Joint preservation over replacement – repairing patho-biomechanics as key to a causal therapy of osteoarthritis

In November, Basel will host an EFORT Instructional Course (IC) on a somewhat neglected art: By detecting osteoarthritis (OA) early and repairing not only present damage but also the underlying patho-biomechanics, total joint replacement can be delayed for many years or even made redundant altogether, says Professor Victor Valderrabano, MD, PhD, Chairman of the Orthopaedic Department at the University Hospital of Basel.

Professor Valderrabano, after years of frequently updated announcements of novel advances in total joint arthroplasties, EFORT is offering an Instructional Course on Joint-Preserving Surgery (JPS) of the Lower Extremity, chaired by you. Why this topic, and why in Basel?

Victor Valderrabano: During recent years, we heard a lot about radical procedures like total joint replacement and arthrodesis, to the extent that joint-preserving procedures have slipped a bit out of sight. However, at a time when OA has expanded to affect billions of patients worldwide, with a tremendous socio-economic impact, one needs to look at the given possibilities for prevention. One essential pillar of prevention in JPS, performed as early as possible in the course of the disease.

The University Hospital of Basel, on the other hand, has a long-standing reputation for its commitment to research and clinical perfection in JPS. So hosting this IC is also a homage to my predecessor, Professor Erwin Menzinger. As you know, this year marks EFORT’s 20th anniversary. Basel is a native city of EFORT, which still has its headquarters here in Switzerland, and Professor Menzinger was one of its founders. By hosting this course, you could say that we are bringing a piece of EFORT back home.

What are the primary causes for the current epidemic of OA?

Victor Valderrabano: Besides the age increase, our Western societies have turned from societies of workers, craftsmen and peasants to one of sedentary lives and couch potatoes, thus causing an increase in body weight and a dramatic extent of musculoskeletal-degeneration. Our sporting leisure activities, however, get more extreme and crazy every year. When you are physically inactive at work long, your proprioception, reaction and resilience will dwindle. So when you try to re-establish that by an extensive weekend of snowboarding, you run a high risk of leisure-time accidents such as fractures, or at least of overburdening your musculoskeletal system with ensuing instabilities. Both frequently lead to OA even in younger people.

The idea of JPS is not new, but until recently its success was limited. Why was that?

Victor Valderrabano: One reason is that conventional X-rays can display OA only at a stage where irreversible damage has already occurred. Our advanced means of imaging, e.g. SPECT-CT, can detect it much earlier, enabling adequate surgery to slow down its progression significantly. Even using these diagnostic passivators, however, surgery interests as joint-preserving has remained a “nice try” until now. This is because it only treats the existing damage without correcting the underlying biomechanical causes.

Thus, a more integral approach is needed.

Victor Valderrabano: Doubtlessly! And the strong intention of this IC is to convey that. For doing JPS right, you do not only need your craft as a surgeon; you must also understand biomechanics and orthobiology. The scope of JPS is to transform a bad biomechanical situation into an almost normative one. Therefore, you need not just cut away some bone or cartilage, you also need ligament and tendon surgery to stabilize the joint, often in addition to correcting the axes, and so forth. This is a complex job, but if mastered, it can delay the necessity for a total joint arthroplasty for many years, and sometimes make it redundant altogether.

Can you give us a few highlights of the course?

Victor Valderrabano: We will have 3 1/2 days. One each for the hip, the knee, and the ankle, during which we will touch upon, in introductory lectures, all the important diagnoses and topics such as the arthroscopy, cartilage repair, osteotomies, arthroscopic surgery or ace osteotomy, and so on. The lectures will be followed by workshops where Europe’s leading specialists will instruct the participants in how to perform these interventions. On top of this, we will present a live surgery on the morning of the first day, presumably an especially intricate multi-joint operation. In the case of the Bern and the Dresden algorithm for hip JPS, we will also define their pros and cons and see if maybe several diverging paths might lead to Rome.

A very tempting program indeed. Do you have a personal vision about future developments in this field?

Victor Valderrabano: If ever I were to get a total joint replacement, I would want to have my own three-dimensional autologous implant, grown from my own stem cells. But to bridge the time gap until medicine has advanced that far, we will need JPS, and I would want to have it done on me by well-trained specialists. Who knows, maybe there is some hidden agenda behind this IC.

Info:
For the complete programme see: www.efort.org/basel2011

Portrait of the Association of Montenegrin Orthopaedics and Traumatology – AMOT

The Association of Montenegrin Orthopaedics and Traumatology (AMOT) was elected National Member Society of EFORT during the General Assembly in Copenhagen, Denmark, on 31 May 2011.

The association was established at the end of 2010 and was founded for the need to professionally support and coordinate the activity of its members, as well as scientific circles and public. Until then, AMOT was part of the Association of Orthopedics and Traumatologists of Serbia. It is now the youngest association in the Western Balkan region with momentarily 33 active members and eight retired members. The main objectives and tasks of the society are the following:

- to study modern literature and the latest knowledge in the area of injuries and diseases of the osteoarticular system;
- to follow and participate in the work of domestic and international expert and scientific meetings;
- cooperation with relevant national and international experts, associations, companies and organisations;
- to study surgical and conservative possibilities of fracture treatment and other osteoarticular and muscular system injuries.

In May 2012, AMOT will organise the “Days of orthopaedics and traumatology of Montenegro” with international participation.

More information about the Association of Montenegrin Orthopaedics and Traumatology is available on www.amot.me.
Trauma and orthopaedics in conflict and post-conflict settings: a crucial field of surgery supported by EFORT

The first EFORT symposium on Trauma and Orthopaedics in conflict and post-conflict settings (TOCS) took place during the last EFORT congress in June in Copenhagen, Denmark.

The symposium had a good response and saw the participation of surgeons from Doctors without Borders, the French Army, the Siriraj Hospital in Bangkok and Dr. Bernard Cistinis, member of the EFORT Portal Content Steering Committee and coordinator of this new area within the EFORT organisation.

Each presenter expressed his experience focusing on main challenges and dilemmas faced by surgeons when working in conflict and post-conflict settings. Case studies were presented from various countries such as Nigeria, Chad, Thailand and Haiti.

There is a clear interest in developing the assets around the world within the surgical community and EFORT is responding to it, said Dr. Cistinis after the symposium. We have received positive feedback from both the speakers and the audience and we are willing to collect and to develop more knowledge in this field of surgery.

The collaboration between EFORT and International organisations involved in surgery in conflict and post-conflict settings is planned to be strengthened. The goal of the project is to reinforce the knowledge around the subject in order to improve the level of trauma and orthopaedic surgery performed in these settings and to give a significant contribution to the scientific research.

"New media are part of the strategy to reach our goal and the EFORT website and digital platforms will play a decisive role in this sense," continues Dr. Cistinis. "We are also planning to involve surgeons from developing and developing countries in order to have a concrete impact and input from the field of intervention."

The next session on TOCS will take place next year during the EFORT congress in Berlin when surgeons from a board range of organisations and backgrounds will present their experiences and achievements during the 2012 EFORT conference.

Portrait of the Turkish Society of Orthopedics and Traumatology – TOTBID

TOTBID, the major orthopedic association in Turkey, was founded in 1930, under the leadership of Professor Rıfkın (Op. MD). The aims were to unite the orthopedic associations that were scattered in three major cities, to provide educational opportunities for the members, to serve as a national orthopedic association and to be the representative of Turkey in the international field of orthopedics and traumatology. Today, TOTBID is very effective in distributing the scientific knowledge to more than 3000 orthopedic surgeons and approximately 1000 orthopedic residents in Turkey. To protect and improve the labor conditions and rights of the members and to give the consulting services when needed are among the most important tasks of TOTBID. One of its main priority focuses is the patient education to improve the healthcare and musculoskeletal system of the Turkish population. TOTBID also advises the government agencies in matters related to orthopedic education and health policies.

TOTBID organises national congresses every 2 years and a combined subspecialty meeting in even years, the latter reaching almost the volume of the former. In addition to these major general events, more than 25 courses, workshops and educational meetings are organised annually by TOTBID. The XXIIIrd Turkish National Congress of Orthopedics and Traumatology will be held in Antalya between 3rd October and 6th November 2012 with international participants.

TOTBID has two official journals: TOTBID Dergisi, which is a quarterly journal in Turkish that mainly publishes review articles and case reports) and Acta Orthopaedica et Traumatologica Turcica (a joint publication of TOTBID and TOOTDTR (Turkish Orthopaedic and Traumatology Society, Istanbul) which is included and indexed in SCI-Expanded, Index Medicus-Medline and Index Copernicus.

An important organ of TOTBID is TOTBID Turkish Orthopedics and Traumatology Education Council. TOTBID works within TOTBID in order to maintain high levels of education policies and opportunities for orthopedic residents and specialists. Another function of TOTBID is defining the criteria for certification of specialists and orthopedic institutions. TOTBID works closely with international organizations such as "Union Europeene des Medecins Spécialistes" (UEMS) and European Board of Orthopaedics and Traumatology (EBOT) and organises the National Orthopaedic Board Examinations.

TOTBID addresses the individual needs of orthopedic specialists in the form of subspecialty branches like orthopaedics, foot and ankle surgery, musculoskeletal tumors, orthopedic trauma, pediatric orthopedics, and sports injuries. In addition to these, TOTBID has eight committees on orthopedics, thromboembolism, medical Turkish language, international relations, implant regulation, public relations, health law and private medical practice.

Relations of TOTBID with AOAS, EFORT and SCIOT are outstanding. Many of Turkish colleagues have attended AOAS annual meeting, EFORT and SCIOT Congresses each year. Turkey was the "Guest Nation" at the AOAS Annual Meeting 2011 in San Diego, U.S.A. TOTBID is a member of EFORT since 1993 and EFORT regularly participates in Turkish National Congresses by organizing EFORT fora. The 14th EFORT Congress will be held in Istanbul, Turkey on June 5-8, 2013.

Although looking forward to seeing our colleagues from all over Europe and continents in our historical and wonderful country.

Introduction
Prof. Dr. Mahmut Nедin Doral, President of TOTBID