

EFORT NEWS

EUROPEAN FEDERATION OF NATIONAL ASSOCIATIONS OF ORTHOPAEDICS AND TRAUMATOLOGY

CONGRESS EDITION



04/2009



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EDITORIAL

A symphony of events



Prof. Karl-Göran Thorngren

This year we will all meet for the 10th EFORT Congress in Vienna from 3-6 June. In this capital of music we will enjoy a symphony of scientific, educational, social and cultural events. In harmony with the musical theme of the Congress, a special note will be sounded by fact that this is the 10th EFORT Congress. There will therefore be a small exhibition about the history of EFORT.

The scientific programme includes symposia and instructional lectures delivered by distinguished speakers from across Europe, as well as free papers, e-posters, workshops, industry symposia and technical exhibits. Furthermore, there will be controversial case discussions and pro and con sessions. Following on from Nice last year, we will also be holding ExMEx (Expert-Meets-Expert) sessions. These are half-day sessions covering a specific theme. We have continued to broaden our collaboration with specialist organisations for the scientific programme. Along with the exhibition, this Congress format will cover the full range of contemporary orthopaedics and traumatology in Europe. The Congress will take place at the Austria Centre Vienna, which is an excellent and easily accessible venue in which to exchange scientific knowledge, share experience and build awareness of future trends.

The EFORT Foundation is now being established and the formalities are underway in Switzerland. As described in the previous EFORT News in October 2008, the EFORT Foundation will collect funds from donors such as institutions, colleagues, industry and the public. A variety of public campaigns will be held in the future including, for example, hip marches, as already held in some European countries, as well as campaigns selling ribbons etc. to support patients

to be continued on page 2.....

Come to the orthopaedic centre of Europe

Welcome address of Prof. Dr. Karl Knahr

VIENNA – Prof. Dr. Karl Knahr, head of the EFORT Local Organising Committee, invites specialists from all over Europe to come to Vienna.

The 10th EFORT Congress in Vienna, from 3 to 6 June, will be the major orthopaedic meeting in Europe 2009. EFORT's Scientific and Local Organising Committees, as well as the Austrian Society for Orthopaedics and Orthopaedic Surgery (Österreichische Gesellschaft für Orthopädie und orthopädische Chirurgie, ÖGO) invite all European specialists to come and celebrate this important event in the Austria Center Vienna. Hosting this 10th EFORT Congress is a highlight in the history of the ÖGO, and it is a great pleasure and honour to organise this event together with the ÖGO President Prof. Dr. Alfred Engel, the chairman of the local Scientific Committee.



Prof. Karl Knahr

Prof. Dr. Pierre Hoffmeyer, the Chairman of the EFORT Scientific Committee, and his team have arranged an outstanding scientific programme that will cover the whole range of orthopaedics and traumatology. Highlights will be artificial joint prostheses, surgery on the spine, the modern treatment of trauma, and osteoporosis and biologics. With the different session formats, from free paper session, symposia, instructional lectures, poster- and video-presentations through to the ExMEx-sessions that were introduced in Nice, the programme offers many opportunities to learn, to watch, to try new techniques and to discuss. A new item will be the Comprehensive Orthopaedic Review Course, that will sum up all the basic orthopaedic knowledge in one day. It will give young spe-



A tour in a "Fiaker" is a pleasant option to visit all the beautiful places in Vienna.

cialists an opportunity to prepare for the European EBOT exam.

Important to the success of the congress is effective cooperation with our

partners from the industry. They deliver all the products that enable us to take care of our patients. The congress to be continued on page 2.....

Surgical safety: Are we proactive enough?

EFORT encourages the implementation of the WHO guidelines for safe surgery

GENEVA – Orthopaedic surgeons must engage pro-actively in promoting all aspects of surgical safety.

In January 2009, the New England Journal of Medicine published a special article describing a study taking place in eight hospitals in eight different cities, spanning the five continents, and representing a variety of socio-economic circumstances (1). All the complications occurring within 30 days of surgery in these hospitals were monitored. A three-month observation period established a baseline. Simple, safety-oriented guidelines published in 2008 by the World Health Organization (WHO) to ensure the safety of surgical patients worldwide were then introduced. This was followed by a second observation period (2). The guidelines targeted op-

erating theatre personnel and involved systematic compliance with checklists at "sign-in", "time-out" and "sign-out" times. In essence, this simply meant that patient identity, the site of surgery and type of procedure were clearly and unequivocally identified by all members of the operating team, be they doctors, nurses or ancillary staff. The "time-out" procedure ensured clearly identified patients, procedures and surgery sites by all team members just before skin incision. Interestingly, the report states that adherence to the measures reduced in-patient complications overall at 30 days from 11.0% to 7.0% and furthermore reduced mortality from 1.5% to 0.7%. Journalists worldwide picked up on this information and relayed it to the global media, thereby heightening public awareness of the surgical safety issue.

Avoiding surgery at the wrong site by the surgeon initialising the correct site with a skin marker pen prior to the operation should be enforced in all surgical departments, and especially in orthopaedic practice, where surgery at the wrong site can have dire consequences for the patients and for surgical careers (3). Global campaigns involving patient safety such as "Clean care is safe care" must be promoted actively and hand washing before and after any patient contact must be made mandatory (4). Informed care is certainly a good premise for the best care and, here again, the orthopaedic surgeon must strive to provide appropriate and satisfactory information to their patient.

Patient safety should be our primary goal. Without it no surgical operation, no matter how sophisticated the proce-

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EDITORIAL

with locomotor system diseases and trauma. All suggestions for effective initiatives are welcome. Orthopaedic and traumatology surgeons from all over Europe will be able to apply for research or training grants from the EFORT Foundation. We will also need many experienced colleagues from national associations around Europe, as well as from European speciality societies, to work on the evaluation advisory committees. Further information will be given during the EFORT Congress in Vienna.

Please participate in our activities and support the development of our speciality!

Prof. Dr. Karl-Göran Thorngren
EFORT President

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will give all the attendees a chance to look into the current options. Many companies are organising lunch symposia to establish contact with orthopaedic specialists, and of course the large-scale industry exhibition offers many opportunities for direct contact with the companies.

Cultivate friendships

A large congress is more than a scientific highlight. It is an opportunity to meet colleagues from all over Europe and the rest of the world. Vienna, with its rich cultural life, offers many occasions to cultivate friendships beyond scientific exchange. During the opening session and at the Vienna Night, the city will present itself as the musical centre of Europe. It is a great pleasure to announce that members of the Opera House ballet will present a very special performance during the opening session at the Austria Centre Vienna. In the Vienna "Konzerthaus", which can accommodate 1,800, the famous Johann Strauß Orchestra will welcome guests with music from Vienna that will remind everybody of its well-known New Year concert. You would be well advised to reserve your ticket soon!

Many places of interest

Congress attendees and their guests alike will find many places of interest in the centre of Vienna. A walk along the famous "Ringstraße" leads from the Opera House to the parliament, the "Burgtheater", the town hall and finally to the University of Vienna – the second oldest university in Europe. A tour in a "Fischer" is a pleasant way of visiting other places such as St. Stephen's Cathedral, the palace of Schönbrunn or the Belvedere Quarter.

From 3 to 6 June, Vienna will be the orthopaedic centre of Europe – and definitely worth a visit. ■

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Perfect live surgery – and more

24th EFORT Instructional Course, 17/18 April 2009 in Budapest

BUDAPEST (jp) – Prof. Dr. Nikolaus Böhler is a member of the EFORT Training Committee and a lecturer at the course in Budapest. In this interview he talks about the subjects and highlights of the event.

What topics provide the focus of this course?

Böhler: In this course we focus on several subjects. The first one is ACL reconstruction. We have been able to enlist some distinguished speakers, such as Prof. Dr. René Verdonck. And we will have a live surgery that will surely be impressive. Our next subject is cartilage repair. In this area our host, Prof. Dr. László Hangody, is an internationally renowned expert who has developed his own technique. Another speaker is Prof. Dr. Lars Peterson. Every orthopaedic specialist knows him as "the cartilage master" in Europe. We will also have a live surgery to demonstrate cartilage repair. A relatively new issue is meniscus reconstruction. This is another field in which Prof. Verdonck has gained an international reputation. And our last subject will be minimally invasive total knee replacement and minimally invasive total hip replacement

– both techniques will be demonstrated and explained convincingly during live surgery.

This is a wide range of subjects. Will participants be able to benefit from the experience of their Hungarian hosts and colleagues, as well as from the international experts?

Böhler: Yes, definitely. Something exciting about this course is the fact that both our hosts – Prof. Hangody and Dr. Iván Udvarhelyi – are excellent surgeons. So alongside the scientific lectures, the live surgeries will be particularly impressive. We will gain insight into all the small steps and details that are part of every surgical procedure. Prof. Dr. Miklós Szendői, our next EFORT President and director of the orthopaedic department at Semmelweis University, will be present to talk about his experience. So I think that all colleagues will benefit from both the Hungarian organisers and from our international guests.

You have already mentioned that there will be a live surgery in each of



Prof. Nikolaus Böhler

the four parts of the course. What is special about this part of the programme?

Böhler: We will have live surgery for each subject. A very experienced team will be operating, with excellent camera work. The individual techniques will be demonstrated in a short time. At the same time it will easily be possible to discuss every single step while the surgery is going on.

Two workshops will allow participants to learn new techniques. A chance to gather some practical experience?

Böhler: All of us are confronted with more and more periprosthetic fractures, owing to the rising number of artificial joints. So we chose the treatment of these fractures as the subject of our practical workshops.

So in summary, you would say that orthopaedic surgeons can learn a lot in every sense during these two days in April?

Böhler: Yes, I am certain that we will offer an excellent overview, and that there are few other courses worldwide that can offer such perfect live surgeries. ■

Fascinating events in 2009

General Review Course – ExMEx Forum – Instructional Course

BARCELONA – Our training mission should be to advance health through research, training and clinical practice. Our ultimate aim is to increase the quality of life of our patients.

We have designed some events over the coming months that will help us to reach these objectives. One of them will focus on essential knowledge, while the others are intended for experts.

General Review Course, Vienna

This event is intended to review the minimum requirements for orthopaedic residents according to the UEMS guidelines. The EBOT (European Board of Orthopaedics and Traumatology) exam is held in Europe every year. In the past, the examiners have established certain deficits in the knowledge of the candidates, especially with regard to general basic science and paediatric orthopaedics.

This new course provides up-to-date presentations in five major areas: upper extremity, spine, paediatrics, basic science and lower extremity. Attending this comprehensive full-day review course will provide the necessary knowledge base to prepare for the European Board examination.

The course will be held at the Austria Centre Vienna (ACV), Bruno Kreisky Platz 1, AT – 1220 Vienna, Austria on Thursday, 4 June 2009 from 7.45 am to 5.15 pm. It has a maximum capacity of 100 participants, who will be admitted on a first-come, first-served basis.

Vienna Thursday, 4 June 2009

Knee arthroplasty, Marseille

This EFORT Instructional Course dedicated to knee arthroplasty will include both partial and total knee replacements and will focus on factors affecting the function of the knee after surgery. These factors may be related to indications, patient characteristics, surgical techniques, design considerations or individual expectations. These various features will be covered by dedicated presentations, live surgeries and themed discussions. We are proud to host a distinguished faculty for this course, which will provide an opportunity for fruitful, informal exchange in the field of knee arthroplasty.

The Center for Arthritis Surgery, which will host the event, specialises in all aspects of hip and knee replacement. It forms part of the Department of Orthopaedic Surgery at the Sainte-Marguerite University Hospital, located in the south of Marseille.

Marseille 11 – 12 September 2009

ExMEx, Barcelona

Fixed sagittal and coronal imbalance is a syndrome in which the patient is only able to stand with the weight-bearing line in front of the sacrum. It may be associated with varying degrees of coronal imbalance. The surgical treatment of this problem has to deal with two main questions: correction by osteotomy and sacro-iliac lumbar fixation. Peer-reviewed literature offers few reports about correction by osteotomy, and we are not aware of any reports involving a substantial number of patients with

coexistent scoliosis and sagittal imbalance being treated in this way.

The second topic in relation to the surgical treatment of these patients is sacro-iliac lumbar fixation, which is a very challenging surgical procedure.

We are delighted to announce that EFORT and GEER will be hosting the first EFORT ExMEx forum in Barcelona on 19 and 20 November 2009. The EFORT ExMEx forum endeavours to provide European experts with a unique platform on which to share their broad experience and knowledge, and to discuss cases with other internationally renowned orthopaedic surgeons.

The ExMEx forum consists of two sessions which are dedicated to sagittal and coronal plane deformities and to sacro-iliac lumbar fusion respectively. Short lectures by some of the world's most experienced surgeons in adult deformity will be followed by a generous period in which to discuss controversial clinical cases each day. A 3.5-hour cadaver workshop is part of each session. This is a combined meeting between GEER and EFORT. GEER, the Spanish Spine Society is one of the most prestigious orthopaedic societies in our country. The Orthopaedic Department of the Autonomous University of Barcelona will be providing all of the facilities for this event. Barcelona looks forward welcoming experts in spine deformity in adult patients. ■

Barcelona 19 – 20 November 2009

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..... continued from page 1 „Surgical safety: Are we proactive enough?“

duration or how deft the surgeon, can succeed. Many national societies, hospitals and individual surgeons use all or some of the above procedures and measures. The orthopaedic community must now come up with a unified concept for implementing these measures with all our patients throughout Europe.

For too long, the initiative for preventive measures involving patient safety has been taken by persons and organisations outside of surgery.

Orthopaedic surgeons must engage pro-actively in promoting all aspects of surgical safety.

EFORT encourages and endorses all initiatives and efforts in this direction. ■

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REFERENCES

- 1) Haynes AB, Weiser TG, Berry WR, et al. A Surgical Safety Checklist to Reduce Morbidity and Mortality in a Global Population. *N Engl J Med* 2009;360:491-9.
- 2) World Alliance for Patient Safety. WHO guidelines for safe surgery. Geneva: World Health Organization, 2008.
- 3) AAOs web site: <http://www.aaos.org/wrong/setup.cfm>
- 4) Pittet D, Dharan S. Alcohol-based rubs for hand antisepsis. *Lancet Infect Dis* 2008 Oct;8(10):585-6.

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A growing network

Federation of Orthopaedic Trainees in Europe

ROTTERDAM – Orthopaedic trainees will meet at the EFORT Congress in Vienna in formal FORTE presentation sessions on 3 June 2009.

The Federation of Orthopaedic Trainees in Europe (FORTE) wants to give trainees from the various national training bodies opportunities to meet and interact. FORTE aims to create a forum for sharing information and to provide individual training opportunities throughout Europe.

The organisation has grown steadily since the inaugural FORTE meeting at the 2005 EFORT Congress in Lisbon. The initial members were the British Orthopaedic Trainees Association (BOTA), Epiphysis (Sweden), IOTA (Ireland) and VOCA (The Netherlands).

Board FORTE:

Dirk-Jan Hofstee	President	The Netherlands
Enis Guryel	Secretary	UK
Paul Ackerman	Treasurer	Sweden
Michiel Janssen	President-elect	The Netherlands

Growing bigger

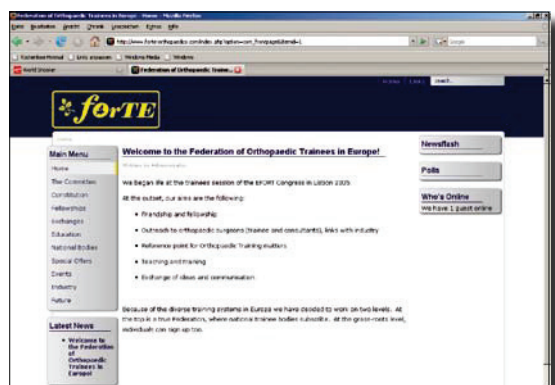
Over the past two years, active interest has been shown from a number of other European countries, and it has

grown on international fellowships, congresses, discounts on literature etc. from a single source. Additionally, discussions are currently taking place at senior level regarding the development of a single European exam for all orthopaedic trainees. FORTE will play an important role in this process, in cooperation with the training board. Details of how to join FORTE, or how to contact the board, can be found on the website.

Funding

Without money nothing can happen. The initial funds were provided by a combination of funds from

each individual training organisation, at a donation of one euro per member, and then subsequently very generously funded by industry. All members of training organisations affiliated with FORTE are automatically also FORTE members. Trainees from those European countries that do not have national organisations can join as in-



been a pleasure to welcome BOTRA (Belgium) and SPOT (Portugal) as active members of FORTE. There has also been recent contact with our French colleagues, who are equally keen to become involved.

In line with the aims of continuing to expand the organisation, it was considered important to develop a form of partnership with senior orthopaedic surgeons in Europe, whilst maintaining our independent status as a trainee organisation. To this end we visited Zurich earlier this year, to meet EFORT President Prof. Dr. Karl-Göran Thorngren. Ideas were exchanged about PR, training, fellowships and sponsorship. It was decided that the two organisations should collaborate, and joint work has already begun in some areas.

What are the benefits of FORTE membership?

Through our website www.forte-orthopaedics.com, European trainees will shortly be able to access informa-

tion on international fellowships, congresses, discounts on literature etc. from a single source. Additionally, discussions are currently taking place at senior level regarding the development of a single European exam for all orthopaedic trainees. FORTE will play an important role in this process, in cooperation with the training board. Details of how to join FORTE, or how to contact the board, can be found on the website.

FORTE in Vienna

This summer we are very excited again to be playing a role in the EFORT Congress, this time hosted in Vienna. There will be formal FORTE presentation sessions on Wednesday, 3 June at 9.00 am (details will be listed in the congress programme) and we hope that as many FORTE members as possible will come to support these. We also encourage trainees from those countries that do not have a formal training organisation to come along and find out more. There will also be a FORTE booth in the trade exhibition where young congress attendees can gather information.

FORTE continues to grow! Hope to see you in Vienna.

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Focus on interaction

10th EFORT Congress in Vienna: New formats, familiar elements

VIENNA (jp) – EFORT President Prof. Dr. Karl-Göran Thorngren explains the attractions of the 10th EFORT Congress in Vienna.

The 10th EFORT Congress will definitely be an occasion to celebrate. Can you tell us some of the special events we can look forward to? Will there be an opportunity to look back on past years and Congresses?

Thorngren: We are celebrating our 10th Congress in Vienna, in a city of culture. This will be audible throughout the Congress as there will be an element of music in all social events. And we will have an exhibition with photographs and information about the history of EFORT. We are confident that this will be a great attraction.

When you look back on past years and past EFORT Congresses, what have been the highlights since the foundation in 1997?

Thorngren: Our main activities have always been the major congresses. So when you look back over the years you remember, for example, Lisbon, Helsinki, Florence and recently Nice. We have had an increasing number of attendees. And now we are expecting more than 7,500 people in Vienna.

To attract attendees, EFORT places a strong emphasis on new and exciting formats such as the controversial case discussions. What do you think makes these sessions especially attractive?

Thorngren: We are continuing and expanding our sessions with controversial case discussions. It is always stimulating for both the audience and the lecturer to have x-rays or a case study linked to a specific patient and to try to cope with the challenge together. Usually these controversial cases are shown as a series of events: one primary procedure is done, a complication appears, and then there are further procedures – it is often an extensive history. The specific linkage to a real case makes it stimulating. And it is always a source of interaction between the audience and the lecturer. In some sessions we also have a pro and con debate where different ideas are put up against each other. In the end the audience can vote which way of treatment is most promising.

The Experts-Meet-Experts sessions were a great success in Nice. There will be even more of these ExMEX-sessions in Vienna. Has the concept of these interactive sessions been developed further since the EFORT Congress in Nice?

Thorngren: We have six subjects:

- ACL reconstruction: from basics to controversies
- The lumbar spine: fixation or fusion or prosthetics
- Osteotomies around the knee
- Paediatric diaphyseal fractures: plaster, external fixation, plating or pinning?
- Osteoporosis: fragility fractures
- Total hip arthroplasty: the ideal bearing surface

An ExMEX-session is a half day dedicated to a specific topic. As the number of participants is limited to 100 per session, we also have a special registration for these sessions. This limitation is necessary to make the sessions more

personal. As it was in Nice, the concept is based on a mixture of lectures and some practical parts, such as hands on-presentations or specific x-ray case presentations. It is intended to be an interactive course at a very high level, as the name "Experts Meet Experts" indicates.

In addition to new and exciting formats, Congress attendees will also find familiar sessions such as the three-minute paper presentation. What is the strong point of these presentations?

Thorngren: The short paper presentations make it possible to include more oral presentations. The extension of the instructional lectures and the symposia, which are much appreciated by attendees, has led to a lower number of free papers. The short time now allows us to include more papers. For the EFORT Congress in Vienna we received 3,478 abstracts. We accepted 19.5 percent as free papers, 59 percent as e-posters and we had a rejection rate of 21.5 percent. The number of abstracts shows that there

junior specialists who want to take the EBOT exam. This is a European exam which was developed by the UEMS (Union of Medical Specialists). EFORT is supporting this exam. We are cooperating with UEMS in organising the exam, and we are offering this comprehensive review course for the first time. But it can also be seen as a refresher course for more experienced colleagues. It is a review of important aspects of our overall expertise.

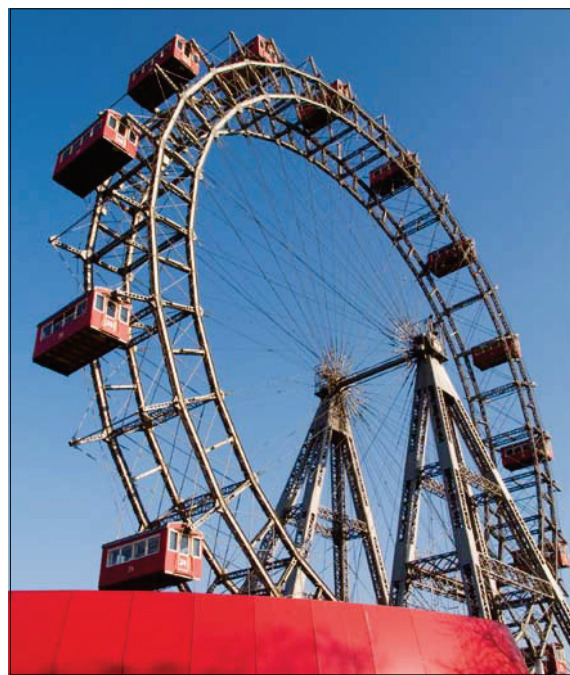
Last but not least, there will be almost 60 symposia and instructional lectures – will it not be difficult to navigate in this ocean of knowledge?



Prof. Karl-Göran Thorngren

Thorngren: For several years already we have tried to keep to certain tracks linked to a subject.

This means if an attendee is specialised in hip surgery, for example, he will find the events linked to his subject in one or two rooms following one after another. Of course if you have several interests you might be frustrated



The 10th EFORT Congress will definitely be an occasion to celebrate – and Vienna offers wonderful locations for a celebration.

is a great interest among orthopaedic surgeons and trauma surgeons all over Europe in presenting their scientific achievements at the EFORT Congress. The high number of abstracts was also a reason why we started to organise yearly Congresses, beginning with Nice in 2008. Next year we will have a meeting in Madrid together with the Spanish Orthopaedic Association, and in 2011 we will meet in Copenhagen.

EFORT is offering the comprehensive review course for the first time. Is this to be understood as "orthopaedics in a nutshell"? Who would you recommend enrol for this course?

Thorngren: That's a correct description. It's a preparatory course for

because you have to make choices. We have tried to reduce the number of parallel tracks. In Florence we had twelve full tracks and up to 16 parallel events at the same time. In Nice we had eight, now we are aiming for ten parallel tracks.

The EFORT foundation will get underway soon. What are its aims?

Thorngren: We will launch the EFORT foundation in Vienna. It will give all orthopaedic and trauma surgeons in Europe the opportunity to apply for grants for research and training. This includes grants for research projects, longer visiting fellowships as well as shorter congress visits. This is our vision for the future.

EFORT Advanced Training Programme 2009



HIP AND KNEE

EFORT IC advanced Budapest, 17–18 April 2009

Local Organiser: Laszlo Hangody



Main Topics:

- ACL Reconstruction
- Cartilage Repair
- MIS THR
- MIS TKR
- MIS Trauma



KNEE

EFORT IC basic Marseille, 11–12 September 2009

Local Organiser: Jean-Nöel Argenson

Main Topics:

- Flexion in unicompartmental knee arthroplasty
- Flexion in total knee arthroplasty
- Evaluation of flexion in knee arthroplasty
- Consequences of high flexion
- Surgical techniques



PAEDIATRICS

EFORT – EPOS IC basic Vienna, 8–10 October 2009

Local Organisers: Bjarne Møller-Madsen
Franz Grill

Combined course:



European Paediatric
Orthopaedic Society

Fractures in children:

- Diagnostics
- Pelvis, thigh and knee
- Shoulder, upper arm and elbow
- Leg, ankle and foot
- Forearm, wrist and hand



HIP

EFORT IC advanced Milano, 16–17 October 2009

Local Organiser: Luigi Zagra

Combined course:



EHS – European Hip Society

Main Topics:

- Metals employed in THA and the optimum surface finishing
- Problems and advantages of cement
- The problems of couplings
- The problems of compatibility in case of partial revision or previous failure



SPINE

EFORT ExME Forum Barcelona, 19–20 November 2009

Local Organiser: Enric Caceres

Combined course:



Spanish Spine Society

Main Topics:

- Sagittal plane deformities
- Lumbo-sacral fusion

Forecast 2010

NAVIGATION AND ROBOTICS

EFORT ExME Forum Berlin, 25 – 27 March 2010

Local Organiser: Fritz Uwe Niethard

Main Topics:

- MIS Hip
- MIS Knee
- MIS Trauma

Expand your knowledge! Visit our Advanced Training Programme on: www.efort.org/training

Then and now

The Austrian Society of Orthopaedics

VIENNA – Austrian specialists have been occupied with the treatment of orthopaedic diseases since the days of the monarchy.

The individuals associated with the history of orthopaedics in Austria include Sigmund Wolffsohn (1767 – 1852), founder of a brace factory producing mechanic orthoses and prostheses in Vienna; Albert von Stephanie (1810 – 1844), who launched physical training in the "K.u.K. Theresianische Ritterakademie" riding school in Vienna; Ludwig Joseph Melicher (1815 – 1871), who introduced Swedish (medical) healing therapeutics for the treatment of spine diseases; and Prof. Johann Edler von Dumreicher (1815 – 1880), who developed an instrument for the treatment of contractures – a prototype of today's CPM machines. Two other important individuals, Prof. Dr. Eduard Albert (1841 – 1900) in Vienna and Prof. Dr. Karl Nicoladoni (1847 – 1902) in Graz, started to integrate surgery in to orthopaedic treatment strategies. They concentrated mainly on the treatment of scoliosis, inborn hip contortions and tuberculosis.

The international reputation of the work in conservative orthopaedics (e.g. bloodless setting of inborn hip contortions) by Prof. Adolf Lorenz (1854 – 1946) and his lecture on „latest progress in orthopaedic surgery" promoted the fusion of conservative and surgical orthopaedics.

Intensive dialogue on the subject was stimulated only with the foundation of the Army Orthopaedic Hospital Gassergasse by Prof. Dr. Hans Spitzzy. This was the second orthopaedic hospital in Vienna after the University Clinic for Orthopaedic Surgery, which was led by Prof. Dr. Adolf Lorenz. The first meeting of the **Free Union of Orthopaedists** was documented in 1921. As a logical consequence of this science-based dialogue, the decision was taken to establish a registered society. The **Society of Viennese Orthopaedists** was officially founded on 9 July 1937.

The work of the fledgling society was abruptly interrupted by the National Socialists (Nazis). Owing to its high number of Jewish members, the Austrian orthopaedics profession was almost destroyed. It was only on 11 October 1948 that the survivors of the war and of forced migration gathered to (re-)establish the **Society of Austrian Orthopaedists**.

Long-standing international contacts were quickly reactivated. This proved no problem considering the close collaboration with the German orthopaedic profession, as evidenced by the presidencies of Adolf Lorenz, Karl Spitzzy in 1913 and Arnold Wittek in 1924. It should be emphasized that Prof. Hans Spitzzy, together with Vittorio Putti and Robert Lovett, was one of the founders of SICOT (La Société In-

ternationale de Chirurgie Orthopédique et de Traumatologie) in 1913.

The continued growth of the **Society / Union of Austrian Orthopaedists** is indicated by the change of name on 21 February 1976 to the **Austrian Society of Orthopaedics and Orthopaedic Surgery**, as well as the involvement of individuals such as Prof. Karl Chiari (1912 – 1982, who introduced hip osteotomies in 1955 with a procedure that is also named after him), Prof. Franz Endler (1918 – 1996), Prof. Fritz Meznik (1923 – 2004), Prof. Hermann Buchner and lecturer Herrmann Neugebauer.

Many new orthopaedic fields were introduced, and findings from research and science influenced the orthopaedic world. Of particular note were the improvements in the field of tumour orthopaedics achieved by Prof. Martin Salzer (rotationplasty of the leg for knee tumours), and the work of Prof. Rainer Kotz (development of a modular tumour prosthesis and the use of intensive chemotherapy) and Prof. Reinhard Windhager (co-development of a growth prosthesis for children with tumours). There were also advances in the fields of cement-free endoprosthesis by Prof. Karl Zweymüller,

new operative hip access by Prof. Rudolf Bauer and Prof. Martin Krismser, infant hip ultrasound by Prof. Reinhard Graf, paediatric orthopaedics by Prof. Franz Grill and cartilage research by Prof. Stefan Nehrer. It is important to emphasise the DGOT presidencies of Prof. Philipp Erlacher in 1954, Prof. Karl Chiari in 1969, and Prof. Rainer Kotz in 1997, as well as the SICOT presidency of Prof. Rainer Kotz (1999 – 2002) and the close relationship with EFORT and its forerunner COCCOMAC. Our active participation in the Federation is emphasised by the presidency of Prof. Nikolaus Böhler (2002 – 2003) and by the

fact that the EFORT Congress 2009 will take place in Vienna.

The Austrian Society of Orthopaedics today has more than one thousand members. The proportion of female memberships is increasing steadily and now accounts for nearly 20%.

As President of the Austrian Society of Orthopaedics and Orthopaedic Surgery, I thank you for choosing Vienna for the 10th EFORT Congress.

Author: Prof. Dr. Alfred Engel
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Prof. Alfred Engel

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An independent advocate

Interview with Prof. Dr. Walter Dick, Basel

BASEL (jp) – Prof. Dr. Walter Dick in an interview takes a look back into history and on the achievements of modern spine surgery.

The Dick „fixateur interne” has become a classic in modern spine surgery. How did you develop this technique?

Dick: To answer your question, we need to take a look back into history: at the end of the 1970s, if you were performing an implant-supported stabilisation procedure in spine surgery you had only the relatively unstable Harrington rod system, Luque wires and simple plate osteosynthesis to choose from. After earlier failures on the spinous process, these were laid over the joints by Roy-Camille and fixed to the pedicles, without giving a stable angle. In order to give a degree of stability – however insufficient – to a fractured spine, they all depended from the biomechanical viewpoint on a three-point support, i.e. where there was a fracture, at least five vertebrae, but preferably seven, had to be involved (immobilised) in fixing the device. What's more, the patient had to lie flat for a long time after their operation, and also wear a corset as external protection.

Back then, as an attending physician at a paraplegics centre I was confronted by the enormous reservations that the rehabilitation specialists had about our operative treatments. It really opened my eyes to see how a paraplegic with a deformed but freely moveable spine responded to conservative treatment.



Prof. Dr. Walter Dick

In one case, after just three months a patient was able to swing himself back into his wheelchair without assistance after falling out of it. He was also able to raise his wheelchair that had been tipped backward while sitting in. At the same time, a patient who had undergone perfectly successful operative fracture repositioning could not, because vertebrae T10 to L4 had been fixed and he no longer had the extreme lumbar flexibility that such a move requires.

This prompted me to start looking immediately for a robust and stable fixation procedure that covered only a

short section of the spine. I understood that this would mean moving away from the three-point support principle that was the underlying feature of all the original rod and plate systems, and their unsatisfactory modifications, that had been tried so far. Magerl then showed in St. Gallen in 1977 that long, strong Schanz screws could be introduced from a dorsal approach through the pedicle into the vertebral body. Here, they could not only be fixed stably, but would also be interconnected at fixed angles outside the body. To do so, he had created an ingenious fixator, giving an external framework that also allowed the spine to be repositioned. This meant that we could achieve fully load-bearing spine stabilisation over a short section of spine that would be load-bearing from the day of the operation – but at the price of a structure that would protrude out of the back for several months!

The principle was fascinating. Magerl and, independently in Germany, Kluger were working on a fully implantable version that was just as stable. As it turned out, while I was in Basel I was the first to produce a workable technical solution, and on 22 December

1982 we implanted the first „fixateur interne” in a paraplegic patient.

How has the treatment of spinal fractures evolved since the 1980s?

Dick: Operating techniques, the way in which we reposition the spine and the fixed-angle fixation principle caught on around the globe with amazing speed. Courses were held all over the world, while surgeons and engineers at all the major implant firms started work on refining the technical solution ever further, making it more user-friendly, and changing the material to titanium. Implantation navigation procedures were also developed. Spine surgeons were then able to turn their attention to questions such as the loss of bone stock in the ventral column of the vertebral body, and the long-term impact on the discs that had also been injured in the fracture. An enormous international body of knowledge was created with regard to osteoplasty and ventral implants and additional procedures. However, despite being easier on the patient, ventral stabilisation alone, without any dorsal tension banding, has not become established for acute fractures despite a number of different trials. The problem area has shifted compared with the 1980s: no longer does controversy centre around spine fractures caused by adequate trauma in healthy subjects. We have more or less solved how to treat them. Today, the biggest therapeutic challenge we face is low-impact fracture to an osteoporotic spine.

Looking back from today's perspective, how would you assess your contribution to modern spine surgery?

Dick: With the clinical launch of the fixateur interne, it very soon became clear that the model worked, that the operating techniques could be learned, and that the principle of interconnecting pedicular screws at fixed angles had much broader applications than in fracture treatment alone. I was able to extend its indications to spondylolisthesis, spondyloptosis, to deformities, degenerative types of scoliosis, to Charcot spines and tumours, and published them in a monograph I wrote as early as 1984. Of course, 25 years later I am delighted to see that the discussion of biomechanics, hints on operating techniques, indications and apparent benefits I put forward then have all remained valid up to the present day. Since I never earned a single cent from the implants themselves, I could be an independent advocate of the principle, and was pleased to see all the new-generation fixed-angle pedicular screw systems that a whole raft of firms produced. I was particularly happy about the products developed for degenerative and scoliosis surgeries, which have resulted in outstanding implants in many sizes and lengths, as well as a whole range of special parts for particular indications along all sections of the spine.

They have become a tried-and-trusted method of treating spinal fusion in almost all clinics, yet few people are aware that they work on the same principle as the old fixateur interne.

Your farewell lecture at the University Orthopaedic Clinic in Basel was entitled „Conjecture about the future”. What did you have to say about the future of spine surgery?



1982 the first „fixateur interne” was implanted.

Dick: In my lecture, I addressed „disruptive change”, as Christensen describes it in his 2000 book „The innovator's dilemma. When new technologies cause great firms to fail”, and as it may well soon be faced by medicine (Christensen et al.: Will disruptive innovation cure health care? Harvard Business Review 2004). I didn't focus on spine surgery, but on general trends toward change, such as „the medicine of the future is female”, „the changing role of the patient”, „value shifts”, and „concerns about doctors' training”.

Experts don't make better predictors of the future, because their thinking is linear, drawing on their experiences of the past and extrapolating them into the future. They never anticipate the black swan, as described in Nassim Taleb's book „The Black Swan. The Impact of the Highly Improbable”. Although it might require some effort, we would all benefit from reading his work. I would not be so bold as to claim I know the future of spine surgery!

What plans do you have for your personal future?

Dick: To conclude my activities for EFORT, I will be taking part one last time in an ExMEx meeting – in Barcelona in November. Otherwise it is time to step aside and make way for the next generation. I look forward to being amazed by the knowledge and skills of our young surgeons. They have impressed me for many years, and I will enjoy keeping up with their new findings as an observer.

EFORT ExMEx FORUM



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MAIN TOPICS

- Sagittal plane deformities
- Lumbo-sacral fusion

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EFORT – JOINT EFFORTS

ExMEx Forum

The EFORT ExMEx Forum in Barcelona on 19 and 20 November 2009 will focus on sagittal plane deformities and lumbo-sacral fusion.

Prof. Dr. Walter Dick will hold a lecture on “Closing wedge osteotomy in ankylosing spondylitis with thoracolumbar kyphotic deformity”.

High standards all over Europe

UEMS – past, present and future

NORWICH – Many surgeons in the orthopaedic community at large have little idea about the purpose and activity of the Union of European Medical Specialists, (UEMS). As the incoming President of the Trauma and Orthopaedic section, and of the European Board of Orthopaedics and Trauma, (EBOT), I felt it would be appropriate to share with you a little of its history, and bring you up to date with its activities and aspirations.

In 1958, medical specialists from the six original members of the European Economic Community met in Brussels to establish principles for the training and practice of specialists in Europe.

The Past

The Union of European Medical Specialists was formed, only one year after signing the treaty of Rome. In the early years, UEMS was concerned principally with the recognition and regulation of specialist professional activity. The European commission and the council of ministers of the EU are responsible for the production of EU directives, and with the expansion of the number of member states there was considerable pressure to relax the rules governing medical specialists. Both the UEMS and European medical organisations resisted this, and the regulations for medical specialists continue to be governed by individual national organisations.

The Present

The UEMS has grown with the expansion of the European Union. Each of the 27 member states, plus Iceland, Norway and Switzerland, which are EFTA countries, is entitled to send two representatives to UEMS council. In addition, UEMS specialist sections have been created to represent the views of doctors in each specialty. Each national medical organisation, appoints the representatives to the general council,

and each national specialist association sends two delegates to the specialist sections. The usual term of office is five years, but is renewable. Observer countries, which are not currently members of the European Union, but have similar aspirations, send one delegate to the specialist section. The UEMS is a lobbying organization, which has influence in the European commission, the European parliament, and also on national governments. Funding for the activities of the UEMS sections comes from contributions from the individual national associations, with additional contributions from EFORT.

Trauma and orthopaedics

The section currently has 47 delegates and three observers. Five EU countries have not yet sent delegates to the section: Latvia, Lithuania, Malta, Slovenia and Poland. There are two meetings each year, attended by an average of 30 to 35 delegates.

The primary function of the section is to monitor and improve standards of orthopaedic training throughout Europe. Initially, the standards and requirements for specialty training were very diverse, and in 1989 a set of "minimal requirements for orthopaedic specialist training" were devised and approved. Subsequently these have been updated and agreed, in 2002. Although these requirements were only advisory to national organisations, it is clear that considerable harmonization of training throughout Europe has occurred since then, in the same way that orthopaedic and trauma practice has become much more uniform throughout Europe.

In the majority of European countries orthopaedic surgeons deal with both elective surgery of the locomotor system and with skeletal trauma. The clinical and surgical skills required to manage all problems of the bones and joints have increasingly led to general surgeons relinquishing their interest in fracture care. Following qualifica-

tion and a period of one to two years in internships, most potential trainee orthopaedic surgeons undergo a variable period in posts in the generality of surgery – basic or core training. Specialist orthopaedic training is in most countries five or six years, with regular assessments, usually by examination, or by interview and appraisal of practical skills, at yearly intervals.

The European Board of Orthopaedics and Traumatology, EBOT, is the working group of the orthopaedic section. It concerns itself particularly with improving the standards of training in all the member countries, and its assessment. Completion of training results in the award of a CCT. This allows the trainee to assume the title of specialist, but many European countries have no final "exit" examination. Others have an examination which is voluntary. This has led to the development of the "European Board of Orthopaedics and Trauma" examination, which is open to all certified orthopaedic specialists in Europe. It has no formal position as an exit examination, but is increasingly useful in a competitive job market.

Continuing medical education (CME or CPD) is a requirement in all European specialist organisations. This is usually controlled by a points system, and will assume increasing importance as revalidation becomes standardized across Europe. The UEMS has been instrumental in obtaining agreement for validation of educational activities on an international basis, through the creation of EACCME, which coordinates the allocation of CME credits for meetings throughout the EU.

After conducting surveys on working environment, manpower and training, the section for T&O has obtained and developed much useful data. The dramatic changes imposed by the European working time directive (now regulation), have had a profound effect in all member states. There has been a general agreement by surgical specialties that this regulation has had a deleterious effect

on training in "craft" specialties. Unfortunately this has failed to impress the profession as a whole, and the influence of the non-surgical specialties prevails for the time being.

The President of the orthopaedic section of UEMS is a co-opted member of the EFORT executive committee, which recognizes the contribution that UEMS can make to the EFORT congresses through its role in education and training. UEMS is also indebted to EFORT which contributes financially to the costs of running the EBOT examination, a considerable advantage to examination candidates.

The future

Although many differences in training remain, there is a continuing commitment to improve standards. This has been stimulated considerably in the recent past by the development of a formal published curriculum, tools to improve assessment of trainees and other important adjuncts to training such as the electronic logbook in the United Kingdom and in some other states.

In recent meetings of the UEMS specialist section for orthopaedics, these advances have been discussed in detail, and the British Orthopaedic Association has sanctioned the promulgation of the knowledge syllabus from our curriculum throughout the European orthopaedic community.

Another aspect of training which has attracted attention in a number of member states is the development of courses and instruction for the trainers. Clearly, if we are to maintain one of the major tenets of the UEMS: To provide training of the highest possible standards throughout all member states, we have to have a unified approach to developing standards of orthopaedic practice. We need validated methods of applying those standards, both for established specialists and the next generation of surgeons, currently in training, using a comprehensive curriculum. We

also require methods of assessment which can take place throughout our professional development, both day to day, in the workplace and also at more formal occasions.

It is to be hoped that in due course such ideas will be accepted by all the national associations, and that a final, formal assessment of training by examination will be appropriate for all trainees throughout Europe. It may then be possible to develop a common assessment process agreeable to all. This will allow the highest of standards to be achieved and maintained by all trainees in trauma and orthopaedics, and will inspire further confidence in the principles promoted by the treaty of Rome, that there should be free movement of professional labour throughout Europe.

More immediately, developments in the EBOT examination will shortly include an online written paper, which will allow candidates to sit the first part in their own country or local centre, and consideration for the translation of the paper into at least five European languages. The concept of an online examination introduces the possibility of an annual in-training assessment which will allow trainees to be ranked anonymously alongside their peers, and will reflect the quality of different training programmes.

These aspirations sit well with our objectives in the orthopaedic section of the UEMS. Harmonisation of improved standards of training and practice throughout Europe, which means that a specialist in any member state would feel comfortable working in any European country, and perhaps more importantly, patients would be happy that their treatment would be to the same high standard in any healthcare system in Europe. ■

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Successful multidisciplinary team

Sarcomas group in Sarajevo established more than ten years ago

SARAJEVO – After four years of war and destruction, society and the medical system in Bosnia and Herzegovina needed to reorganise and to adjust to new conditions. The sarcomas group at the University Clinical Centre in Sarajevo, established in 1998, is an example of the region's successful recovery in this area.

Bosnia and Herzegovina was recognised as independent state in 1992, followed by a war that lasted four years. All segments of society, including the medical system, were badly affected by destruction and devastation.

Right after the end of the war, the Clinic for Orthopaedics and Traumatology at the University Clinical Centre in Sarajevo had to reorganise and switch from the principles of war surgery to

regular peacetime surgery. Among the patients now were a large number with suspected malignant diseases of bone and soft tissue. Until then, our centre had no systematic approach to oncological surgery.

The problems we had to face were a huge loss of time until diagnosis, the unnecessary repetition of diagnostic procedures and long discussions about therapeutic instructions. Patients went to other clinics and centres searching for adequate care, and a society that was poor to start with lost a great deal of money.

To face these problems, we formed a multidisciplinary team consisting of orthopaedic surgeons, clinical oncologists, radiotherapists, radiologists, psychologists and physiatrists. The group was established with the support and tre-

mendous practical help of the Austrian expert in tumour orthopaedics Prof. Dr. Martin Salzer, Vienna, and the pathologist Prof. Dr. Matilda Kuchnic-Salzer, Vienna. They initiated the sarcomas group that started in 1998. The principles and goals have remained the same over the past ten years: to provide the fastest and most appropriate service to patients with a suspected or verified diagnosis of a malignant disease. The sarcomas group takes care of the patients from their first reception in the clinic until the end of the treatment. The group meets once a week to discuss pre- and postoperative cases, to evaluate pathological, radiological and clinical findings, and to work out a detailed therapy plan for each patient. The patient's time is precious and the time that patients spend waiting for the diagnosis is often the most difficult

phase in the whole process. Our goal is thus to confirm the diagnosis as soon as possible. Radiologists and pathologists give their contribution as quickly as possible. During this phase, the patient receives psychological support, which will continue if radical surgery and even if minimally invasive surgery is indicated. Preoperative planning is extremely important in the group's work. An individual treatment protocol is worked out for each patient. Malignant tumours are treated with a combination of surgery, radiotherapy and chemotherapy. Surgical treatment may include the use of allografts, as well as the use of tumour prosthesis to save the bone or the whole extremity. Radiologists and pathologists are often present during the surgery. The postoperative recovery of the patient is closely monitored by all members of the

group. The monitoring continues even after the patient has left the hospital.

The sarcomas group has treated 2155 patients since 1998. The Clinic for Orthopaedics and Traumatology is now the reference centre for a population of more than two million people.

We are proud that, after the total collapse of the medical system in a short period of time, we succeeded in creating a generally accepted principle of work for patients with malignant diseases. Of course this was possible only with the generous support of our friends and colleagues. ■

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On the way to Asia

EFORT forges links with the Far East

BEIJING – EFORT and the Chinese Orthopaedic Association aim to hold joint training events.

Our first contact with China dates back to 1981. A small wooden bridge led out of Hong Kong into this enormous country. In my memory, parallel lines of cyclists dominated the streets. Among the first medical impressions were visits to outpatient trauma clinics, as well as the excellent outcomes of micro- and replantation surgery in the 6th People's Hospital in Shanghai.

Many journeys to China followed, along with lectures and live surgery sessions. China was changing with vertiginous speed. Based on culture and science that was thousands of years old, a new society, industry and technology moved into the future.

Chinese orthopaedics and traumatology have been developing especially well in recent years. Just over three years ago, the Chinese Orthopaedic Association (COA) under the presidency of Prof. Guixing Qiu (Beijing) gathered for its first congress in Beijing. It was already a huge event. National and international contributions made it an excellent meeting.

It was an honour for EFORT's representative to speak at the opening ceremony.

By last year, when the congress was held in the old imperial city of Sushu



Prof. Guixing Qiu und Prof. Wolfhart Puhl in Beijing

south of Shanghai, the congress and the team effort of the COA had grown remarkably, as had the industry exhibition, with more and more Chinese companies.

Desire for closer collaboration

After several years of positive cooperation and growing trust on both sides, the desire for closer collabora-

tion is now clear. His Excellency, the Chinese ambassador to the Federal Republic of Germany, facilitated discussions about politically stabilised cooperation, and also helped to strengthen and maintain this process.

The next step was an invitation to meet representatives of the Chinese Ministry of Health. The meeting took place in Beijing before the last COA congress in November 2008 in Sushu. As EFORT representatives we

were asked to organise training events in coming years in collaboration with the COA and with the help of the ministry, and have also been asked to help develop standards.

We were delighted to respond positively to these proposals. A letter of intent was signed with Prof. Qiu during the COA congress. The legal and organisational preparations for the first training events in China are now underway.

In this dynamic situation, another group contacted us with the aim of establishing a partnership with EFORT in the rest of Asia. This would involve some kind of cooperation with APAS, the Asian Pacific Arthroplasty Society. There are some contractual questions still to be resolved here, but the first event is scheduled to take place late in 2009 – and a number of Asian cities are interested in hosting the meeting.

What does this development mean to EFORT and its members?

European orthopaedics is well respected in Asia, and this positive image is the reason for the desire for close collaboration. These relationships will become more and more important in the future. To build up this constructive relationship in practical terms, we need active help from the best orthopaedists and traumatologists in EFORT. EFORT members – the national societies – are currently looking for experienced colleagues who would like to get involved with this alliance. EFORT invites the specialty societies in Europe dedicated to musculoskeletal conditions to help in this search. The aim is to find the best experts in common orthopaedics and every subspecialty.

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A cordial reception in Buenos Aires

EFORT participation in South America

BUENOS AIRES – In an attempt to increase the scientific knowledge across all continents, EFORT is strengthening contacts with various national orthopaedic associations outside Europe.

In 2008, this work was focused on South America and, in particular, on Brazil and Argentina. Dr. Jorge Romanelli as a representative of the Asociación Argentina de Ortopedia e Traumatología, AAOT, was invited to our annual meeting in Nice, and initial discussions were started in order to expand a scientific exchange programme between EFORT and AAOT.

As a result EFORT was invited to send a delegation to the 45th Congreso Argentino de Ortopedia y Traumatología, held in Buenos Aires between 30 November and 5 December 2008. This congress is one of the largest in South America, with an attendance of around 5,000 delegates. EFORT was represented by the President, Prof. Dr. Karl-Göran Thorngren, the Immediate Past President, Prof. Dr. Wolfhart Puhl, and the Secretary General, Dr. Manuel Cassiano Neves. Owing to their cultural connection with Argentina, the national associations of Spain (SECOT) and Italy (SIOT) also decided to be involved in this EFORT-organised project by sending Prof. Dr. Enric Cáceres Palou, Dr. Maite Ubierna Garces, Dr. Francisco Jativa Silvestre, and Dr. Ro-

berto Giacometti Ceroni as speakers. The EFORT delegation was received in Buenos Aires by the President of AAOT, Dr. Ivan R. Ayerza, and by the local host, Dr. Jorge M. Romanelli, in a very warm and welcoming atmosphere that put the group in the perfect frame of mind for the following days.

The participation of EFORT in the scientific programme was scattered across the different rooms used for the local programme. On the third day, EFORT organised a course with an overview on hip fractures, new implants in hip



The presidents' palace in Buenos Aires is the „Casa Rosada“.

surgery, new trends in SCFE and the role of conservative treatment in children's fractures. The second part concentrated on updates in the treatment of spine tumours, spondylodiscitis, THR in hip dysplasia, and what is new in the treatment of children's trauma, scoliosis and cervical herniated discs.



In 2008 the Argentinian capital Buenos Aires hosted the 45. Congreso Argentino de Ortopedia y Traumatología.

In total, EFORT was responsible for 26 presentations and moderated six sessions. Most of the presentations were well received, although the EFORT course was not so well attended owing to language problems because there was no translation. Perhaps it will make more sense in the future to include EFORT presentations in the local programme.

In addition to the scientific programme, EFORT had the opportunity to meet the Executive Committee of the Sociedad Latino Americana Ortopedia y Traumatología, SLAOT,

which is chaired by Dr. Pedro Antonio Bravo Bernabé. SLAOT represents around 40,000 orthopaedic surgeons from South and Central America. The organisation is increasing its scientific activities and at the same time looking for scientific partnership. EFORT is organising a combined meeting together with SECOT for the first time in 2010. Plenary sessions with simultaneous translation will be organised to allow Spanish-speaking people from all over the world to follow the most important themes. This has drawn considerable attention from our colleagues, indicating a growing

interest in participating actively in the meeting. Other aspects were discussed, such as a travelling fellowship programme for SLAOT members. It is worth remembering that, soon, the Argentinian and Brazilian associations will begin participating in our travelling fellowships, with a visiting fellowship and information exchange via the portal. At the same time, it was decided to share information via both



Dr. Manuel Cassiano Neves

The meeting ended on a very cordial note, with a desire to improve the relationships in the future. We extend our sincere thanks to the local team and, in particular, to Dr. Jorge Romanelli, for the wonderful atmosphere and warm reception we enjoyed in Buenos Aires.

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10th EFORT Congress

Vienna, Austria • 3 - 6 June 2009



Challenging cases

Failed THR II: revision using modular implants

ANKARA – There is no doubt that total hip replacement (THR) has been one of the most successful procedures in orthopaedics. Wear, and the end result loosening with infection, have been its main limitations. Since developments in technology have allowed us to use the procedure in more patients, the number of revisions has increased and the age of revision has decreased. We are now revising more THRs than ever, and these patients are demanding more from their surgeons and from their implants.

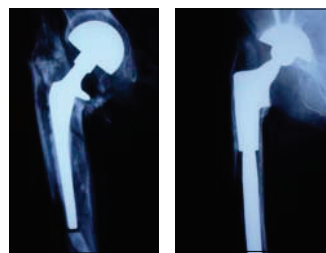
and achieve proximal loading of the femur with modular implants instead of off-the-shelf implants.

The initial concerns about using these implants were additional wear and corrosion from connections, breakage and instability. Many of these concerns have been addressed with technological developments in implant design, the materials chosen for manufacture, and success in loading the bone. Now, there are a variety of implants – based on different philosophies – on the European market. These implants have different stem designs such as cylindrical, conical or taper configurations, and different types of coating, such as beads, plasma spray, or hydroxyapatite. There are also many different options for reconstructing the proximal femur. Each implant has its own options for the stem, neck and locking mechanisms. There are also various configurations of body segments to attach to the femoral stem.



Prof. Mazhar Tokgozoglu

Wear to a THR leads to osteolysis, which is bone destruction around the implant induced by particle phagocytosing macrophages. These macrophages then activate osteoclasts surrounding the implant, which then resorb the bone to which the im-



A patient with severe osteolysis was revised with a modular stem and a calcar replacement type body. The stem segment was a porous coated curved stem.

plant is fixed. This leads to micro and macro motion in the implant, causing even more bone destruction. The reconstruction of these bone defects has been a major challenge. First-generation femoral revision implants were cementless devices that ignored the individual configuration of bone defects. They were also rigid implants that were fixed across long sections of bone. Although these implants were able to address many issues, they were fixed in the femur distally and caused severe non-physiological stress absorption and further bone resorption in the proximal femur. It became apparent that, to ameliorate this problem, the femur needed to bear the load in the proximal area. Now, the best solution appears to be to reconstruct the osteolytic defects

and different types of coating, such as beads, plasma spray, or hydroxyapatite. There are also many different options for reconstructing the proximal femur. Each implant has its own options for the stem, neck and locking mechanisms. There are also various configurations of body segments to attach to the femoral stem.

The aim of this symposium is to discuss the different options available for these challenging revision cases. The focus will be on the advantages and disadvantages of each system, the options they provide, results and limitations. Prof. Dr. Mazhar Tokgozoglu, Ankara, Turkey, will discuss the ZMR stem with a cylindrical porous coating. Dr. Wolfgang Klauser, Hamburg, Germany, will be discussing the MP reconstruction stem – a plasma spray-coated conical stem with tines – Dr. Luca Marega, Brescia, Italy, will talk about how to load the proximal femur. and Dr. Jean Pierre Vidalain, Annecy, France, will discuss the long-term results of the oldest modular femoral stem, S-ROM, which has modular proximal bodies with a porous coating. ■

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Symposium Room F1
Wednesday, 3 June 17.00 – 18.30

Nails or plates?

Treatment of tibial fractures

EDINBURGH – The recent introduction of locking plates and minimally invasive surgical techniques has caused surgeons to re-evaluate the treatment of tibial fractures.

The mainstay of the treatment of tibial diaphyseal fractures in the last 20 years has been intramedullary nailing using either reamed or unreamed nails. This has proven to be a relatively straightforward technique which gives good results. There was initial disquiet about the use of intramedullary nailing in severe open fractures, but the results have been good and the technique is in widespread use.

The problems with intramedullary nailing relate mainly to the nailing of proximal and distal fractures. Few surgeons use nails to treat intra-articular proximal or distal frac-

sures, to minimize the problem but plating is another alternative.

Many of these fractures occur in osteoporotic bone, and conventional screws and plates often fail to hold the fracture. However the introduction of locking plates (Figure 1) has been associated with better results. There have been a number of studies of locking plates,



Fig. 1: A locked plate used for a distal tibial fracture. A supplementary fibular plate was also used.

but most have been in distal tibial fractures, probably because most of the studies have been undertaken in level-one trauma centres. However an analysis of the use of locking plates in proximal fractures suggests that 90% of fractures unite without significant problems. In distal fractures a comparison of plating with nailing suggests that about 5% of plated fractures and 15% of nailed fractures require secondary reconstructive procedures, and the prevalence of malalignment is much higher after nailing. It seems likely that locked plating will be the treatment of choice for these fractures.

Locked plating and minimally invasive techniques have been used for the treatment of tibial diaphyseal fractures but intramedullary nailing is a minimally invasive technique which is associated with good results. One potential advantage of plating is that it does not cause knee pain – this being the main complication of intramedullary nailing. However, in a recent study of plating 40% of patients had anterior shin discomfort and 25% of plates had to be removed!

The results of intramedullary nailing of tibial diaphyseal fractures are very good. The technique can be used in both adolescents (Figure 2) and adults and in both closed and open fractures. An analysis of the results of the nailing of closed and less severe open fractures shows that the union time averaged 16.6 weeks and the infection rate averaged 1.9%. The non-union rate averaged 2.9% and the mal-union rate 7.6%. Joint stiffness, usually of the hindfoot, averaged 8.9%. The results of unreamed nailing of Gustilo I – IIIB fractures show that the union times averaged 29.3 weeks and the average infection rate was 6.1%. The non-union rate averaged 21.5% and the mal-union rate averaged 9.5%. The use of reamed intramedullary

nailing in Gustilo I – IIIB fractures gave very similar results, with an averaged union time of 32.3 weeks and an average infection rate of 6.5%. The literature clearly points to the advantages of reamed nailing in closed fractures but reaming does not offer any advantage in more severe open fractures.

When considering the future of tibial fracture management, it is important to remember that the epidemiology of tibial fractures is changing. There is evidence that fewer fractures are now caused by road traffic accidents, with more being caused by simple falls in older patients. A review of the Edinburgh database shows that the incidence of tibial diaphyseal fractures was 26/105/year in 1988 – 2000. In 2000 the incidence was 21.5/105/year and in 2007/8 it was 14.3/105/year. The average age of the patients rose from 37 to 40 years. The epidemiology of proximal and distal fractures has also changed, with an increasing incidence being seen in the last ten years. Significant, however, is the fact that the average age of both sets of patients has increased by about six years. This suggests that there will be an increasing number of tibial fragility fractures. It seems likely that nailing will remain the treatment of choice for diaphyseal fractures, but plating will increasingly be used for metaphyseal fractures. ■

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Symposium Room F2
Thursday, 4 June 17.00 – 18.30

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Relieving the symptoms

Role of facetectomy in isolated patellofemoral osteoarthritis

LYON – Partial lateral facetectomy is an option for patients with isolated patellofemoral osteoarthritis. Its aim is to relieve symptoms, but it does not eliminate predisposing factors.

Isolated patellofemoral osteoarthritis (PFOA) is a relatively rare condition which affects the lateral facet in 89% of the cases (1, 2). Since conservative treatment options do not lead to long-lasting relief, surgical options may be considered. The aim of this presentation is to establish the indications of facetectomy, to define its place within the surgical management of this condition and to present our results regarding to the treatment of symptomatic patients with isolated lateral PFOA using partial facetectomy (3).

Material and methods

The sample included patients with evidence of isolated lateral PFOA, PFOA with kissing lesions, localized lateral patellar tenderness on physical examination, and anterior tuberosity-trochlear groove (AT-TG) distance less than 16 mm measured on the CT scan.

Patients who had osteoarthritis in the tibiofemoral compartments, medial or central PFOA or isolated cartilage lesions of the patella were excluded.

In a supine position under tourniquet control, the knee was approached through a lateral parapatellar incision. A lateral retinacular release (LRR) was performed along the poles of the patella (Figure 1). The patella and the trochlear groove were then examined for cartilage lesions. Patellofemoral congruency was checked. One to 1.5 cm of the lateral border of the patella, including osteophytes and 1 to 2 mm of cartilage, were resected with an oscillating saw (Figure 2). If a kissing lesion and osteophytes existed on the lateral condyle of the femur, they were also cut and chipped. Bone wax was applied to the cut surfaces and meticulous hemostasis was obtained. In most of the cases a combined arthroscopy was not indicated. Between 1991 and 2000, partial lateral facetectomies of

the patella were performed on eleven knees of eleven patients who had isolated lateral PFOA. The mean duration of follow-up was eight years (range 3 to 12 years).

Results

During the follow-up period, none of the patients underwent any revision or patellofemoral joint surgery. The mean Knee Score improved significantly from a preoperative score of 77 to a score of

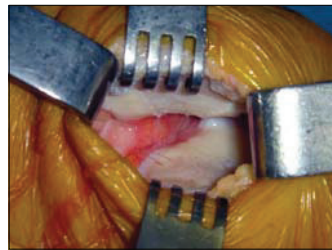


Fig. 1: Lateral parapatellar approach and comprehensive LRR

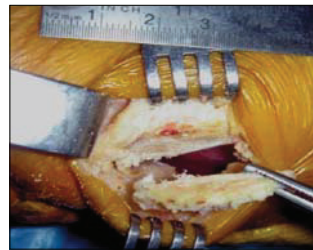


Fig. 2: After the osteotomy of the lateral facet (partial facetectomy)

91 at latest follow-up, mainly owing to pain relief. The mean American Knee Society Score improved from a preoperative score of 150 to 176 at latest follow-up.

Follow-up radiographs demonstrated the slow progression of osteoarthritis in the patellofemoral and tibiofemoral compartments. However, radiological appearance and clinical

symptoms were occasionally uncorrelated.

At the latest follow-up, patellofemoral osteoarthritis was severe in seven cases and the patellar position had not improved in five cases after facetectomy.

Discussion

Many surgical techniques have been advocated for PFOA. Among the 'minimally invasive' surgical options, the

cartilage on to which to transfer the patella (8). Among replacement surgeries, patellofemoral arthroplasty has a variable success rate ranging from 44% to 90% (9). Total knee arthroplasty (TKA) for PFOA provided excellent pain relief and improvement of function (1). TKA may be a good surgical option for older, less demanding, bilaterally involved patients.

The reported results of partial lateral facetectomy are encouraging. Martens et al pointed out that 90% of the patients who underwent lateral facetectomy and open LRR were satisfied with the results (10).

Partial lateral facetectomy is an appropriate procedure for patients with isolated PFOA. Ideal candidates are highly demanding, younger individuals. This procedure aims to relieve symptoms but does not eliminate predisposing factors. Additionally, it does not have any negative influence on subsequent procedures and can easily be converted to TKA. ■

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Symposium Room E1
Thursday, 4 June 10.30 – 12.00

REFERENCES

- 1 Laskin RS, Van Sten M (1999) Total knee replacement for patients with patellofemoral arthritis. Clin Orthop 367: 89 – 95
- 2 Iwano T, Kurosawa H, Tokuyama H, Hoshikawa Y (1990) Roentgenographic and clinical findings of patellofemoral osteoarthritis. Clin Orthop 253: 190 – 197
- 3 Yercan HS, Ait Si Selmi T, Neyret P (2005) The treatment of patellofemoral osteoarthritis with partial lateral facetectomy. Clin Orthop 436: 14 – 19
- 4 JB Moseley, KO'Malley, NJ Petersen et al (2002) A controlled trial of arthroscopic surgery for osteoarthritis of the knee. N Engl J Med 347: 81 – 88
- 5 Owens B, Stickles B, Balikian P, Busconi B (2002) Prospective analysis of radiofrequency versus mechanical debridement of isolated patellar chondral lesions. Arthroscopy 8: 151 – 155
- 6 Herrenbruck TD, Mullen DJ, Parker RD (2001) Operative management of patellofemoral pain with degenerative arthritis. Sports Med Arthroscopy Rev 9: 312 – 324
- 7 Shea KP, Fulkerson JP (1992) Preoperative computer tomography scanning and arthroscopy in predicting outcome after lateral retinacular release. Arthroscopy 8: 327 – 334
- 8 Becker R, Röpke M, Krull A, Musahl V, Nebelung W (2008) Surgical treatment of isolated patellofemoral osteoarthritis. Clin Orthop 466: 443 – 9.
- 9 Kooijman HJ, Driessen APPM, Van Horn JR (2003) Long-term results of patellofemoral arthroplasty J Bone Joint Surg 85B: 836 – 840
- 10 Martens M, De Rycke J (1990) Facetectomy of the patella in patellofemoral osteoarthritis. Acta Orthop Belg 56: 563 – 567

The rhythm of the waltz

VIENNA (jp) – The concert by the famous Vienna Johann Strauß Orchestra will be the highlight of the "Vienna Night" on Thursday, 4 June.

The Vienna Johann Strauß Orchestra continues its mission to bring to life the tunes of Viennese music, manifest in the compositions of the Strauß dynasty. The musicians are well aware of their great tradition: to save the charm of the classical Viennese dance music for posterity and to inspire their public.



The music of Johann Strauß I will play an important role in the "Vienna Night".



The "Waltz King" Johann Strauß II, composer of the famous "Blue Danube"

In 1965 outstanding musicians from all of the famous Viennese orchestras united to form a group in the historical formation of the Strauß-orchestra. Its current conductors are Alfred Eschwé and Martin Sieghart.

The founder of the Strauß dynasty was Johann Strauß I, born in March 1804. His most famous piece is probably the "Radetzky March" (named after Joseph Radetzky von Radetz), whereas his most famous waltz is probably the "Lorelei Rhein-klänge". Few people today remember that he completed an apprenticeship as a bookbinder, before he managed to secure a place in an orchestra. He became one of the best-known and best-loved dance composers in Vienna, and he toured with his orchestra to Germany, the Netherlands, Belgium, England, and Scotland.

His sons were Johann Strauß II, Josef Strauß and Eduard Strauß. They followed in his footsteps as composers. Johann Strauß II became famous for composing more than 500 waltzes, polkas, and galops, amongst them the waltz "The Blue Danube". ■

The right implant for the right patient

The lumbar spine – fusion or prosthetics

BOGEN – New implant systems allow stabilisation while maintaining motion.

The treatment options in segmental pathologies, such as degenerative disc disease, have changed over the last 20 years. This has had many benefits for patients, as surgical intervention can now address the pain generators more precisely and in a way more appropriate to the degree of damage. It is also possible to start with a less risky treatment, with options for further treatments always open. This is not usually possible once a fusion has been performed.

With the introduction of new implant systems, such as artificial discs and dynamic posterior stabilisation systems that increase rigidity, it has been possible to achieve stabilisation while maintaining motion. This is not the case where flexible sections of the spine are fused. The consequences of fusion are often thought to be responsible for adjacent-level conditions that may even require a new operation to treat the pain.

As such, devices that maintain motion offer an alternative to fusion. However, these implants are not intended to replace fusion procedures, as the latter still have a role to play in

correcting instabilities and deformities that cannot be addressed adequately or at all by devices that preserve motion. These developments have been accompanied by increasing debate on biomechanical aspects, as well as in-vitro tests in the development of a wide range of implants that allow the surgeon to choose the right solution for the individual patient. The intention – apart from treating the pain – is not only to restore disc height and introduce stability, but also, where necessary, to influence the overall posture of the spine when using artificial discs or posterior dynamic stabilisation. This can also be achieved with multisegmental applications

where different pathologies at different levels must be addressed. Hybrid constructs, featuring a combination of motion-sparing and fusion devices, are also possible. Since the first motion-sparing devices were introduced, much has been learned about inclusion and exclusion criteria, so that the right patient receives the right implant to treat their spine-based back pain. ■

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ExMEx session
Thursday, 4 June 8.00 – 12.30
Pre-registration required

Treatment strategies are changing

Femoral neck fractures: internal fixation / intertrochanteric fractures: arthroplasty

TORONTO – As part of the ARTOF symposium on fractures of the proximal femur, we will present lectures on two topics.

The first is the role of internal fixation in fractures of the femoral neck. Increasingly, endoprosthetic replacement is being promoted as the preferred treatment for these fractures. This is based on analysis of patient outcomes, including the early and late complications of hip fracture surgery, the level of patient activity after surgery, as well as the incidence of second operations to address the complications of the

primary procedure. In young patients who sustain femoral neck fractures as a result of significant trauma, fixation is the preferred method of treatment



Fig. 1a: Intertrochanteric fracture in patient with pre-existing symptomatic hip arthritis



Fig. 1b: Fracture stabilized by invagination of the calcar fragment and a cemented stem

because of good bone quality and long-term problems associated with endoprostheses. In minimally displaced fractures in the older population fixation remains the appropriate procedure because of the low rate of complications, possibility of immediate weight bearing, and implant cost.

Intertrochanteric fractures

The treatment of intertrochanteric fractures is also changing. Recognising the importance of immediate full weight bearing after surgery in improving pa-



Fig. 2a: Displaced femoral neck fracture right hip

tient outcomes, fracture stability obtained at surgery is essential to maximise patient recovery. Owing to complex fracture patterns and poor bone quality, endoprosthetic replacement is occasionally suggested as an alternative to internal fixation. Published studies, however, do not support endoprosthetic replacement as a routine strategy. Technical complications are

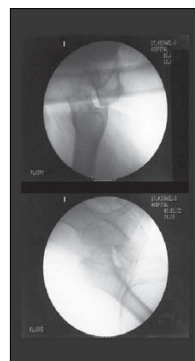


Fig. 2b: Intraoperative fluoroscopy demonstrating anatomic reduction



Dr. James P. Waddell



Fig. 2c: Intraoperative fluoroscopy demonstrating correct screw placement on the calcar on the AP x-ray and posterior neck screw placement on the lateral x-ray

common, and mortality rates routinely higher in those patients treated by endoprosthetic replacement rather than internal fixation. Hip arthroplasty should be reserved for those patients with pre-existing hip pathology with significant pre-fracture hip symptoms, and for the rare late treatment of complications of intertrochanteric fractures such as malunion, non-union and avascular necrosis. ■

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ARTOF session
Wednesday, 3 June
8.00 – 12.00

Searching for the ideal implant

Intertrochanteric fractures: nail fixation

HAMBURG – The incidence of proximal femoral fractures has increased significantly in recent decades in industrialized countries (1). Owing to the anticipated increase in the number of intertrochanteric fractures and the rising medical costs of management, considerable attention is being paid to the treatment of these fractures.



Dr. Andreas Rücker



Fig. 1: Medialisation of the shaft owing to missing lateral buttress

Since most patients with intertrochanteric fractures are elderly, operative treatment must be rapid and permit immediate weight bearing postoperatively. At the present time, orthopaedic surgeons can choose between various fixation methods for intertrochanteric fractures, but no implant presently exists that fully satisfies all the fixation requirements for these fractures.

History and advantages of intramedullary fracture fixation

The first extramedullary implants were non-dynamic plate constructs for the internal fixation of trochanteric fractures. In 1968, the Angled Blade Plate was introduced and represented by the AO, but the plate was an extramedullary, non-minimally invasive, non-dynamic implant, and was therefore abandoned in the late 1980s in favour of more suitable implants.

Since the first report on the use of a sliding hip screw (SHS), this device and its variants have become a standard in

the surgical management of intertrochanteric fractures (2). SHS were designed to provide fracture compression by allowing the lag screw/head/neck construct to slide within the barrel of the plate, simultaneously acting as a lateral tension band and transmitting forces through the medial cortex (3). Despite this, comminuted intertrochanteric fractures treated with SHS may still result in significant malunion and shortening of the neck and shaft (4) (Fig. 1). Based on the known biomechanical advantages of intramedullary nailing for femoral shaft fractures, intramedullary nails (IMNs) were developed for the treatment of intertrochanteric fractures

(5). In comparison with extramedullary implants such as plates, intramedullary devices shift the weightbearing axis in the proximal femur medially, resulting in load sharing (6). This is especially important in unstable fractures that present with a mechanical loss of the medial column (7).

Remaining problems with intramedullary nails

Even though proximal nails have biomechanical advantages, three main complications can arise after the application of intramedullary devices including

1. varus collapse of the head/neck
2. uncontrolled shortening of the neck

3. femoral shaft fractures at the tip of the nail (8).

Several authors have postulated that the causes of these complications were the designs of the nails and the inaccurate placement of the distal locking or lag screws (9).

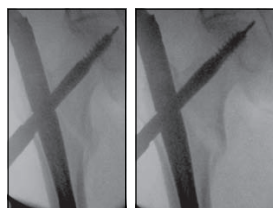


Fig. 2: Rotation of the head neck fragment

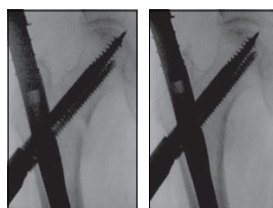


Fig. 3: Intraoperative linear compression under rotational stability

One-screw systems: The specific problem of one-screw systems is that they do not offer rotational stability while drilling for and inserting the lag screw, which can lead to a rotation of the head neck fragment (10) (Fig. 2).

Two-screw systems: To ensure constant stability in rotation, two-screw systems were developed. Unfortunately, many complications were reported with these implants. The reason seems to be

the design, with the thinner antirotation screw above and the carrying lag screw below. Furthermore, a new problem occurred – the Z-effect. Under full weight, the two screws started to move apart because they were not connected to each other and not locked to the nail (11).

Recent concepts

Neither of the general or specific issues is adequately addressed in present-day implants. A new antegrade trochanteric nail, the InterTan nail (Smith-Nephew, Memphis, TN) attempts to overcome these limitations by using a different method of fixation. This



Fig. 4: Fixation of an intertrochanteric fracture with a modern nailing device

device differs considerably from existing implants in that it allows for immediate intraoperative compression of the principal fracture fragments through linear compression combined with rotational stability secondary to its geometry and mechanism of action. (Fig. 3, 4) ■

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ARTOF Session Room D
Wednesday, 3 June 8.00 – 12.00

REFERENCES

1. Lorch DG, Geller DS, Nielson JH. Osteoporotic peritrochanteric hip fractures. Management and current controversies. J Bone Joint Surg Am. 86:398-410, 2004
2. Radford PJ, Needoff M, Webb JK. A prospective randomised comparison of the dynamic hip screw and the Gamma locking nail. J Bone Joint Surg Br. 1993;75:789-793.
3. Jacobs RR, McClain O, Armstrong HJ. Internal fixation of intertrochanteric hip fractures: a clinical and biomechanical study. Clin Orthop. 1980; 13:62-70.
4. Schipper IB, Marti RK, van der Werken C. Unstable trochanteric femoral fractures: extramedullary or intramedullary fixation. Review of literature. Injury. 2004;35:142-151.
5. Guyer P, Landolt M, Eberle C, et al. The Gamma nail as a resilient alternative to the dynamic hip screw in unstable proximal femoral fractures in the elderly. Helv Chir Acta. 1992;58:697-703.
6. Rosenblum SF, Zuckerman JD, Kummer FJ, et al. A biomechanical evaluation of the Gamma nail. J Bone Joint Surg Br. 1992;74:352-357.
7. Mahomed N, Harrington I, Kellam J, et al. Biomechanical analysis of the Gamma nail and sliding hip screw. Clin Orthop Relat Res. 1994; 280-288.
8. Williams WW, Parker BC. Complications associated with the use of the Gamma nail. Injury. 1992;23:291-292.
9. Lacroix H, Arwert H, Snijders CJ, et al. Prevention of fracture at the distal locking site of the Gamma nail: a biomechanical study. J Bone Joint Surg Br. 1995;77B:274-276.
10. Albareda J, Laderiga A, Palanca D, Panaiagua L, Seral F. Complications and technical problems with the gamma nail. Int Orthop (SICOT) 1996; 20: 47-50.
11. Windolf J, Hollander DA, Hakime M, Linhart W. Pitfalls and complications in the use of the proximal femoral nail. Langenbecks Arch Surg (2005) 390:59-65.

Research meets industry

Experts-Meet-Experts session „THA: the ideal bearing surface“

VIENNA – Ceramic-on-ceramic, metal-on-metal, conventional polyethylene on metal head or cross-linked polyethylene on a metal head: the choice of bearing surfaces in total hip arthroplasty (THA) is growing, but the search for the ideal material is still going on.

The ideal bearing surface for total hip arthroplasty has been sought since the early days of this procedure. Starting initially with polyethylene as a bearing surface, as used by Sir John Charnley, a metal-on-metal bearing surface was then introduced by McKee-Farrar. In the early seventies Boutin started with the first ceramic-on-ceramic articulation in France. Since these pioneering activities, improvements in manufacturing techniques and materials have led to better long-term results – yet each of these bearings has not only strengths, but also weaknesses.

Nowadays, cross-linked polyethylene shows improved wear characteristics

compared to conventional polyethylene. There are lipped liner configurations available, and it can also be matched with multiple head sizes. That said, wear will probably not be as low as with hard-on-hard bearings and we don't know if it really can eliminate osteolyses, especially in young and active patients. Additionally, we may be faced with liner fractures when the polyethylene wears thin.

The major advantage of ceramic-on-ceramic is the very low wear and there are no ions, but unfortunately the material is sensitive to cup position and impingement, and there is a minimal risk of fracture. Metal-on-metal again has low wear, no fracture risk and allows the largest femoral head to outside cup diameter ratio. Systemic metal ion level elevation and metal allergies resulting in local lymphositis response nonetheless give cause for concern.

The aim of this ExMEEx-session on Saturday morning is to convey the latest in articulation options to European surgeons, from both clinical researchers and representatives of the industry.



Prof. Karl Knahr

The first part of the session will feature clinical experts, who will present long-term clinical results for those articulations that are used most commonly at present. Laurent Sedel from France



Fig. 1: The most important concerns: a) polyethylene wear b) osteolysis due to metal wear c) ceramic head fracture

will report about ceramic-on-ceramic, Rainer Kotz from Vienna will talk about metal-on-metal, and Johan Kärrholm from Sweden about conventional polyethylene on a metal head. Finally, Henrik Malchau from Denmark – now representing the United States – will speak about cross-linked polyethylene on a metal head. All of them are excellent hip surgeons and have many years of experience with the bearing surface on which they are reporting.

The second part of the meeting is dedicated to representatives of industry. Katharina Guth from Biomet will inform us about vitamine E-stabilised cross-linked polyethylene, Robert Streicher from Stryker will talk about the new X3 technology. The title of the presentation by Daniel Delfosse from Mathys is "Lessons learned from 20 years ex-

ents, while Claude Rieker from Zimmer will give an update on metal-on-metal articulations. Representing CeramTec, Thomas Pandorf will report about the clinical aspects of ceramic-on-ceramic articulations, and Enrico Sandrini from Samo will present their new, high-performance acetabular system using nanotechnology. The final speaker comes from DePuy. Graham Isaac will present the concept and early results of ceramic-on-metal hip arthroplasties.

As chairman of this session, I hope to encourage all participants to participate in an active and critical discussion with the speakers, hopefully resulting in a comprehensive briefing on this interesting topic.

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Fig. 2: The most common options for articulations

perience with ceramic-on-polyethylene articulation". Azad Hussain from Smith & Nephew will report on the advantages of Oxinium in young and active patients.

ExMEEx session
Saturday, 6 June 9.00 – 13.30
Pre-registration required

Mozart, Haydn and more

A glimpse of what's on

VIENNA – The Austrian capital offers a choice of 50 theatres, four opera houses, two stages for musicals, 100 museums and numerous theatre, music and dance festivals. Just a brief glimpse at the programme for 3 – 6 June offers a variety of events.

Everybody knows of Wolfgang Amadeus Mozart's popular opera "The Magic Flute". A very special version will be presented by the marionette theatre Schönbrenn castle – adapted to the location and to the opportunities provided by puppet theatre. This "Magic Flute" takes place in Schönbrenn with the Roman ruins, the pavilion in the Zoological Gardens, and the paths through the park. As for the puppets – they can perform beyond the capabilities of their human counterparts in the opera.

Wednesday, 3 June 2009 19.00
The Magic Flute
Marionette Theatre, Schönbrenn Castle
Schönbrenner Schloßstraße 47
1130 Vienna
www.marionettentheater.at

The Vienna State Opera is performing Peter I. Tschaiowski's "Eugen Onegin", which is based on the novel by Alexander Sergeevich Pushkin. Two days later Richard Wagner's "Rheingold" is the order of the day.

Thursday, 4 June 2009
Eugen Onegin

Saturday, 6 June 2009
Rheingold
Vienna State Opera
Opernring 2, 1010 Vienna
www.staatsoper.at

The Vienna Mozart Orchestra plays concerts with internationally renowned singers and soloists – all in magnificent historical costumes and wigs. There will be several concerts at the famous "Musikverein" during the EFORT Congress.

Wednesday, 3 June 2009 20.15
Vienna Mozart Orchestra
Musikverein – Golden Hall
Bösendorferstraße 12
1010 Vienna
www.mozart.co.at

Of course, in 2009 many concerts are dedicated to Joseph Haydn, who died 200 years ago in Vienna. The Artis quartet will play Haydn's string quartet no. 25 in C major, Hob. III:32, Felix Mendelssohn Bartholdy's string quartet in A minor, Op. 13 and Haydn's string quartet no. 59 in G minor, Hob. III:74 in a concert at the "Musikverein".

Thursday, 4 June 2009 19.30
Artis quartet
Musikverein – Brahms Hall
Bösendorferstraße 12
1010 Vienna
www.musikverein.at

A wonderful highlight will be the open-air summer's night concert by the Vienna Philharmonic Orchestra lead by the famous conductor Daniel Barenboim. The programme includes music of Mozart, Mussorgsky and Johann Strauss II.

Thursday, 4 June 2009 21.00
Vienna Philharmonic Orchestra
Park of Schönbrenn Castle
www.wienerphilharmoniker.at

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