historian:** Frank Burke

**Member-at-Large (Nominating Committee):** Goo Hyun Baek

We thank Arlindo Pardini and Bill Cooney for their contribution to the IFSSH Executive over the past terms.

The IFSSH Executive recognises the importance of effective communication with the national hand societies and wishes to expand financial support to worthy projects. Due to the financial success of the Seoul Congress new horizons have been opened and the leading role of the



IFSSH in the world of hand surgery education can be further emphasised. This is possible only with active contributions of the national societies. The Executive would appreciate suggestions, comments and requests. Not only national delegates, but all members of the IFSSH are encouraged to communicate with us.

The Executive have preserved the existing administrative office to ensure communication is optimal, and Belinda Smith will continue to help with the administration of our organisation. Her contact address ([administration@ifssh.info](mailto:administration@ifssh.info)) is available on the web site. To directly contact the Secretary General simply click on the website or write an email to [secretary@ifssh.info](mailto:secretary@ifssh.info)

As the new Secretary General I will try to do my best and follow the path which was so perfectly constructed by names like Guy Foucher, Jim Urbaniak, Ulrich Mennen and Michael Tonkin. To succeed in this work I need your help and contributions because only together can we continue to build this wonderful palace that is our world of hand surgery.

*Zsolt Szabo*

Secretary-General, IFSSH

Email: [secretary@ifssh.info](mailto:secretary@ifssh.info)

Website: [www.ifssh.info](http://www.ifssh.info)

# IFSSH Eponymous Swanson Lecture

## Fractures of the distal end of the radius—an historical perspective

Jesse B. Jupiter MD, Hansjorg Wyss/AO Professor, Harvard Medical School

The history of the distal radius fracture is a fascinating one for it intertwines historical precedent, the nobility of surgical tradition, and the inevitable conflict attendant to strong surgical personalities. When one looks at three major categories of the evolution of fracture care, ie recognition, definition, and treatment, it is evident that contemporary surgeons are experiencing similar issues as our predecessors, albeit in different formats.



Fig 1: The Korean Royal Physician Heo Jun (1546-1615)

### Recognition

Today we discuss the distal radius fracture by different patterns of fracture eg bending, shearing, axial compression, avulsions, or complex, some of which are so different that the only thing in common is involvement in the radius. Yet it is not so very long ago that Hippocrates' suggestion that these injuries were dislocations held forth. While in the Western culture we have come to attribute the recognition of this injury to be a fracture to Petit (1705), Pouteau (1783), or Colles (18140), the lesion recognized to be a fracture was clearly defined in a book called Dong Eui Bo Gam translated to read "Mirror of Eastern Medicine" compiled by Heo Jun, a royal physician in Korea (1546-1615). (Figure 1) "if the bone is broken or joint dislocated, reduction should be applied..."

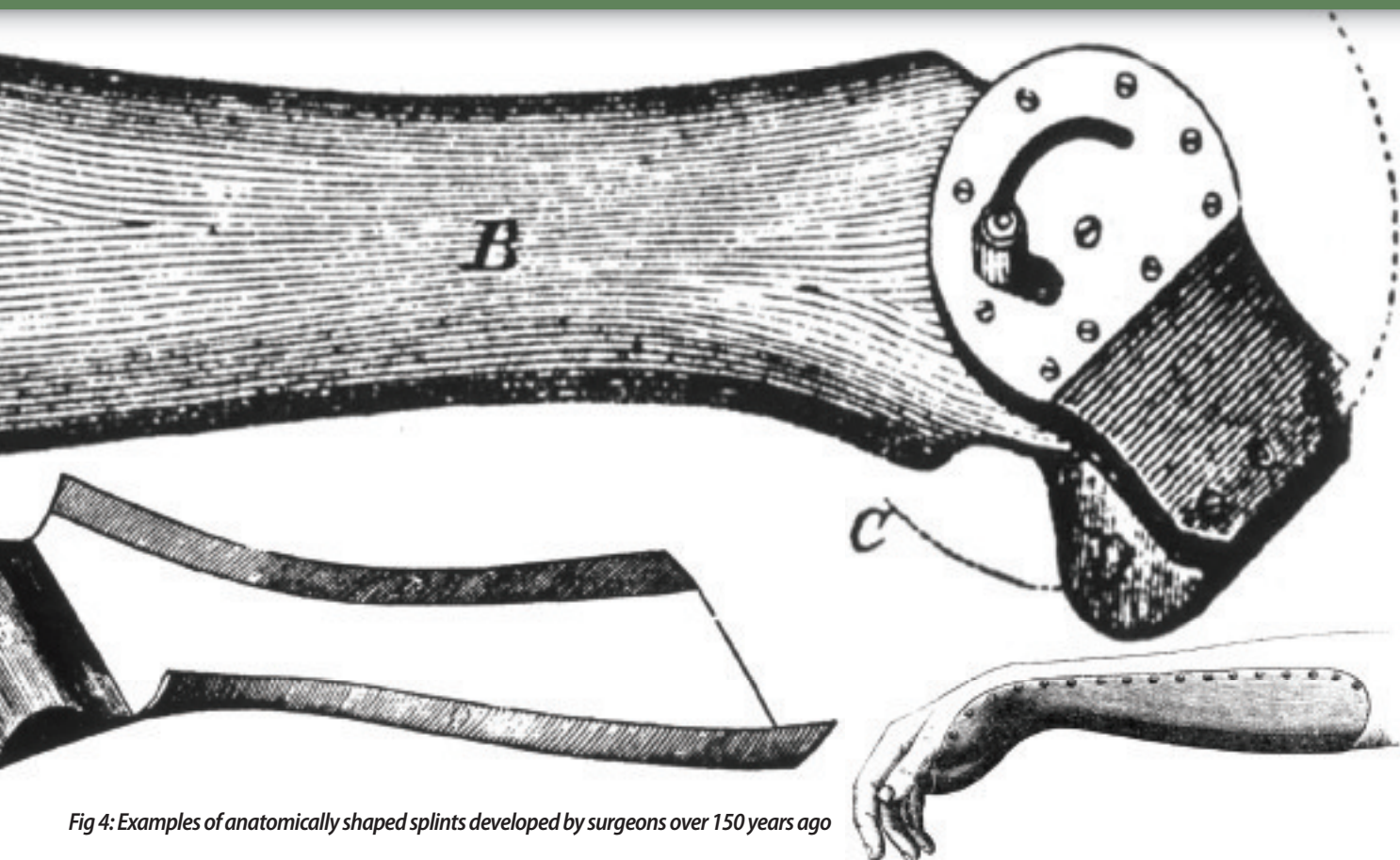
Today we are recognizing the distal radius fracture as one of the important fragility fractures which are having an increasing impact on public health. The likely chance of a woman over 60 yrs to have a distal radius fracture is 17% compared to hip fracture of 14%. As people are living longer and healthier,

we are also recognizing that age is not a reliable indicator of functional need and the traditional complacency regarding the outcome of this injury is being challenged by internal fixation with implants designed for fractures in the older aged patient.

### Definition

We have the luxury of having computer scans and MRI to help us define these injuries whereas our forerunners had only clinical judgement and postmortem evaluations. That did not stop early investigators such as Smith, Goyrand, Barton among others to attach their names to variations of the distal radius fracture. Here too, Heo Jun considerably earlier defined patterns based upon direction of displacement.

Contemporary definitions of distal radius fractures now include the presence of intercarpal ligament injury, assessment of the stability of the distal radioulnar joint, and associated soft tissue injury. The biomechanical nature of the distal radius itself has led to understanding of how forces are transmitted and stimulated several investigators to characterize fractures



*Fig 4: Examples of anatomically shaped splints developed by surgeons over 150 years ago*

by virtue of the bony “columns” of the radius and ulna. (Figure 2)

### Treatment

A major trend today is towards open reduction and internal fixation with anatomically shaped implants with locking screws, in part to restore a more rapid functional return. Yet in the

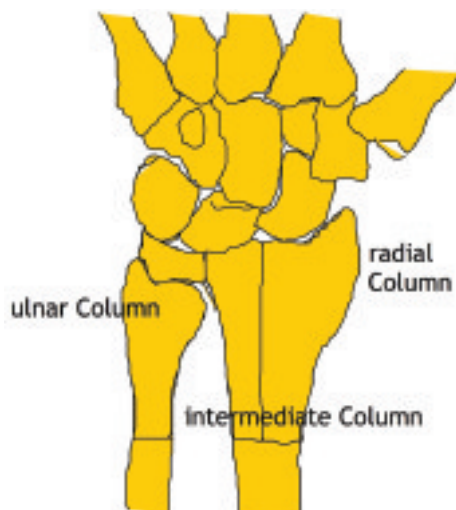
work of Heo Jun, it clearly defines early surgical treatment and postreduction support – “reduction should be applied under the application of an anesthetic drug... immobilization with wood boards and intermittent joint motion should be started, if not motional deficit will remain”. In addition, in the older Chinese text *Pu Chi Fun* edited in the Min Dynasty, numerous methods of fracture reduction are illustrated (Figure 3). It took a considerably longer time for subsequent Western surgeons to

realize the disabilities associated with prolonged plaster immobilization.

Today we see over 30 different forms of plates and screws specific for the distal radius. Over 150 years ago, it was commonplace for different surgeons to develop and promote their own fracture supports, at times experiencing personal financial gain as a result. (Figure 4)

One final aspect of distal radius care that may seem to be a relatively new problem, the malpractice suit, was in fact not unknown in the 19th century. In 1847 a reported malpractice suit can be found in the *Royal Medical and Chirurgical Society Journal* followed by one in 1841 in the *Boston Medical and Surgical Journal*.

Thus, it becomes apparent that we truly stand on the shoulders of our predecessors who when faced with much the same injuries, asked similar questions and continuously sought better treatments for their patients. ■



*Fig 2: The column concept of the anatomic aspects of the distal radius and ulna*



*Fig 3: One of 27 methods of fracture reduction in the Chinese text *Pu Chi Fun**



# IFSSH Committee report: Kienböck's Disease

Chairman: **Carlos Irisarri, Vigo, Spain**

Members of the committee: **Marc Garcia-Elias, Barcelona, Spain.**

**Guillaume Herzberg, Lyon, France. Karlheinz Kalb, Bad Neustadt, Germany.**

**Samuel Ribak, Sao Paulo, Brasil**

**November 2010**

One century after 1910 Kienböck's first publication of the disease, the pathogenesis for the so-called lunatomalacia still remains unknown. Mechanical factors, acute trauma or repetitive stress do not seem to be a primary cause, but factors that explain symptom aggravation of an already present Kienböck's disease (KD). A biological, more than a mechanical cause, is likely to induce focal intraosseous vascular deprivation with minor bone marrow infarctions as the initiating mechanism of bone weakening, fracture and collapse.

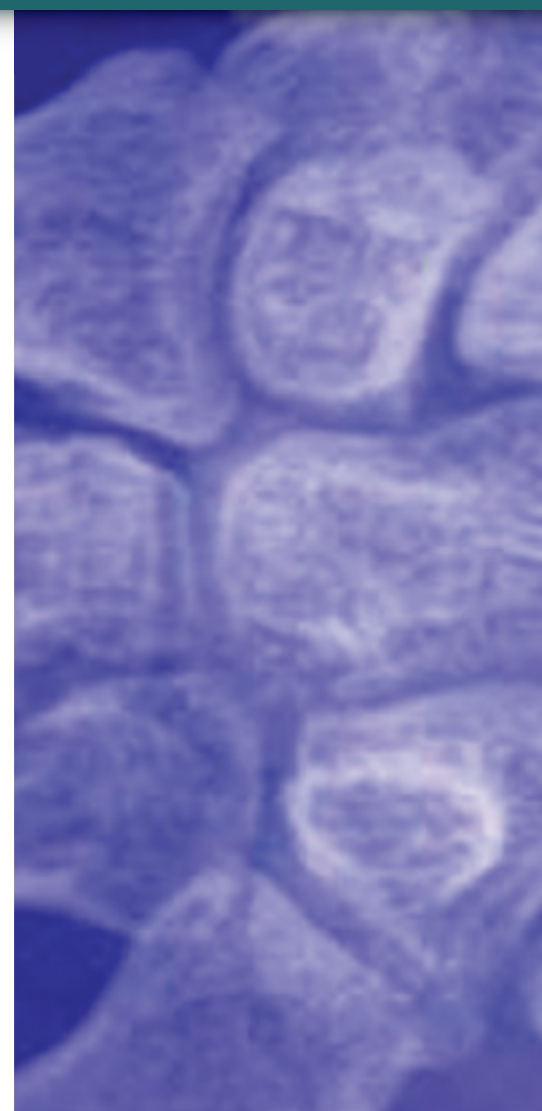
There is an unbalanced bone remodelling, with increased bone resorption by osteoclasts not being counteracted by increased new bone formation by osteoblasts. The reason why osteoclast action overpasses osteoblastic activity in the repair process is still not known. The role of genetic predisposition to the disease is a suggested possibility in selected

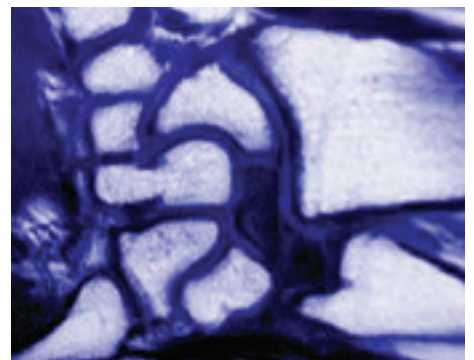
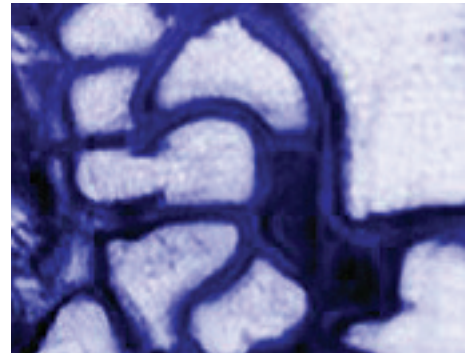
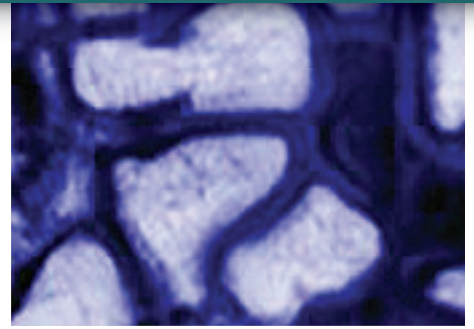
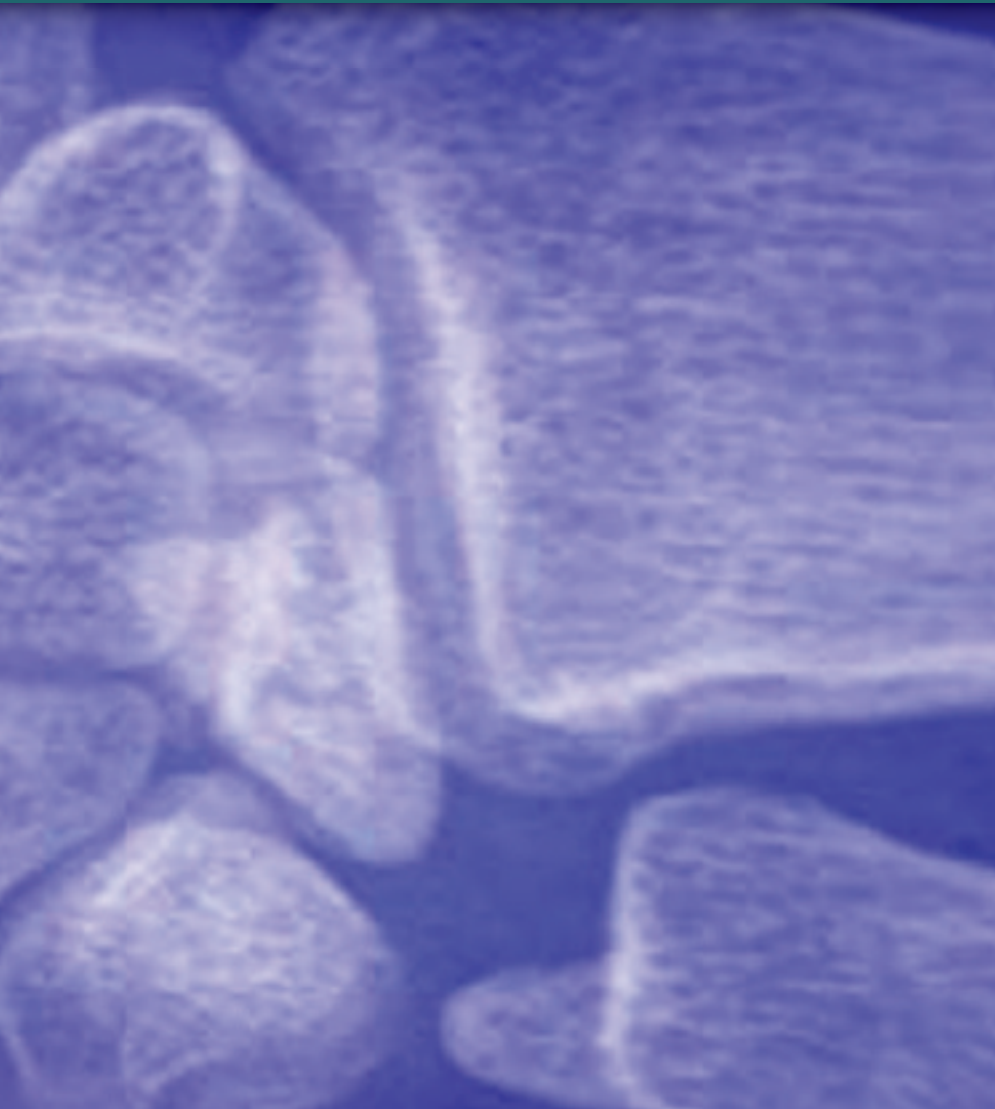
cases, but certainly it does not play a role in most avascular necrosis. Indeed, no specific gene has been found in association with KD so far. Yet, it is not unlikely that the genetic background of the host may have an influence in the intensity of the reaction after infection and/or immune reactions, and the hypothesis that some sub-populations may be more susceptible to develop KD than others is worth consideration. Another thought provoking possibility is provided by some researchers who suggest KD to be secondary to reactive arthritis, based on increased polymerase chain reaction (PCR arrays) and viral RNA analysis in some patients with KD. Certainly, there is a need to reinforce such evidences with further research in this regard.

While diagnostic techniques have improved in recent years, significant questions remain unanswered about the treatment choices and timing. Most surgeons act under the

conviction that surgical interventions appreciably improve the natural history of KD (considering each stage independently). In fact, some appropriately powered, randomized, prospective studies comparing operative vs non-operative treatment in patients with early stages of the disease appear to point in that direction, but a definitive response in this regard is not yet available. Indeed, early diagnosis of KD could allow more efficient treatments, especially in young patients with high functional requirements.

Revascularization and/or radial shortening is the most common surgical preference. The exception is in the infantile, or even in the





**“One century after 1910 Kienböck’s first publication of the disease, the pathogenesis for the so-called lunatomalacia still remains unknown”**

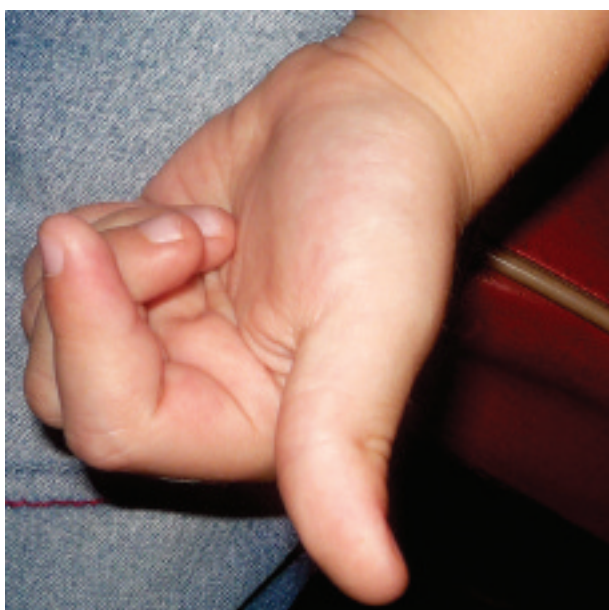
juvenile lunatomalacia (the so-called “teenböck’s disease”) where the prognosis is good with conservative measures. Finally, as Litchman pointed out in the centennial celebration held in Vienna, Austria, in May 2010, the natural history and true outcomes of treatment must be determined by cooperative, multicenter data based on modern research techniques that have been proven to provide consistent, patient oriented results. Only through such a cooperative effort will we ever definitively arrive at a consensus in the classification and treatment of Kienböck’s disease. ■

**REFERENCES:**

- Irisarri C. ‘Aetiology in Kienböck’s disease’. Handchir Mikrochir Plast Chir. 2010 42:157-61.
- Lichtman DM, Lesley NE, Simmons SP: The classification and treatment of Kienböck’s disease: The state of the art and a look at the future. J Hand Surg Europ. 2010; 35:549-554.

# What would you do?

**L**ittle boy, 3 years old, presents with an isolated injury of the flexor digitorum profundus tendon of the index finger of the left non dominant hand 6 weeks after trauma. Laceration was by a sharp kitchen knife. The place of injury was at the PIPJ level. No treatment was given initially. The wound healing was uneventful. What would your option of the treatment be?



## Example Answer

To the Editor,

**My answer would be the following:**

I would explore and see if the FDP tendon is still anchored by the vincula. You may then be able to pull it distally and suture it to the distal stump. If this is not possible I would do a tenodesis of the distal stump to create a 10 degree flexion contracture at the DIP joint. Since it is his non-dominant hand and he is still a young child he will adapt very well. Furthermore, we all know from practical experience that whatever tendon reconstruction one does, the most likely outcome will be some flexion contracture deformity at the DIP joint anyway.

### NOTE FROM THE EDITOR:

Readers are encouraged to share their views, opinions and questions with interested colleagues.

**Please send your comments and questions to [ezine@ifssh.int](mailto:ezine@ifssh.int)**



IFSSH 2010 SEOUL  
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# Evaluation of solutions for failed surgery for scaphoid non-union

Ole Reigstad from the Hand- and Microsurgery Section at Oslo University Hospital, led a study that investigated whether revision bone grafting is worthwhile after failed surgery for scaphoid non-union.

"We have Norway's greatest share of scaphoid non-unions and many years of experience with these patients," Ole Reigstad explains. At his unit in Oslo, the treatment of patients with scaphoid non-union presenting for first time surgery is standardized using bone graft and k-wire fixation as the work horse, with a proven predictable outcome (Reigstad et al, study published in April 2010).

Reigstad continues that discussions among the consultants revealed different opinions and experiences when it came to the failed patients, focusing around the questions:

- a: What are the options after a failed surgery for scaphoid non-union?
- b: What could the indications for a second or even a third surgical attempt be?
- c: Seeing degenerative changes in the majority of patients with symptoms, what is the radiological

**"The majority of patients are never followed for a longer period, often being younger men with little contact to the health care system"**

Ole Reigstad

appearance of the patients with minor symptoms not seeking help? "The majority of patients are never followed for a longer period, often being younger men with little contact to the health care system. All our secondary surgery patients were identified and we achieved the longest follow-up published," Reigstad adds.

The key findings of this study were that 16/18 scaphoids healed (two after a third attempt). During the follow-up period (mean 12 year) 4/18

patients had salvage treatment due to pain and increasing degenerative changes (two healed and two persistent non-unions). "The majority of the remaining patients were satisfied with their wrist function demonstrating minor symptoms and a mean VAS=21 and QDASH=18. None of them took sick leave or used painkillers for wrist problems in the past year. Grip strength was significantly (20%) reduced. The reduction in key pinch (10%) was not significant. Range of motion on the affected side was reduced by 25%, but still the mean flexion-extension arc exceeded 100°. Nine patients had degenerative changes on radiographs at surgery, and the remaining five also demonstrated degenerative changes at follow-up," he explains.

According to Reigstad, the limitation of the study was its retrospective design. "The contralateral wrist was used for comparison, but we had no subjective outcome scores preoperatively, making it more difficult to evaluate the treatment results," he says. He adds that



although a reduced wrist function was observed, and more serious degenerative changes was seen than after first time surgery, the majority of patients had functioned well both at work and in leisure.

"The results after secondary surgery are worse than after a first attempt, which underlines the importance of an adequate technique the first time. We offer patients with symptoms and no or minor degenerative changes a second attempt. The treatment goal is preservation of motion and pain reduction. For symptomatic non-unions with moderate degenerative treatment an individual approach is used, having three alternatives: wait and see, a second attempt or salvage treatment," he concludes.

## Take home points:

- The results after secondary surgery are worse than after a first attempt, which underlines the importance of an adequate technique the first time
- Patients with symptoms and no or minor degenerative changes are the better candidates for secondary surgery
- The treatment goal is preservation of motion, pain reduction and to slow the degenerative process.
- For symptomatic non-unions with moderate degenerative treatment an individual approach is used, having three alternatives: wait and see, a second attempt or salvage treatment ■

## JOURNAL REFERENCE

Hand Surg Eur Vol December 2009 34: 762-765, first published on October 12, 2009 doi:10.1177/1753193409344529  
O. REIGSTAD, R. THORKILDSEN, C. GRIMSGAARD, A. REIGSTAD, and M. RØKKUM  
Is revision bone grafting worthwhile after failed surgery for scaphoid nonunion? Minimum 8 year follow-up of 18 patients

**URL:** <http://jhs.sagepub.com/content/34/6/772.abstract>



# Product News

## 1: Synthes – LCP Wrist Fusion Set

The LCP Wrist Fusion System consists of plates, locking screws and cortex screws. The system is indicated for wrist arthrodesis and fractures of other small bones of the carpus. Specific indications include: Post-traumatic arthrosis of the joints of the wrist, rheumatoid wrist deformities requiring restoration, complex carpal instability, postseptic arthritis of the wrist, severe unremitting wrist pain related to motion, brachial plexus nerve palsies, tumor resection and spastic deformities. Implants are available in stainless steel and titanium. In 1958, the AO formulated four basic principles, which have become the guidelines for internal fixation<sup>1</sup>. These principles as applied to the LCP Wrist Fusion System, are:

### Anatomic reduction

The LCP Wrist Fusion System consists of implants designed to restore the anatomy of the wrist after fusion.

### Stable fixation

The implants in the LCP Wrist Fusion System use locking compression plate (LCP) technology. Locking the screw to the plate creates a fixed-angle construct that is stronger compared

to a similar nonlocking plate and screw combination. The compression screw allows controlled compression of the joint that increases stability and promotes bony union.

### Preservation of blood supply

The plates are low profile to allow good soft tissue coverage and improved blood supply to the fusion site.

### Early, active mobilization

LCP Wrist Fusion Plates combined with proper AO technique provide stable fusion plating with minimal trauma to the vascular supply. This helps to create an improved environment for bone healing, accelerating the patient's return to activity.

### Reference

1. Müller ME, Allgöwer M, Schneider R, and Willenegger H (1991) *AO Manual of Internal Fixation*. 3rd Edition. Berlin: Springer-Verlag

### Synthes, Inc.

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West Chester, PA 19380, USA

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1 800 523 0322

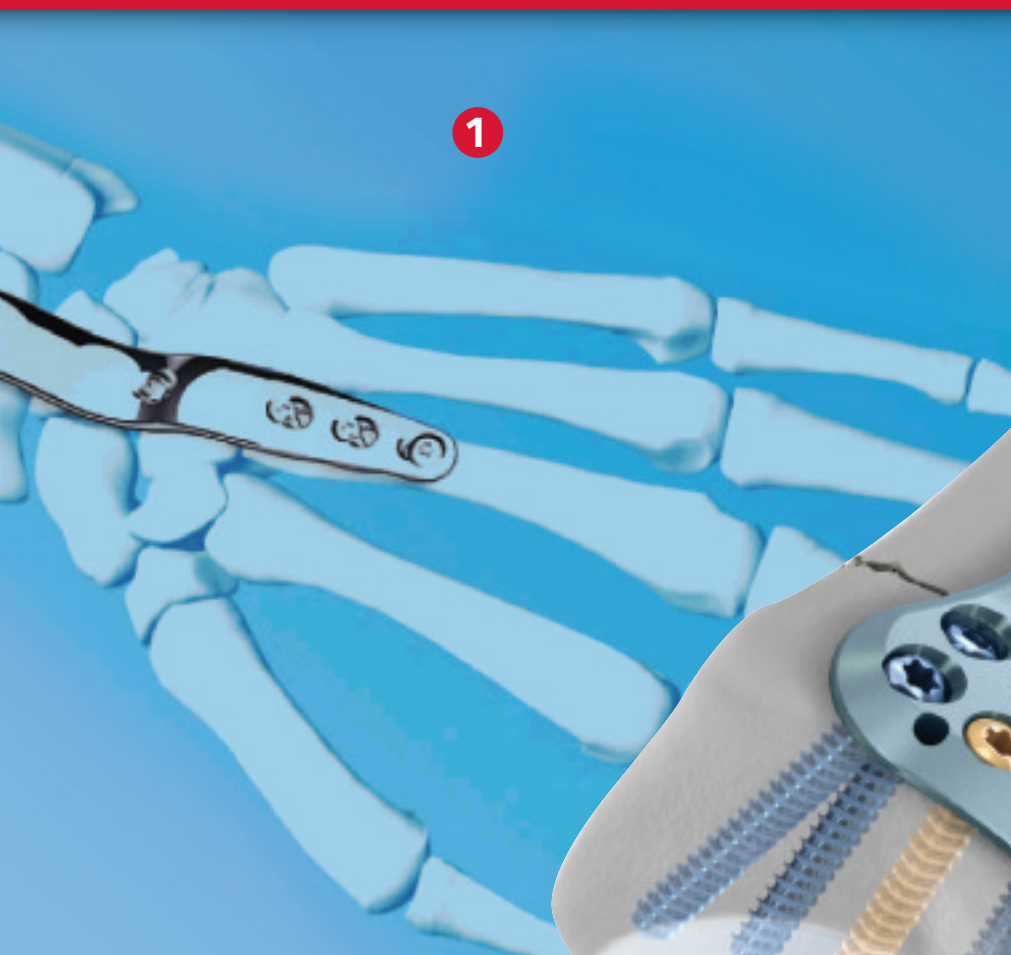
[www.synthes.com/html/index.php?id=8874](http://www.synthes.com/html/index.php?id=8874)



## 2: Medartis

With the motto Precision in Fixation, Medartis develops, manufactures and sells titanium screws and plates, surgical instruments and system solutions for fracture fixation. The highest priority is placed on maintaining stringent quality standards, continuous further development and innovation as well as comprehensive service provision for surgeons, OR staff and patients.

The APTUS implants are used for the treatment of fractures, correction osteotomies and degenerative diseases of the fingers, metacarpus, carpus and the distal radius. Additionally, selected ergonomic instruments are available which further simplify the treatment. All APTUS implants are anatomically designed and have a low plate profile. This minimizes tendon and ligament



irritation after surgery. The APTUS systems feature anatomically correct reconstruction of the bone, offer early functional stability and enhance pain-free regeneration. As with all Medartis products, the APTUS systems are also modular in design and the individual elements are characterized by a user-friendly colour coding system.

The TriLock technology enables the stabilization of complex, intra-articular fractures by means of an 'internal fixator'. Thanks to the variable screw positioning, individual bone fragments are stabilized at a fixed angle and create an anatomic reconstruction. Intricate bone transplants for implant support are therefore largely unnecessary. Due to the stability of the entire construct, the implant size is significantly decreased and patients have considerably increased freedom of movement for their subsequent

therapy.

APTUS Wrist, Hand, and Elbow are developed in close consultation with hand and traumatology physicians as well as OR teams. The TriLock technology plays an essential role in future developments, especially in the area of upper extremities. The first examples of use are angular stable implants for hand and trauma surgeons that ensure fixation allowing for immediate mobilization for intra-articular fractures.

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Below is a selection of contents pages from the latest issues of the following leading hand surgery journals. Hover your mouse over each article heading and click to go to the original abstract page of the article

## Journal for Brachial Plexus and Peripheral Nerve Injuries

[www.jbppni.com](http://www.jbppni.com)



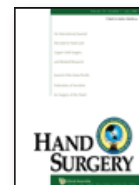
- Functional cooperation of of IL-1 $\beta$  and RGS4 in the brachial plexus avulsion mediated brain reorganization  
*Jifeng Li, Hui Zhao, Pengbo Luo, Yudong Gu*
- Storage and allogeneic transplantation of peripheral nerve using a green tea polyphenol solution in a canine model  
*Ken Nakayama, Ryosuke Kakinoki, Ryosuke Ikeguchi, Tomoyuki Yamakawa, Soichi Ohta, Satoshi Fujita, Takashi Noguchi, Scott FM*

- Duncan, Suong-Hyu Hyon, Takashi Nakamura*
- Advanced radiological work-up as an adjunct to decision in early reconstructive surgery in brachial plexus injuries  
*Kasim Abul-Kasim, Clas Backman, Anders Björkman, Lars B Dahlin*
- Differential cellular FGF-2 upregulation in the rat facial nucleus following axotomy, functional electrical stimulation and corticosterone: a possible therapeutic

- target to Bell's palsy. *Karen F Coracini, Caio J Fernandes, Almir F Barbarini, César M Silva, Rodrigo T Scabello, Gabriela P Oliveira, Gerson Chadi*
- Letter to the Editor: Possible role of alpha-lipoic acid in the treatment of peripheral nerve injuries. *Maurizio Ranieri, Manuela Sciuscio, Annamaria Cortese, Marilena Stasi, Francesco Panza, Marisa Megna, Pietro Fiore, Andrea Santamato*

## Journal of Hand Surgery Asian Volume

[www.worldscinet.com/hs/hs.shtml/](http://www.worldscinet.com/hs/hs.shtml/)



- How I developed the world's first evidence-based endoscopic management of carpal tunnel syndrome. *Ichiro Okutsu*
- Anatomical study of arcade of struthers  
*Piyapong Tiyaoranan, Surut Jianmongkol and Tala Thammaroj*
- Distal radial and ulnar landmarks used in percutaneous pin fixation: anatomical relationship to the superficial radial and ulnar nerves. *M. Tryfonidis, C. P. Charalambous, S. P. Mills, G. K. Jass, S. Jacob, J. K. Stanley and M. J. Hayton*
- The dorsal cutaneous branch of the ulnar nerve: an anatomical study  
*Akira Goto, Oka Kunihiro, Tsuyoshi Murase and Hisao Moritomo*
- Self-reported outcome following anterior transposition of ulnar nerve in the elderly  
*S. Sreedharan, A. K. T. Yam and S. C. Tay*
- "mood rings": a new method of objective clinical assessment of peripheral nerve injuries  
*F. Ya'ish, J. P. Cooper and M. A. Craigen*
- High resolution ultrasonography of the hand and wrist: three-year experience at a district general hospital trust. *J. K. K. Chan, R. M. Choa, D. Chung, G. Sleat, R. Warwick and G. D. Smith*
- Dorsally displaced fractures of the distal

- radius — a study of preferred treatment options among UK trauma and orthopaedic surgeons. *P. Hull, N. Baraza, H. Whalley, M. Brewster and M. Costa*
- Slac wrist in the absence of recognised trauma and CPPD  
*J. Pollock, A. A. Giachino, K. Rakhra, G. DiPrimio, H. Hrushoway, A. F. Conway and M. Andreyechen*
- A working classification for the management of scapho-trapezium-trapezoidosteo-arthritis  
*Johan van der Westhuizen and Ulrich Mennen*
- Mycobacterium marinum infection of the deep structures of the hand and wrist: 25 years of experience  
*Jason Pui Yin Cheung, Boris Kwok-Keung Fung and Wing-Yuk Ip*
- Acute plastic bowing of the radius with a distal radioulnar joint injury: a case report.  
*Masashi Uehara, Hiroshi Yamazaki and Hiroyuki Kato*
- Partial anterior interosseous nerve palsy: isolated neuropraxia of the branch to flexor pollicis longus  
*Nor Hazla Mohamed Haflah, Abdul Halim Abd Rashid and Jamari Sapuan*
- Carpal tunnel syndrome associated with a

- fracture of a silicone implant for Kienböck's disease: two case reports  
*Takako Kanatani, Kyoko Yamasaki and Hiroyuki Fujioka*
- Scaphoid dislocation associated with axial carpal dissociation during volar flexion of the wrist: a case report  
*Kohei Kanaya, Takuro Wada and Toshihiko Yamashita*
- Simultaneous fracture of the waist of the scaphoid and the hook of the hamate  
*Shingo Komura, Yasushi Suzuki and Tatsuya Ikehata*
- Accessory extensor digiti minimi muscle simulating a soft tissue mass during surgery: a case report  
*Konstantinos Natsis, Efthymia Papathanasiou and Nikolas Anastasopoulos*
- Objective assessment of the alterations in wrist mobility with the Fastrak system following dorsal capsulodesis  
*A. C. Jariwala, I. Scott, G. P. Arnold, R. J. Abboud and C. A. Wigderowitz*



# Journal of Hand Therapy

[www.jhandtherapy.org/current](http://www.jhandtherapy.org/current)

■ Severity of Contracture and Self-reported Disability in Patients with Dupuytren's Contracture Referred for Surgery. *Christina Jerosch-Herold, Lee Shepstone, Adrian Chojnowski, Debbie Larson*

■ Clinical Commentary in Response to: Severity of Contracture and Self-reported Disability in Patients with Dupuytren's Contracture Referred for Surgery *Tara Packham*

■ The QuickDASH Score: A Patient-reported Outcome Measure for Dupuytren's Surgery *Henry R. Budd, Debbie Larson, Adrian Chojnowski, Lee Shepstone*

■ Using the Force–Time Curve to Determine Sincerity of Effort in People with Upper Extremity Injuries, *Bhagwant Singh Sindhu, Orit Shechtman*

■ Upper Extremity Performance Test for the Elderly (TEMPA): Normative Data for Young Adults. *Bernadette Nedelec, Karyne Dion, José A. Correa, Johanne Desrosiers*

■ Association of Disturbances in the Thoracic Outlet in Subjects with Carpal Tunnel Syndrome: A Case–Control Study *Megan S. Vaught, Jean-Michel Brismée, Gregory S. Dedrick, Phillip S. Sizer, Steven F. Sawyer*

■ Identification of Shoulder-specific Patient Acceptable Symptom State in Patients with Rheumatic Diseases Undergoing Shoulder Surgery. *Anne Christie, Hanne Dagfinrud, Andrew M. Garratt, Hanne Ringen Osnes, Kåre Birger Hagen*

■ Early and Temporary Use of Finger Prosthetics to Aid Rehabilitation *Barbra Samph Almond*

■ Composite Flexion Splint for the Stiff Hand. *Jun Wang, Gard Erlandsson, Yong jun Rui, Xiang hong Xu*

## Book and DVD Reviews

■ Digital Dynamics: Anatomical Odyssey Through the Finger *Lisa Harris Jordan*

■ ASSH Manual of Hand Surgery *Deborah A. Schwartz*

## Abstracts from the Literature

■ Zone II Flexor Tendon Repair: A Randomized Prospective Trial of Active Place and Hold Therapy Compared with Passive Motion Therapy *Christopher Brown*

■ Assessment of the Effectiveness of a Functional Splint for Osteoarthritis of the Trapeziometacarpal Joint of the Dominant Hand: A Randomized Controlled Study. *Greg Hritzo*

## ASHT 2010 President's Invited Lecture

■ 2010 President's Invited Lecture: A Vision for Clinical Research—From the Clinic to the Community. *Jane Bear-Lehman*



# Journal of Hand Surgery European Volume

<http://jhs.sagepub.com/>

■ The length and position of the long axis of the scaphoid measured by analysis of three-dimensional reconstructions of computed tomography images *Y. Guo and G. L. Tian*

■ Corrective osteotomy in forearm fracture malunion improves functional outcome in adults *D. S. Y. Chia, Y. J. Lim, and W. Y. C. Chew*

■ Physical and radiographic identification of the bones of the wrist by junior doctors *Roche, G. Williams, D. Wharton, and D. Brown*

■ Proximal row carpectomy for scapholunate dissociation. *J. C. Elfar and P. J. Stern*

■ Long-term outcomes of osseointegrated digital prostheses for proximal amputations *Sierakowski, C. Watts, K. Thomas, and D. Elliot*

■ Anterior transposition of the ulnar nerve with endoscopic assistance *T. Konishiike, K. Nishida, M. Ozawa, and T. Ozaki*

■ A novel technique for the treatment of recurrent cubital tunnel syndrome: ulnar nerve wrapping with a tissue engineered bioscaffold *N. Puckett, R. G. Gaston, and G. M. Lourie*

■ Functional restoration after early tendon transfer in high radial nerve paralysis *V. Dabas, T. Suri, P. K. Surapuraju, S. Sural, and A. Dhal*

■ The relation of patient satisfaction and functional and cosmetic outcome after correction of the wrist flexion deformity in cerebral palsy *K. Libberecht, S. R. Sabapathy, and P. Bhardwaj*

■ Isolated flexor digitorum profundus tendon injuries in zones IIA and IIB repaired with figure of eight sutures *M. M. Al-Qattan*



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