

*The International Society  
for Fracture Repair*

# THE INTERNATIONAL SOCIETY FOR FRACTURE REPAIR

## NEWSLETTER

January 2012



Osteoporotic  
Fracture Campaign

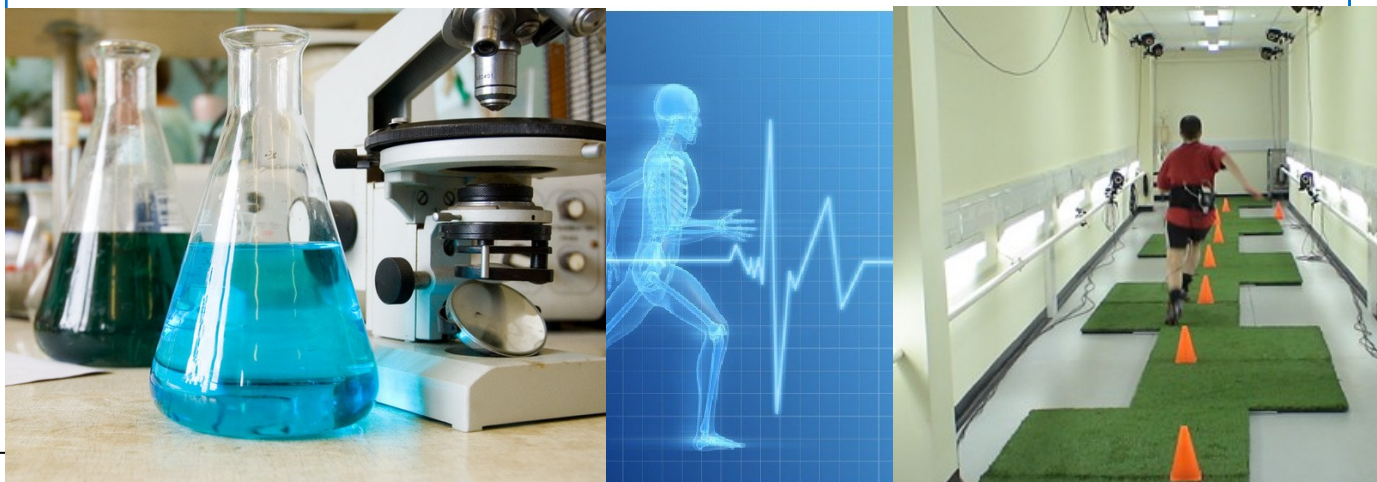


### From the President,

The ISFR will be holding its biennial conference this year in November in Kyoto Japan. Prof. Takashi Matsushita is the ISFR's Meeting Chairman and welcomes all members, and scientists to register quickly to catch the early-bird registration fee. There will be particular emphasis on non-unions, fracture healing and fragility fractures.

Abstract submissions will open starting February 1st. More information can be found on our website [www.fractures.com](http://www.fractures.com).

The application for travel fellowships and young investigator awards is once again being offered. Funds totaling \$15,000 USD are available and three applicants will be chosen to receive these awards. Applicants for the travel awards must be under 40 years of age and presenter at the upcoming conference. Further instructions are available on our website and the deadline is May 31st, 2012. Submit your application soon!

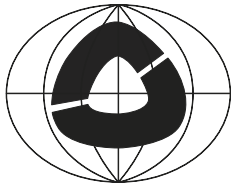


**\$15,000 USD funds are available for:**

**Young Investigator Awards & ISFR Travel Fellowships to attend this year's ISFR Kyoto Conference.**

**Submit your application by May 31st, 2011.**

This year for the International Society for Fracture Repair is promising to be a busy one and within this newsletter you will find an article on visco-supplementation in osteoporotic patients treated for arthritic knees. Announcements on fractures of the proximal humerus will be further explored in the workshop to be held this September in Edinburgh. Prof. David Hak and Prof Alan Johnstone will be hosting this meeting and look forward to achieving consensus on best surgical approaches to treating these complex fractures.



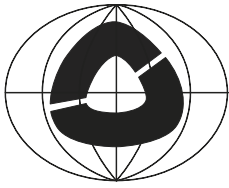
*The International Society  
for Fracture Repair*

The ISFR-IOF Distal Radius Working Group has also prepared a manuscript with recommendations for a minimal core set of outcome instruments. This consensus was made possible because of a series of meetings and involvement from a widespread of interprofessions including orthopaedic surgeons, outcome scientists, physiotherapists, patients and industry executives all interested in conducting osteoporotic research and improving patient management in their clinical practice. For the future, I encourage all members to submit their proposals for upcoming workshops and working groups.

Yours sincerely,

A handwritten signature in black ink, which appears to read 'Antonio Moroni'.

Antonio Moroni, ISFR President



*The International Society  
for Fracture Repair*



# ISFR 2012 13<sup>th</sup> Biennial Conference

November 6 - 9, 2012  
Kyoto, Japan

Pre-congress Symposium  
Pathomechanism and  
Treatment of Nonunions  
November 4 – 6, 2012

Post-congress Meeting  
Asia-Pacific Fragility  
Fracture Network,  
November 10, 2012

[www.fractures.com](http://www.fractures.com)  
[www.ISFR2012.com](http://www.ISFR2012.com)

Call for abstracts Feb. 1, 2012  
Abstract deadline June 1, 2012

## Announcements

Meeting Chairman: Takashi Matsushita, MD, DMSc,

Dept. of Orthopaedic surgery

Teikyo University School of Medicine

Session: 6th, Nov (Tue), 2012 - 9th, Nov (Fri), 2012

Venue: Kyoto International Conference Center, Kyoto, JAPAN

Main Topics: 1. Fragility Fracture, 2. Nonunion

Important Conference Deadlines:

Call for abstracts: 1st Feb. 2012

Dead line of Abstract Submission: 1st June 2012

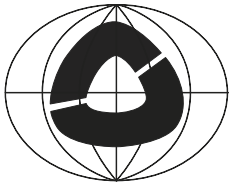
Date of Abstract Acceptance Notification: 20th July 2012

Dead line for early registration: 17th Aug. 2012

Delegate Registration Fee Includes:

- Admission to all plenary sessions and workshop sessions
- Conference Programme and abstract details
- Refreshments during official conference breaks
- Lunch during the 3 day conference 7 - 9 Nov. 2012
- Welcome Reception 6 Nov. 2012
- Gala party 7 Nov. 2012





*The International Society  
for Fracture Repair*

## Announcements



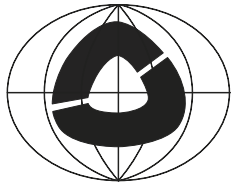
### Registration Fees

The cost for attendance at the conference is

Delegate Registration Type	Payment is Japanese Yen
Early Registration Fee (until 17 Aug 2012)	¥38,000 member
Early Registration Fee (until 17 Aug 2012)	¥50,000 non member (includes 1st year subscription for ISFR membership)
Late Registration Fee (after 17 Aug 2012)	¥50,000 member
Late Registration Fee (after 17 Aug 2012)	¥62,000 non member (includes 1st year subscription for ISFR membership)

Conference Welcome Reception: 20:00, 6th Nov 2012

Gala party: 19:00, 7th Nov 2012



*The International Society  
for Fracture Repair*

# The Effects of Viscosupplementation on Knee proprioception in Early Stage Osteoarthritic Patients with Osteoporosis

F. Pegreff, P. Pegreff, University of Bologna

## INTRODUCTION

Osteoarthritis, the most common joint disease, is characterized by loss of articular cartilage, subchondral bone sclerosis, responsible for substantial pain and decreased functional capacity (1-6). A critical appraisal of the current evidence-based research offer no guidance in the treatment of early stages of knee arthritis disability in elderly population.

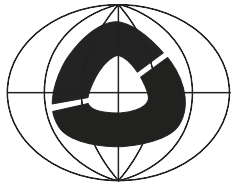
A variety of treatment options such as analgesics, anti-inflammatory medication, weight loss, physical and occupational therapy, orthotic devices, corticosteroid injections, and surgery can be adopted. Although some cases can be treated successfully with surgery, many patients affected by early arthritis are not good candidates for surgery due to limited cartilage damage or prefer not to have surgery. In many elderly patients with a low mineral bone density, the progressive loss of the cartilage integrity compromises function of the diseased knee during every-day activities, resulting in different biomechanical strategies to compensate for the uncontrolled balance, thus favoring falls and fragility fractures and consequently increasing costs to the patient and society (7).

To our knowledge, no previous study has assessed the interplay between viscosupplementation and proprioception in terms of balance change in patients with knee arthritis.

The purpose of this study was to analyze Hyaluronic Acid (HA) effects exerted in terms of pain relief and consequently improved balance in osteoporotic elderly patients affected by early stage knee osteoarthritis.

### Clinical and Functional Outcomes

Pain, patients' satisfaction, knee function and stabilometric pattern were evaluated before and after five injections of HA. Data were recoded at T0, 1 week, 3 weeks, 5 weeks, 3 and 6 months follow-up. Pain was assessed using Visual Analog Scale (VAS) (8). Patients' satisfaction was measured administrating Patient Satisfaction Index (PSI) questionnaire. A score ranging from 1 to 5 was regarded as reflecting a very unsatisfactory outcome, 1, unsatisfactory outcome, 2, neutral, 3, satisfactory outcome 4, very satisfactory outcome 5. Knee Society Score, was employed as a validated functional outcome



*The International Society  
for Fracture Repair*

# The Effects of Viscosupplementation on Knee proprioception in Early Stage Osteoarthritic Patients with Osteoporosis Cont'd

F. Pegreff, P. Pegreff, University of Bologna

69 points, a fair result; 70 to 84 points, a good result; and 85 to 100 points, an excellent result (9).

## DISCUSSION

This study provides evidence that a regimen of five weekly intra-articular injections of hyaluronate can be a safe and effective treatment for patients with unilateral knee arthritis, resulting in improvements in pain, function, and proprioception. The patients' satisfaction rate was high, and there were no serious adverse events. These effects can last for at least six months.

A limited number of other studies have evaluated balance in patients with knee arthritis (10, 11, 12). Based on the aforementioned analyses, viscosupplementation is an effective treatment for OA of the knee with beneficial effects not only reducing pain but improving balance. This new aspect is crucial dealing with fall risk in patients with bone mineral density and with increased fragility fracture risk.

Presentation accepted at AAOS 2012, CA

## References

1. Sandell LJ, Aigner T (2001) Articular cartilage and changes in arthritis. An introduction: cell biology of osteoarthritis. *Arthritis Res* 3:107-113
2. Arøen A, Løken S, Heir S, Alvik E, Ekland A, Granlund O, Engebretsen L (2004) Articular cartilage lesions in 993 consecutive knee arthroscopies. *Am J Sports Med* 32:211-215
3. Center for Disease Control and Prevention (2002) Prevalence of self-reported arthritis or chronic joint symptoms among adults United States, 2001. *Morb Mortal Wkly Rep* 51:948-950
4. Center for Disease Control and Prevention (2004) Prevalence of doctor diagnosed arthritis and possible arthritis 30 states, 2002. *Morb Mortal Wkly Rep* 53:383-386
5. Center for Disease Control and Prevention (2001) Prevalence of disabilities and associated health conditions among adults-United States, 1999. *Morb Mortal Wkly Rep* 50:120-125
6. Cicuttini F, Ding C, Wluka A, Davis S, Ebeling PR, Jones G (2005) Association of cartilage defects with loss of knee cartilage in healthy, middle-age adults: a prospective study. *Arthr Rheum* 52:2033-2039
7. Walker-Bone K. Preventing fractures in the elderly. *Br J Hosp Med (Lond)*. 2011 Oct;72(10):576-81.
8. Scott J, Huskisson EC: Graphic representation of pain. *Pain* 2:175-184, 1976
9. John N. Insall, MD, Lawrence D. Dorr, MD, Richard D. Scott, MD. Rationale of the Knee Society clinical rating system. *Clin Orthop Relat Res*. 1989 Nov;(248):13-4.
10. Hurley MV, Scott DL, Rees J, Newham DJ. Sensorimotor changes and functional performance in patients with knee osteoarthritis. *Ann Rheum Dis*. 1997;56:641-8.
11. Hassan BS, Mockett S, Doherty M. Static postural sway, proprioception, and maximal voluntary quadriceps contraction in patients with knee osteoarthritis and normal control subjects. *Ann Rheum Dis*. 2001;60:612-8.
12. Wegener L, Kisner C, Nichols D. Static and dynamic balance responses in persons with bilateral knee osteoarthritis. *J Orthop Sports Phys Ther*. 1997;25:13-8. 35.

# ISFR-IOF Distal Radius Working Group



## Rationale:

Distal radius fractures (DRF) are one of the most common manifestations of osteoporosis. Although not life-threatening, fractures impact hand function and activities of daily living. Loss of independence and subsequent need for assistive living can be a devastating consequence for elderly individuals. In recent years, DRF have been studied to measure the effect of various drugs on fracture healing. High incidence, comparably standardized treatment for non-operative fractures, and inexpensive outcome measures such as grip strength - paired with sophisticated diagnostic imaging tools - are among the reasons DRF are well-suited for pharmacological studies. To date, however, no widely accepted consensus about DRF outcome measures exist.

**Objectives:** The intention of the working group was to bring together orthopaedic surgeons specialized in the treatment of distal radius fractures, experts in outcome research, partners from rehabilitation, representatives from industry engaged in the improved treatment of DRF (device as well as pharmaceutical companies), representatives from patient societies, and colleagues from regulatory affairs. The ultimate goal of this workshop held in Zurich, Switzerland in May 2011 was to reach a consensus about a core set of measures that should be included in scientific studies about distal radius fractures. The set will be composed within the framework of the International Classification of Functioning, Disability and Health (ICF), as proposed by the World Health Organization (WHO). The working group are currently working on the : “Recommendation for Measuring clinical outcome in distal radius fractures-- A core set of domains for standardized reporting in clinical practice and research” and are planning a dissemination of the ideas from the series of drf meetings in future international conferences.

**Membership:** F Angst (Switzerland), D Beaton (Canada), MK Chang (Switzerland), C Cooper (UK), J Goldhahn (Switzerland), A Hoang-Kim (Canada), A Johnstone (UK), J Jupiter (US), A Ladd (US), P Lips (NL), J MacDermid (Canada), M Marks (Switzerland), G Moeller (Switzerland), B Mitlak (US), TL Müller (Switzerland), F Pegreff (Italy), D Rikкли (Switzerland), T Shisha (France), B Simmen (Switzerland), T Rozental (US), D A Wahl (Switzerland)

# ANNOUNCEMENT

## ISFR PROXIMAL HUMERUS WORKSHOP

Roxburghe Hotel, Edinburgh, Scotland

September 13-15, 2012

Meeting Chairs: Alan Johnstone, & David Hak

### Motivation

Despite the variety of surgical treatment options that are available, proximal humerus fractures (PHFs) remain difficult injuries to treat and are associated with unpredictable outcomes and not uncommonly significant complications. For this reason, many clinicians prefer to treat these injuries conservatively although surgeons who treat these injuries operatively on a regular basis have little doubt that, in the correct hands, the clinical outcome following surgical treatment is superior to conservative management for the more complex injuries. Where does the problem lie? There is little doubt that many patient, implant related, and surgical factors influence the clinical outcome and need to be explored in more depth. However, our current methods of assessment, both radiological and clinical have serious limitations and likewise need to be explored further. This international working group is composed of orthopaedic surgeons who specialize in the treatment of PHFs using different approaches. They are joined by experts in outcomes research, and the allied fields of musculoskeletal bioengineering and radiology. In addition, the core faculty will be joined by representatives from the orthopaedic and pharmaceutical industries that will provide the ideal forum for effective cross talk between providers and enablers, all with the same common goal of improving our standard of care for patients who have sustained a PHF. By the end of the forum, the organising committee hope that the working group members will have reached a consensus as to which avenue(s) for further research are realistic and the goals achievable.



Photos provided by: Edinburgh Inspiring Capital ,  
[www.edinburgh-inspiringcapital.com](http://www.edinburgh-inspiringcapital.com)

## Recent ISFR Member Publications

New concepts in the treatment of distal radius fractures. Conservative management of rotator cuff tear. Pegreff F, Paladini P, Campi F, Porcellini G. Sports Med Arthrosc. 2011 Dec;19(4):348-53

Measures of adult shoulder function. Angst F, Schwyzer H, Aesclimann et al. Arthritis Care & Research 2011 Nov; 63 (S11):S174-S188.

Outcome Assessment in Hip Fracture: Evaluation of the practicality of commonly-used outcomes in hip fracture studies. Hoang-Kim A, Schemitsch E, Bhandari M, Kulkarni A, Beaton D. Arch of Orthop Trauma, 2011. 131 (12): 1687-1695.

A Practical Guide to Research: Design, Execution, and Publication, Eds. Lubowitz J, Karlsson J, Marx R, Poehling G, Bhandari M. Arthroscopy. 2011

Efficacy of Autologous Platelet-Rich Plasma Use for Orthopaedic Indications: A Meta-Analysis. Sheth U, Simunovic N, Klein G, Fu F, Einhorn TA, Schemitsch E, Ayeni OR, Bhandari M. J Bone Joint Surg Am. 2012 Jan 11.

Ideal tibial intramedullary nail insertion point varies with tibial rotation. Walker RM, Zdero R, McKee MD, Waddell JP, Schemitsch EH. J Orthop Trauma. 2011 Dec;25(12):726-30.

Evaluation of risk for secondary fracture after removal of a new femoral neck plate for intracapsular hip fractures.

Eberle S, Wutte C, Bauer C, von Oldenburg G, Panzer S, Augat P. J Orthop Trauma. 2011 Dec;25(12):721-5.

Weak effect of strontium on early implant fixation in rat tibia. Linderbäck P, Agholme F, Wermelin K, Närhi T, Tengvall P, Aspenberg P. Bone. 2012 Jan;50(1):350-6.

Surgical treatment and management of hip fracture patients. Moroni A, Hoque M, Waddell JP, Russell TA, Wippermann B, Digiovanni G. Arch Orthop Trauma Surg. 2011 Dec 6.

Hip fracture management, before and beyond surgery and medication: a synthesis of the evidence. O'Malley NT, Blauth M, Suhm N, Kates SL. Arch Orthop Trauma Surg. 2011 Nov;131(11):1519-27. Epub 2011 Jun 25.

Increased proportion of hypermineralized osteocyte lacunae in osteoporotic and osteoarthritic human trabecular bone: Implications for bone remodeling. Carpentier VT, Wong J, Yeap Y, Gan C, Sutton-Smith P, Badiei A, Fazzalari NL, Kuliwaba JS. Bone. 2011 Dec 7.

## MEETINGS OF INTEREST

Orthopaedic Research Society

February 4-7, 2012

San Francisco, California

[Www.ors.org](http://www.ors.org)

American Academy of Orthopaedic Surgeons

February 7-11, 2012

San Francisco, California

[Www.aaos.org](http://www.aaos.org)

IOF-ECCEO12 Meeting

March 21-24, 2012

Bordeaux, France

[www.iof-ecceo12.org](http://www.iof-ecceo12.org)

ECTS 39th European Symposium on Calcified Tissues

May 19-23, 2012

Stockholm, Sweden

<http://www.ectsoc.org/>

European Federation of National Associations of Orthopaedics and Traumatology

May 23-25, 2012

Berlin, Germany

[Www.efort.org](http://www.efort.org)

Canadian Orthopaedic Association Conference

June 8-10 2012

Ottawa, Canada

<http://www.coa-aco.org/>

ISFR Proximal Humerus Workshop

September 13-15, 2012

Edinburgh, Scotland

[Www.fractures.com](http://www.fractures.com)

contact Amy Hoang-Kim at [isfr.fractures@gmail.com](mailto:isfr.fractures@gmail.com) on how to get more involved with ISFR activities, visit our website [www.fractures.com](http://www.fractures.com)