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Schedule of Events ▼

Fast-Track Hip and Knee Replacement – Have We Reached the Goal?
Michael Freeman Honorary Lecture
12:45 – 13:15, Vienna Room

Cervical Spine Injuries in Sports Practice
15:00 – 16:30, Barcelona Room

Massive Rotator Cuff Tears
17:00 – 18:30, Berlin Room

FREE PAPERS ▼

Join your colleagues today in the Helsinki Room to serve as a judge for the Free Papers Awards competition.

10:15 – 11:15, Top trauma papers
11:30 – 12:30, Top orthopaedics papers

Evidence-based guidelines, new implants may help determine best proximal hip fracture fixation method



Cecilia Rogmark

Techniques orthopaedic trauma surgeons use to treat proximal femoral fractures vary by country, which leads to the inconsistent use of internal fixation, hemiarthroplasty and total hip arthroplasty (THA), said Cecilia Rogmark, MD, PhD, who moderated a symposium 1 June at the 18th EFORT Annual Congress.

Surgeons worldwide particularly need better guidance regarding how to best treat subgroups of these patients, such as patients who are younger than 60-years-old or who have comorbidities, she said.



Bjarke Viberg

More evidence-based medicine (EBM) will also help surgeons make good treatment decisions for their patients regarding displaced and non-displaced femoral neck fractures. But, in terms of implementing EBM, "there are a lot of barriers," Bjarke Viberg, PhD, said.

Viberg noted international EBM guidelines for these fractures differ in Holland, Denmark, Scotland, England, Australia, the United States and Germany/Austria. In addition, there are obstacles to not implementing EBM for proximal femoral fractures, which include inadequate access to

implants, a lack of resources or financing to acquire equipment, for example used to perform cemented arthroplasty, and a lack of training.

Furthermore, surgeons who have performed these treatments for a long time

may not be willing to change or feel limited by the guidelines, he said.

These obstacles must be overcome, Viberg said.

The Hansson Pinloc System (Swemac), *(Rogmark continues on page 7)*

Semi-rigid casts effective, and comfortable for paediatric forearm fractures



Mihir Bakshi

Congress in Vienna.

Mihir Bakshi, MD, and colleagues randomised 249 children with minimally displaced forearm fractures (mean age 9 years) to treatment with 123 rigid casts and 126 soft casts (BSN Medical). Patients were treated at a fracture clinic at a major paediatric hospital.

Investigators sent a questionnaire to the patients' families 6 weeks after injury at the typical time of cast removal to determine cast comfort, ease of removal, any time patients and/or their caregivers lost in attending a final clinic visit for cast removal and overall satisfaction.

"From this, semi-rigid casts for mini-

Compared with rigid casts, investigators found semi-rigid casts were acceptable to children with minimally displaced forearm fractures, as well as their parents, based on results presented 1 June at the 18th EFORT Annual

mally displaced forearm fractures are safe and effective. They save time and money and are more comfortable for patients than traditional rigid casts," Bakshi said.

Overall, a soft cast "looks very similar to a traditional rigid cast, however a rigid cast has to be removed by a plaster saw," he said.

The plaster staff at the clinic gave the plaster casts a better rating than the semi-rigid casts for ease of application and moldability.

The parents gave the soft casts a median comfort score of 5 vs. a score of 4 for rigid casts, Bakshi said. "The two groups performed similarly in all other areas, including overall satisfaction," he said.

Reference:

Williams N, et al. Paper #1336. Presented at: 18th EFORT Annual Congress: 31 May – 2 June 2017, Vienna.

Disclosure:

Bakshi reports no relevant financial disclosures.



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For sublingual use only. The tablet will dissolve under the tongue and should not be crushed, chewed or swallowed. Patients should not eat or drink and minimise talking for 10 mins after each dose. A maximum of 3 doses (45 mcg) can be delivered in one hour. **Elderly:** No special population studies performed. Safety and efficacy in elderly patients similar to that observed in younger adults. **Hepatic/renal impairment:** Limited data available. Administer with caution in moderate to severe hepatic or severe renal impairment. **Paediatric population:** No safety and efficacy established in children below 18 years. **Contraindications:** Hypersensitivity to active substance or any excipients. Significant respiratory depression. **Special warnings and precautions:** **Respiratory depression:** Sufentanil may cause respiratory depression. Respiratory effects should be assessed by clinical monitoring. Those with respiratory impairment or reduced respiratory reserve are at higher risk. Respiratory depression can be reversed by opioid antagonists. **Intracranial pressure:** Use with caution in patients susceptible to cerebral effects of CO₂ retention (e.g. increased intracranial pressure or impaired consciousness). May obscure the clinical course of patients with head injury. Use with caution in patients with brain tumours. **Cardiovascular effects:** May produce bradycardia. Caution in patients with previous or pre-existing bradyarrhythmias. May cause hypotension, especially in hypovolaemic patients. **Impaired hepatic or renal function:** Duration of sufentanil activity may be prolonged in patients with severe hepatic and renal impairment. Monitor for overdose in moderate to severe hepatic impairment or severe renal impairment. **Abuse potential and tolerance:** Potential for abuse; consider where concern of misuse, abuse or diversion. **Gastrointestinal effects:** May slow gastrointestinal motility. Use with caution in risk of ileus. May cause spasm of the sphincter of Oddi; use with caution in biliary tract disease, including pancreatitis. Other: Ensure patients have been appropriately instructed on how to operate the Zalviso administration device. Consider patient's ability (visual or cognitive) to use the device appropriately. **Excipients:** Contains colouring agent sunset yellow FCF Aluminium Lake (E110). **Interactions:** **Cytochrome P450-3A4 (CYP3A4) enzyme:** Primarily metabolised by CYP3A4. Ketconazole can significantly increase systemic exposure to sufentanil. Similar effects with other potent CYP3A4 inhibitors cannot be excluded. 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Should administer opioid antagonist (e.g. naloxone) in respiratory depression. **Legal classification:** POM, CD (Schedule 2).

Marketing Authorisation holder: Grünenthal GmbH, Zieglerstraße 6, 52078 Aachen, Germany. **Date of preparation:** February 2016.

Researchers from Medical University of Graz receive EFORT/Medtronic Award



**Sriveena
Srinivasaiah**

A team of researchers led by Sriveena Srinivasaiah, MSc, of the Department of Orthopaedic Surgery, Medical University of Graz, Graz, Austria, has been awarded the EFORT/Medtronic Award for Excellence in Bone Repair Research.

"Winning the Medtronic Award has encouraged me, both on scientific and personal levels, to seek meaningful answers that could be of substantial use to the scientific community," Srinivasaiah told *Orthopaedics Today Europe*. "It has also uplifted my motivation to design a new study where our model could be used for preclinical investigations of bone fracture and repair in vitro."

The study, "In Vitro Stimulation of Endochondral Ossification of the Growth Plate Using an Ex Vivo 3 Dimensional Organotypic Culture Model," was focused on the development of an in vitro functional bone organotypic culture model capable of mimicking the processes involved in endochondral ossification. In addition to achieving its primary endpoint of stimulating endochondral bone development with significant physiological relevance, the study represents an advancement in humane testing methods.

"From an ethical standpoint, we also wanted to promote alternative testing methods that could reduce the number of animals used for in vivo experiments," Srinivasaiah said.

The EFORT/Medtronic Award for Excellence in Bone Repair Research is awarded based on the quality of the submit-

ted abstract/poster in the field of bone repair, and is part of both EFORT's and Medtronic's commitment to encouraging and promoting research in this area. The recognition and financial prize is awarded to Srinivasaiah's department at the Medical University of Graz.

"Contributing to this particular study has enhanced my scientific acumen in terms of creativity, rationality, planning and execution of experiments with greater confidence," Srinivasaiah said.

"Our current findings can be of potential value in the distinct mechanisms involved in bone development, fracture healing, drug/toxicity testing, therapeutic and biomaterials applications."

Disclosure:

Srinivasaiah reports no relevant financial disclosures.

Targeted exercises increase abductor strength in older patients after hemiarthroplasty for proximal femoral fractures



**Efstathios
Chronopoulos**

In elderly patients who have recently undergone hemiarthroplasty for proximal femoral fractures, targeted progressive strengthening exercises appear to increase isometric muscle strength of abductors and decrease the strength deficit of the fractured hip relative to the contralateral hip, according to a study to be presented as part of the Free Papers award session for trauma at the 18th EFORT Annual Congress in Vienna.

In the double-blind, stratified, randomised clinical study, researchers evaluated 96 patients, aged 70 years to 84 years, after hemiarthroplasty performed for Garden type 3 and 4 femoral neck fractures. Patients were placed into two equally numbered subgroups. For 12 weeks, the control group used the standard physiotherapy regimen, while the research group followed the standard program as well as an active abductors exercise program. This program entailed gradual encumbrance in differ-

ent body positions and increasing ranges of motion as well as sets of repetitions. At the end of the third postoperative month and again at the end of the sixth month, the researchers measured isometric strength of abductors using a reliable electronic dynamometer. They also calculated the ratio of abductors of fractured hip to contralateral hip. A *P* value of less than .05 was considered to be statistically significant.

The researchers found that at the end of 3 months, the isometric strength of hip abductor muscles in the fractured limbs of the research group was 19.0 lbs \pm 2.9 lbs vs. 13.99 \pm 1.8 lbs in the control group. The abductors' ratios at the end of 3 months were 79.9% \pm 2.3% in the research group vs. 77.0% \pm 0.5%. At the end of 6 months, the research group had abductors isometric strength of 80.7% \pm 3.1% vs. 73.6% \pm 3.0%.

"Prevention of future falls is essential for the elderly with a previous hip fracture, as the odds of a new fracture are six to 20 times higher than the initial fracture within the first year," study presenter Efstathios Chronopoulos, MD, PhD, associate professor

in the Department of Orthopaedics at National and Kapodistrian University of Athens, Greece, told *Orthopaedics Today Europe*. "The goal of a targeted progressive strengthening program postoperatively is to increase the isometric muscle strength and reduce the strength deficit of the fractured side compared to the contralateral hip. That helps the patient to walk easily and safely, minimising the risk for a future fall and fracture."

Reference:

Chronopoulos E, et al. Paper #2272. Scheduled to be presented: 2 June 2017 at 10:39 to 10:47 in the Helsinki Room at the 18th EFORT Annual Congress; 31 May – 2 June 2017; Vienna.

Source Info:

Efstathios Chronopoulos, MD, PhD, can be reached at Technological Educational Institution, Agiou Spiridonos 28, Egaleo 122 43, Athens, Greece; email: stathi24@yahoo.gr.

Disclosure:

Chronopoulos reports no relevant financial disclosures.

Opportunities to advance education available from EFORT

New European Orthopaedics & Traumatology Education Platform

EFORT has developed a comprehensive new tool, the European Orthopaedics & Traumatology Education Platform (EOTEP), to provide an educational overview in orthopaedics and traumatology for those wishing to advance their professional development. EOTEP guides users toward successful completion of the EBOT exam, a prestigious qualification.

"The EFORT Education Committee wanted to offer a platform whereby different programs from Europe would be compiled into one place, in a structured view, especially for those interested in looking for an overview of educational programs," Prof. Dr. Klaus-Peter Günther, chairman of the EFORT Education Committee said. "It is aiming to become the best available overview of offers of education in musculoskeletal training in Europe."

EFORT Fora sessions

The outreach of EFORT has been substantially complemented by a series of EFORT Fora that are organised and held during the national orthopaedics and traumatology congresses throughout the year. These European Fora sessions feature specific topics that are unrelated but are dedi-

cated to the topics highlighted at each national congress.

To organize a Fora session, a national society selects a topic and proposes a session that involves four to six speakers. It is held during its yearly congress. In recent years, the scientific level of the EFORT Fora has been high, which has provided an excellent exchange between the national societies and EFORT.

EFORT Open Reviews special issue

The *EFORT Open Reviews (EOR)* journal is a publication with state-of-the-art information and outstanding data with detailed explanations of an array of relevant topics. This year, EFORT has compiled the most popular sessions of the annual congresses and instructional lectures into a special print publication, included in delegate bags, that contains the full peer-reviewed manuscripts being presented.

The main role of *EOR* is to disseminate cutting-edge information on key topics to all orthopaedists and associated musculoskeletal health care professionals to advance the scientific quality of orthopaedics and traumatology practice and research.

Are you interested in becoming a reviewer or publishing a paper? Meet *EOR*'s Editor-in-Chief Pierre Hoffmeyer, MD, at

EFORT's booth A-21 on either Wednesday 31 May 15.45 – 16.15 or Thursday 1 June 09.45 – 10.15. Find out the benefits of becoming a reviewer for *EOR*, and if you are working on a paper, find out more about the submission process.

eLibrary

Attendees are encouraged to explore the EFORTnet eLibrary, Europe's largest orthopaedic conference library, currently housing more than 16,500 scientific resources. This comprehensive digital library offers sessions covering all of the main orthopaedic and traumatology topics, including the spine, hip, polytrauma/ pelvis, pain control, rehabilitation, upper limb trauma, osteoporosis, basic science, technology, general education and many others. EFORTnet is easily accessible from the top right corner of www.efort.org.

Upcoming EFORT Fora

27 September 2017 – SECOT Congress 2017 in Barcelona, Spain – Knee Osteoarthritis in Young Adult: Surgical Options

13 October 2017 – HAAST Congress 2017 in Athens, Greece – Femoropatellar Joint: From the Adolescence to the Arthritis

19 October 2017 – SOROT Congress 2017 in Timisoara, Romania – Diagnosis and Management of Infected Total Knee Arthroplasty

21 October 2017 – SIOT Congress 2017 in Palermo, Italy – Challenges in Paediatric Trauma

24 to 27 October – DKOU Congress 2017 in Berlin, Germany – Fast Track Surgery Opportunity or Threats?

25 October 2017 – TOTBID Congress 2017 in Antalya, Turkey – Trauma/Lower Extremity Reconstruction

27 October 2017 – SPOT Congress 2017 in Coimbra, Portugal – The Multi-Ligament Injured Knee

7 November 2017 – SOFCOT Congress 2017 in Paris, France – Short Stems in Primary THA: Are They Safe and Effective?

Come to Barcelona for the 19th Annual EFORT Congress



Join your colleagues in Barcelona, Spain, from 30 May to 01 June 2018, for the scientific sessions, educational meetings and training courses provided at the 19th annual EFORT congress.

Barcelona, home of much of the magnificent work of architect Antoni Gaudí, conveys innovation and originality like few other cities can. The congress will be held in Barcelona's Fira Gran Via, Hall 8, regarded as one of the most modern venues in all of Europe.

"Innovation leads to the delivery of better health care, resulting in improvement in people's quality of life," Prof. Dr. Önder Aydingöz, 2017/2018 EFORT president said. "For these reasons, 'Innovation and New Technologies' has been chosen as the main theme of 19th EFORT Congress in Barcelona."

Highlights of the congress will include new diagnostic techniques, robotics and computer-assisted surgery, 3-D printing, advanced implant technologies, new tissue regeneration techniques, telemedicine, innovative rehabilitation programmes and virtual learning. Attendees will also see the latest products and innovations showcased in the exhibition hall.

Visit www.efort.org/barcelona2018 for updates on next year's congress.

Abstract submission opens: 15 September 2017

Abstract submission closes: 12 November 2017

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Complimentary access to the EFORT Comprehensive Review Course during the annual congress (subject to availability and pre-registration)				✓
Preferential rate for the EBOT Exam (subject to acceptance of the application documents)				✓

Trainee-performed THA yields outcomes comparable to experienced surgeons



Per Jolbäck

In patients who undergo primary total hip arthroplasty, surgeries performed by trainees provided similar outcomes and patient satisfaction as surgeries performed by experienced surgeons, according to a study to be presented today in the Free Papers award session for orthopaedics at the 18th EFORT Annual Congress in Vienna.

In this register-based observational study, researchers identified 8,116 patients with primary total hip arthroplasties (THA) in the surgery and anesthesia management system in the Western Region in Sweden for which the experience level of the surgeon could be determined. Significant differences were observed in demographic data, particularly in terms of mean age and BMI, between less experienced and more experienced surgeons. For trainees, patient

mean age at operation was 71.2 years; for surgeons with less than 8 years of experience, the mean age was 68.8 years, compared to the reference 67.1 years. Trainees had patients with a mean BMI at surgery of 26.9 kg/m², which differed significantly from patients treated by surgeons with more than 15 years of experience (27.4 kg/m²). The ASA class, diagnostic indication for implantation and fixation technique also demonstrated significant disparities between surgeon groups. No significant differences were observed in terms of pain, EQ-5D index or EQ-VAS for any subgroups.

"After analysing the effect of surgeons' experience on patient-reported outcomes (PROs), we found that 1 year after THA, patients operated on by consultants reported slightly higher satisfaction," Per Jolbäck, RN, told *Orthopaedics Today Europe*.

No other differences in PROs were observed between the different surgeon subgroups.

"Our findings support that the Swedish teaching tradition in TKA is safe and should not raise ethical concerns among patients, surgeons or regulating authorities," Jolbäck said. "It is reassuring that patients operated on by trainees in the Western Region can expect the same improvements in quality of life and pain relief as if the surgery had been performed by an experienced surgeon."

Reference:

Jolbäck P, et al. Paper #2386. Scheduled to be presented: 2 June 2017 at 11:46 - 11:54 in the Helsinki Room at the 18th EFORT Annual Congress; 31 May - 2 June 2017; Vienna.

Source Info:

Per Jolbäck, RN, can be reached at Sahlgrenska Academy, University of Gothenburg, 405 30 Gothenburg, Sweden; email: per.jolback@vgregion.se.

Disclosure:

Jolbäck reports no relevant financial disclosures.

(Rogmark, continued from page 1)

an angled internal implant with a plate that connects three pins, may prove to be effective for these fractures based on initial results of a multicentre randomised, controlled trial Torsten Johansson, MD, presented.



Torsten Johansson

Results of the timed-up-and-go test were similar between the new device and standard pins at the 3-month and 12-month follow-up in patients at least 50-years-old who were treated between

May 2014 and January 2017.

Among patients with displaced fractures, 15% who received the Pinloc device and 33% of patients who received standard pins required a reoperation with THA or hemi-arthroplasty, Johansson said.

"This Pinloc device is technically more demanding," Johansson said, adding it can be more complicated to work with

compared with two screws and two pins. There is also the possibility the three drill holes made to implant the device can weaken the femoral bone cortex vs. two standard drill holes with pinning, he said.

"So far, no major differences. No recommendation, so far. Pinloc may not be the saviour," Johansson said.

However, he said, "This is probably the first prospective study including undisplaced femoral neck fractures, as far as I know."

Johansson added, "I also feel it is ethical to give some sort of guidelines, what we should do today."

Reference:

Rogmark C, et al. Symposium: Treatment of the proximal femoral neck fracture: Internal fixation or arthroplasty. Presented at the 18th EFORT Annual Congress: 31 May - 2 June 2017, Vienna.

Disclosures:

Johansson, Rogmark and Viberg report no relevant financial disclosures.

EFORT Committee Selects New Board Members

Elections for the 2017/2018 EFORT board members took place during the General Assembly on 31 May 2017.

New 2nd Vice President:

Philippe Neyret from France

New Treasurer:

Theofilos Karachalios from Greece

New Member at Large:

Enrique Gómez Barrera from Spain

New Young Member at Large:

Mirza Biscevic from Bosnia and Herzegovina





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