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6th ISAKOS Biennial Congress in Florence!
Register Online www.isakos.com

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• Evidence Based Medicine
• Arthroscopic Surgery in 2020
• Double Bundle ACL & PCL
• Minimally Invasive Joint Arthroplasty
• Meniscal Transplant
• Cartilage Technology
• Arthroscopic Rotator Cuff Repair & Instabilities
• Hip Arthroscopy
• Injury Prevention
• Rehabilitation Based on Science
• Sports with Joint Replacement

Featured Sessions
• Live Surgical Demonstrations
• Hands–On Workshops
• Poster Exhibits
• Scientific Paper Presentations
• Instructional Course Lectures
• Technical Exhibits

6th ISAKOS Biennial Congress
MAY 27–31, 2007
FLORENCE, ITALY

Early Registration Deadline with Discount: March 1, 2007

WINTER 2007
Volume 11, Issue 1

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FROM OUR LEADERSHIP

Editor's Note
Ronald M. Selby, MD (USA)

ACTIVE, PROACTIVE, AND RESPONSIVE

You and I have every reason to be proud and pleased with our organization. Leaf through the pages of this edition of the Newsletter and you will sense the energy, enthusiasm, and the many activities embraced by ISAKOS. Your International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine takes its role seriously as the world leader in education, research, and patient care within our discipline. Look at the directives that have come out of the Global Leadership Retreat in Beijing. The emphasis on education in developing countries speaks to the wisdom, foresight, and compassion of world leaders in our field who understand the impact and role of ISAKOS and the positive influences it has and will have in the world. The impact of ISAKOS is great for humanity and it’s great for you and me!

Take note of the committee meetings scheduled for San Diego, California, USA at the American Academy of Orthopaedic Surgeons Annual Meeting. And, of course, preview the many offerings of the Biennial Congress in Florence, Italy! The Biennial Congress is the crown jewel of the educational offerings (and there are many) of ISAKOS. If you, by some chance, are not planning on attending I urge you to reconsider! If you miss it you will most definitely regret it! This meeting will be talked about for years! First, consider the destruction of the Medici’s power by the capture of Tuscany and the decadence of the Renaissance. Florence has much to offer, art, architecture, sculptures, Italian cuisine, the Palazzo Vecchio, the Duomo and the Uffizi Gallery. Along the banks of the Arno River have walked Dante, Michelangelo, da Vinci, Boccaccio, Giotto, Masaccio, Botticelli, Galileo, Verdi, Puccini and thousands of others who made Florence an undisputed cradle of talent and intellect.

(continued on page 7)

President's Message
John A. Bergfeld, MD (USA)

These are exciting times for ISAKOS. As the world flattens, ISAKOS is uniquely positioned to carry out our mission to advance the exchange and dissemination of education, research and practice in arthroscopy, knee surgery and orthopaedic sports medicine.

Under the leadership of the Committee Chairs, our committees are functioning well and have utilized the world-wide membership and expertise in producing educational material for our members. These projects will be presented at the upcoming ISAKOS Congress, and include Arthroscopic Anatomy, Patellofemoral Biomechanics, Minimally Invasive Knee Reconstruction, Sleeper Tendon, and Sports Injuries of the Elderly.

We have restructured our Membership Committee, assigning co-chairs for each of the geographic areas. i.e. Europe (EISSA), Latin America/Mexico (SLARD), North America (ANNA/AOSSM), and Asia (APORSM – Asia divided into three major areas as designed by the APORSM). Finally, co-chairs will be assigned to the unassigned areas of the world such as Africa and the Middle East.

Developing countries have had a high educational priority. We have partnered with EISSA for 2 East Central European educational programs in St. Petersburg, Russia and Warsaw, Poland. We also partnered on a program with the Chinese Orthopedic Association (COA) and The Chinese Sports Medicine Association (CASM) in Beijing.

The Executive Committee and strategic invited members met with our major industrial supporters at the second ISAKOS Global Leadership Retreat in Beijing. This past October. This was a unique opportunity to discuss how industry can significantly advance the worldwide exchange and dissemination of education, research and patient care in arthroscopy, knee surgery and orthopaedic sports medicine.

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Our committees have flourished under the strong leadership of the Chairs. Please consider volunteering for a committee of your choice, by advising the Chair of your interest. The Committee on Committees will meet at the AAOS Annual Meeting in San Diego, California on February 13-14, 2007 to finalize committee appointments.

It is a great honor to be entrusted with leading ISAKOS through its adolescence as we celebrate our 12th birthday at our Biennial Congress in Florence, Italy. This Congress promises, under the direction of Program Chair, Lars Egerbreten, to hit one of the best meetings we have ever had. Please register and make your lodging reservations today!

Associate Members

Cassio de Almada Abreu, MD, Brazil
Eliyahu Adar, MD, Israel
Josemar Saurocu Amaro, MD, Brazil
Demis R. Atkinson, FRACS, New Zealand
Luciano Taylor Auguglietti, MD, Brazil
Albin J. Binder, MD, MPH, USA
André Botelho Filho, MD, Brazil
David Ian Brett, BMBS, FRACS, New Zealand
E. Lyle Carr, Jr, MD, USA
Sia Ting Chew, MBBS, NHM RC St, FRCSED, FRHCS, Hong Kong
Cesar Wagner Cima, MD, Brazil
Stephen A. Cord, MD, USA
Sergio Ricardo de Costa, MD, Brazil
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Christian Fontaine, MD, Calleh
John Patrick Furka, MD, USA
Julio Cesar Galli, MD, Brazil
Roben Darie Garcia, MD, Hungary
Charles J. Gott, MD, USA
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Shereen Geha, D.O., USA
Paul Joseph M. Guerber, MD, Canada
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Nigel Gordon Hope, PhD, FRACS, Australia
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Mohsen Hussien, MD, Siemens
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Sumant G. Krishnan, MD, USA
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Shereen Ali Lawne, MD, FRACS, Malaysia

www.isakos.com/register

You can register online for the 2007 ISAKOS Congress. Visit the ISAKOS Web site at www.isakos.com/register, enter your registration information and provide a credit card number for payment. Your process will be completed immediately and you will receive a confirmation of your registration via e-mail. Registration discounts will be honored until March 1, 2007.

The deadline to pre-register for the 2007 ISAKOS Congress is April 15, 2007. After April 15, you will be required to register on-site at the meeting in Florence, Italy. If you prefer to submit your registration via fax or mail, you may download the registration form from the ISAKOS Web site at www.isakos.com.

ISAKOS WELCOMES NEW MEMBERS

Chief Wyo Lee, MD, Korea
Robert Larsen, MD, Ireland
Fernando Laguna Leandri, MD, Brazil
Vijay S. Masson, MRCP, FRACS, Australia
Cesar Antunes da Grazioli, MD, Brazil
J未成, MD, USA
Richard A. Abraham, MD, USA
Alexander P. Bulgin, MD, Brazil
Gustavo O. Curo Montenegro, MD, Brazil
Ivone F. de Souza Noritomi, MD, Brazil
Richard Jones Shindle, MD, USA
Cheti O. Menelecki, MD, CBF, FRACS, New Zealand
Puja Aswath Pratap, MD, India
Michael Palmer, MD, USA
William Van Norden, PhD, MD, Philippines
Shlomo Rudikov, MD, Brazil
Alberto younger, MD, Brazil
Massimo Pramantika, MD, Thailand
Leonardo Safari Etiene, Brazil
Roderigo Bezerra de Memesa Rolf, MD, Brazil
He Rubbi, MD, Australia
Dipit Sahak, MS, India
Mark Steven Schickendantz, MD, USA
Petra John Shattuck, HVAC/SH SUD, Canada
David W. Shenton Jr, MD, USA
Mammochi Shibata, MD, China
K. Shanmugam Sivanarlaan, FRACS, Malaysia
Vanessa Patricia Soto, MD, Chile
P. Maximo Sylverson, MD, KOUSA
Katherine I. Shulze, MD, USA
Michael Jerome Stuart, MD, USA
Lusdel A. Torres, MD, Argentina
Tumpish S. Waliadoor, MBBS, FRACS, Australia
Ruzaini bin Zakri, MD, Malaysia
Les Zawor, MD, CHINA
Rodrigo Cana, MD, Brazil
ISAKOS COMMITTEES

The ISAKOS Committee on Committees is scheduled to meet during the AAOS Annual Meeting in San Diego, CA to determine the appointments of Chairs, Deputy Chairs and Members of the ISAKOS Committees for the 2007–2009 term. All Chairs and Deputy Chairs are requested to assist the Committee on Committees in providing input on the members of your committee. The committees are essential to ISAKOS and the growth of our Society.

The committee appointments for the 2007–2009 term will be finalized at the AAOS Annual Meeting and will be announced immediately following. The new committees will meet during the ISAKOS Congress in Florence, Italy. Please forward your list of committee members to the ISAKOS Office at 2678 Bishop Dr, Suite 250, San Ramon, CA 94583 or email to: Elizabeth@isakos.com no later than February 1st.

All of the ISAKOS 2007–2009 Committees will meet at the upcoming 6th Biennial ISAKOS Congress in Florence, Italy. The committee schedule is listed on page 5.

If you are asked to participate on a committee, you will be expected to attend committee meetings at the:

1. 2007 ISAKOS Biennial Congress in Florence, Italy (May 27–31, 2007)
2. 2008 AAOS Annual Meeting in San Francisco, CA (March 5–9, 2008)
3. 2009 AAOS Annual Meeting in Las Vegas, NV (February 25–March 1, 2009); and the
4. 2009 ISAKOS Biennial Congress in Osaka, Japan (April 5–9, 2009)

Attendance at all meetings is not mandatory, but the Board would like members to make every effort to attend. Please be advised that ISAKOS is unable to reimburse committee members for any expenses associated with travel to ISAKOS committee meetings or ISAKOS congresses.

In addition, all old and new committee members will attend the Strategic Planning Forum on Saturday, May 26 from 12:00 pm – 4:00 pm. All new and old committee members will attend the May Strategic Planning Forum without charge to discuss the future of ISAKOS. This meeting is at the Fortezza da Basso in Florence, Italy.


Please visit www.isakos.com and log into the Member’s Only Section to pay your membership dues online or download your invoice. Your membership dues must be paid in full to receive the member registration fee for the 2007 ISAKOS Congress.

Your ISAKOS Membership includes:
- Automatic subscription to the official ISAKOS Journal - Arthroscopy: The Journal of Arthroscopic and Related Surgery
- Optional online subscription to Knee Surgery, Sports Traumatology, Arthroscopy (KSSA)—the official journal of the European Society of Sports Traumatology, Knee Surgery and Arthroscopy (ESSKA)
- ISAKOS Biannual Newsletter
- Discounted registration rate at the ISAKOS Congress
- Access to “Member’s Only” at www.isakos.com
- Opportunity to participate in ISAKOS Approved Teaching Centers and Approved Courses
- Complimentary publications from ISAKOS Committee Projects

NEW! Go directly to the Arthroscopy: The Journal of Arthroscopic and Related Surgery through the Members Only Section on www.isakos.com.

ISAKOS COMMITTEE MEETINGS

AAOS ANNUAL MEETING DATES: FEBRUARY 12–14, 2007
Omi Hotel, San Diego, California

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<tr>
<th>Day</th>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>Monday, February 12</td>
<td>12:00 PM – 6:00 PM</td>
<td>Executive Board Meeting and Finance Committee Meeting</td>
</tr>
<tr>
<td>Tuesday, February 13</td>
<td>8:00 AM – 10:00 AM</td>
<td>Education Resource Development (2 hr)</td>
</tr>
<tr>
<td></td>
<td>10:15 AM – 11:15 AM</td>
<td>Communications (1 hr)</td>
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<tr>
<td></td>
<td>11:15 AM – 12:15 PM</td>
<td>Newsletter Editorial Board (1 hr)</td>
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<td></td>
<td>1:30 PM – 3:30 PM</td>
<td>Strategic Planning (2 hr)</td>
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<td></td>
<td>3:30 PM – 5:30 PM</td>
<td>Upper Extremity (1 hr)</td>
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<tr>
<td>Wednesday, February 14</td>
<td>8:00 AM – 10:00 AM</td>
<td>Journal Advisory Task Force (2 hr)</td>
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<td></td>
<td>10:15 AM – 12:15 PM</td>
<td>Program (2 hr)</td>
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<tr>
<td></td>
<td>12:30 PM – 2:30 PM</td>
<td>Board of Directors Only (2 hr)</td>
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<tr>
<td></td>
<td>2:30 PM – 5:30 PM</td>
<td>Board of Directors and All Committee Chairs from 2005–2007 (2 hr)</td>
</tr>
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ISAKOS CONGRESS: MAY 27–31, 2007
Fortezza da Basso, Florence, Italy

<table>
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<tr>
<th>Day</th>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>Friday, May 25</td>
<td>2:00 PM – 5:00 PM</td>
<td>Executive Committee &amp; Finance</td>
</tr>
<tr>
<td>Saturday, May 26</td>
<td>7:00 AM – 11:30 AM</td>
<td>2005–2007 Program Committee</td>
</tr>
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<td></td>
<td>7:00 AM – 8:30 AM</td>
<td>Membership</td>
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<td></td>
<td>7:00 AM – 8:30 AM</td>
<td>Arthroscopy</td>
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<td>8:30 AM – 10:00 AM</td>
<td>Newsletter Editorial Board</td>
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<td>8:30 AM – 10:00 AM</td>
<td>Education</td>
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<td>10:30 AM – 12:00 PM</td>
<td>Upper Extremity</td>
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<td>10:30 AM – 12:00 PM</td>
<td>Scientific</td>
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<td></td>
<td>10:30 AM – 12:00 PM</td>
<td>Communications</td>
</tr>
<tr>
<td></td>
<td>12:00 PM – 4:00 PM</td>
<td>ISAKOS Strategic Planning Forum (all NEW AND OLD committee chairs and members to attend) with lunch</td>
</tr>
<tr>
<td>Sunday, May 27</td>
<td>7:00 AM – 9:00 AM</td>
<td>Orthopaedic Sports Medicine</td>
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<td></td>
<td>7:00 AM – 9:00 AM</td>
<td>Journal Advisory Task Force</td>
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<tr>
<td>Thursday, May 31</td>
<td>9:00 AM – 10:30 AM</td>
<td>New Program Committee</td>
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<tr>
<td></td>
<td>10:30 AM – 12:00 PM</td>
<td>2007–2009 Board of Directors</td>
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<td></td>
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<td>2007–2009 Committee Chairs</td>
</tr>
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ISAKOS OFFICE STAFF UPDATE

The ISAKOS Office would like to congratulate Gap Tarasow on the birth of her son, Max and Rebecca Elshenington-Steath on the birth of her son, Luca. We wish them both the best in their new roles!

ISAKOS welcomes two new staff members to its team: Katie Anderson who graduated from St. Mary’s College of California in Moraga with a Bachelor of Arts degree in English & Communication and Elizabeth Collins-Gibson who graduated with a Bachelor of Science degree with a concentration in Non-Profit Organizations from Louisiana State University.

ISAKOS OFFICE

Michele Johnson, Executive Director
Elizabeth Collins-Gibson, Project Manager
Katie Anderson, Project Manager

ISAKOS NEWSLETTER • WINTER 2007 • 5
**ISAKOS GLOBAL LEADERSHIP RETREAT**

October 26–27, 2006 | Beijing, China

In October, ISAKOS Leadership and corporate campaign donors met in Beijing, China for the second ISAKOS Global Leadership Retreat.

The Global Leadership Retreat was designed to create dialogue between industry and ISAKOS to address problems, issues and concerns facing both industry and ISAKOS, as well as develop action items for ISAKOS and industry to carry out solutions to the problems, issues and concerns identified. Topics discussed included education, research, membership and administration.

The outcome of this forum was the development of a plan to achieve the ISAKOS vision of advancing our specialties around the world, to continually sponsor effective programs and to advance cooperation among ISAKOS and industry leaders. ISAKOS appreciates the participation of its industry partners at the Global Leadership Retreat. Their continued support allows ISAKOS to fulfill its mission.

**ISAKOS PATELLOFEMORAL TRAVELING FELLOWSHIP**

Sponsored by the Patellofemoral Foundation, Inc.

The ISAKOS Patellofemoral Traveling Fellowship was established to promote better understanding and communication regarding patellofemoral pain. The fellowship is awarded on a competitive basis to an orthopaedic surgeon interested in the study and advancement of understanding of the patellofemoral joint.

Dr. Ryosuke Kuroda was awarded the fellowship for 2006. He traveled with Dr. Philippe Neyret and Dr. Peter Verdonk in Lyon where they discussed topics including Patellofemoral Disorders, Fulkerson Osteotomy and the Fithian MPFL technique.

**Now Available…**

NEW ONLINE PROSPECTIVE MULTI-CENTER SURVEY OF THE MEDIAL COLLATERAL LIGAMENT (MCL) OF THE KNEE

The ISAKOS Orthopaedic Sports Medicine Committee has developed a worldwide survey of ISAKOS members concerning the treatment of acute isolated tears of the Medial Collateral Ligament (MCL) of the knee. As there is presently no gold standard for treatment of isolated MCL injuries, the purpose of the survey is to establish an up to date overview of treatment options in current usage globally for this injury.

The aim of this study is to include as many patients as possible who are under the control, directly or indirectly, of an ISAKOS member. A 3 month period will be chosen by each participant according to the sports program that they are involved in (e.g. after the beginning of the season, training, games, etc.). The treating physician is to use his/her usual treatment protocols for managing the injuries during the course of the study.

Please go to [www.isakos.com](http://www.isakos.com) to enter your data for the diagnosis, treatment and follow up of isolated MCL injuries.

Data will be collated at the completion of the survey and the results presented at a future ISAKOS meeting.

Francois Kelliknine, MD
Peter Myers, MD

**FROM OUR LEADERSHIP**

continued from page 2

**Editor’s Note**

And to that, all of the education, camaraderie, stimulation, and excitement of the ISAKOS Biennial Congress where thought leaders from around the world in our field gather offering an international perspective with fresh ideas and solutions to problems that we face every day in our practices and in the operating room! We expect over 2,500 orthopaedic surgeons to attend the Congress from our areas of orthopaedics – arthroscopy, knee surgery and orthopaedic sports medicine. It’s an incomparable combination!

Read about the fabulous educational agenda [President John Bergfeld](http://www.isakos.com) and the Program Committee, under the leadership of [Program Chair Lars Engbergsten](http://www.isakos.com), have put together. The 6th Biennial ISAKOS Congress will be memorable! Mark your calendars now for May 27th–31st, 2007 and make your travel and hotel reservations for Florence, Italy today! I’ll see you there!

Ciao!

Ronald M. Selby, MD

Thanks to the companies that participated in the Global Leadership Retreat

**Corporate Partners**

[Smith+Nephew](http://www.smithnephew.com)
[Arthrex](http://www.arthrex.com)
[Stryker](http://www.stryker.com)
[Aircast](http://www.aircast.com)
[DJO](http://www.djo.com)
[Zimmer](http://www.zimmer.com)
DOUBLE BUNDLE ACL RECONSTRUCTION
Using Only the Semitendinosus

ALBERTO GOBBI, MD
Orthopaedic Arthroscopic Surgery
Via Amadeo G. A., 21–20133
Milano, Italy
Tel: +39027610310
Fax: +390270124931
E-mail: sportimg@in.it

Due to recent studies suggesting the need for better rotational control than that provided by the conventional ACL reconstruction (ACLR) techniques currently used, renewed interest at the anatomic double bundle ACLR have prompted the orthopaedic community to take a second-look at the technique and its possible implications. Foremost among the concerns associated with the double bundle procedure is the technical expertise required to perform the technique properly. Moreover, surgeons who have contended or at least wary of the reported incidence of hamstring weakness when using both the semitendinosus and gracilis tendons for this type of reconstruction. But basically surgeons contemplating the use of a double bundle technique have to answer the same question: is double bundle ACLR better than conventional reconstruction techniques available? At present, the answer may be more complicated than one would expect.

INTRODUCTION
Anatomical studies have demonstrated that the anterior cruciate ligament is composed of two functional bundles: anteromedial (AM) and posterolateral (PL). The nomenclature of their innervations is not limited to their insertion in the tibial side. On the femoral side, these bundles have been demonstrated to lie on different coronal planes with the AM bundle originating more proximally than the PL bundle. Biomechanically during knee flexion, the AM bundle has been observed to tighten while the PL bundle slackens. On the contrary, during knee extension the PL bundle tightens while the AM bundle loosens. The majority of the reconstruction techniques basically reconstruct the anatomic bundle of the cruciates as the femoral tunnel is placed between the 10 and 11 o’clock position for the right knee (or 1 and 2 o’clock position for the left knee). While good results have been generally achieved, the deep flexion and internal rotation strength deficit and associated rotational stability on the operated knee have been frequently associated with the double bundle procedure. The anterior cruciate ligament (ACL) plays a crucial role in maintaining the anteroposterior and rotational stability of the knee joint. Because of recent investigations indicating that conventional ACL reconstruction procedures only provide sufficient AP and rotational stability, renewed interest on the performance of an anatomic reconstruction technique has been generated. Biomechanical and in vitro investigations reveal that this reconstruction can result in an anterior tibial translation that is significantly closer to that of an intact knee and produces better rotatory stability than conventional single bundle ACL procedures. These findings are consistent with the results of Yamashita et al which demonstrated that single bundle reconstruction successfully restores AP tibial translation but fails to provide rotational stability during dynamic loading.

The DBST (double bundle, single tendon) technique described here offers the possibility of reconstructing both the AM and PL bundles without sacrificing the functional integrity of the hamstring muscles by preserving the gracilis avoiding deep flexion and internal rotation strength deficit and preserving an active protection for further ACL injures. Furthermore, the single fixation system at the tibial side achieves adequate fixation at the prescribed flexion angles for each bundle with less cost for the patient.

Using standard anterolateral and anteromedial portals, the knee joint is visualized and prepared for tunnel placements. The anteromedial footprint of the native ACL on both the femoral and tibial sides are identified. The PL femoral tunnel is initially prepared using an ‘outside-in’ technique. To properly achieve this step, a customized Postero-lateral (PL) tunnel guide is used (Shino K. Japan). This customized guide has a component arm designed to reach either the 9 o’clock or the 3 o’clock position. The arm of the PL guide is inserted in the antero-lateral portal and positioned at either 9 o’clock or 3 o’clock on the medial wall of the lateral condyle while the handle is maneuvered at the area of the junction of the distal femur and lateral condyle to fix the entry point for the tunnel. A guide wire is inserted from outside which is followed by a 45 mm cannulated drill to prepare the pilot hole. Once the length of this hole is measured, a 6 mm PL tunnel with its appropriate depth is drilled. Preparation of the 7 mm AM tunnel follows, using standard techniques with the tunnel placed at the either the 11 o’clock or 1 o’clock position. At the end of this step, we have two divergent tunnels positioned anatomically.

The tunnels are prepared at an angle of 45° with the entry point separated by a distance of 1–1.5 cm. These tunnels converge on the ACL’s footprint intrathecally.
Although rehabilitation following ACL reconstruction is thought to be very important by almost all surgeons, very little discussion concerning this matter is included in most papers published on ACL reconstructions and their follow-ups. In fact, the majority of papers simply state that a modified accelerated or aggressive rehabilitation protocol is followed, with vague details concerning the rehabilitation protocol. Very few authors document their patients' compliance with the protocols. A statement indicating the time intervals that patients are advised to go back to unrestricted work or athletic activities is often provided, but almost no one documents the actual time that their patients do go back such as to full activities and at what level of participation. From the material provided in the literature, very little information can be obtained about what constitutes a safe and effective rehabilitation program. There are, however, a number of articles published in the recent past which use study designs randomized clinical trials (RCTs) which allow the reader to glean some meaningful information about the safety and efficacy of rehabilitation programs. The purpose of this brief article is to provide a summary of the information obtained from such publications which can be used to help construct an appropriate rehabilitation protocol, as well as to identify important aspects of rehabilitation where our present knowledge is wanting.

IMMEDIATE VERSUS DELAYED WEIGHTBEARING

Prospective RCTs comparing immediate versus delayed weightbearing performed by Jorgensen et al and Tyler revealed no significant difference in clinical, patient and functional outcomes, indicating no evident elevation of the graft or disruption of the initial fixation. However, the effect of early weightbearing on the healing of articular cartilage damaged at the time of the ACL injury or meniscus repair is unknown.

OPEN VERSUS CLOSED KINETIC CHAIN EXERCISES

Open kinetic chain (OKC) versus closed kinetic chain (CKC) exercises following ACL reconstruction have been evaluated in four RCTs. Only one of these studies, all of which involved bone-patellar tendon-bone autografts, revealed any difference in the anterior laxity at the time of follow-up (one year or less). Byrnan's group showed increased anterior laxity and poorer post-treatment function at one year postoperatively whereas the other studies revealed no adverse effects on anterior laxity when OKC exercises were utilized. There were several differences in the timing and dosage of the treatments used and the determination of A-P laxity, which makes the results of these investigations difficult to compare. Thus, there appears to be no consensus about the effects of OKC knee extensor exercises during the early phases of healing following ACL reconstruction in spite of the potential disadvantages of early use of OKC exercises.

REHABILITATION BRACES

Four RCTs have demonstrated that the use of rehabilitation braces in the early postoperative period following an ACL reconstruction results in less swelling, pain and wound infection without improvement in knee strength when compared to those patients who utilized OKC exercises at final follow-up (range 1-3 years). No differences were found with regard to knee range of motion, subjective satisfaction, A-P laxity, activity level, muscle strength or ability to perform one-legged hop tests whether a rehabilitation brace was used or not.

FUNCTIONAL KNEE BRACES

Two RCTs evaluating the efficacy of functional knee bracing following ACL reconstruction for a minimum of two years revealed no perceptible advantage of the lower braces. In both studies, no differences in A-P laxity, functional testing, patient satisfaction, range of motion or strength were found between the group treated with a functional brace compared to the group that did not use functional bracing.

HOME VERSUS CLINIC BASED REHABILITATION PROGRAMS

Beard and Dodds, Fischer et al, Grant et al, and Schenck et al have performed RCTs comparing home versus clinic-based rehabilitation. Although different amounts of supervision were provided in these studies, they showed that home-based rehabilitation was as effective as clinic-based programs even though the latter groups had greater supervision.

CURRENT CONCEPTS OF REHABILITATION

Following ACL Reconstruction

IMMEDIATE VERSUS DELAYED WEIGHTBEARING

Prospective RCTs comparing immediate versus delayed weightbearing performed by Longo et al and Tyler revealed no significant difference in clinical, patient and functional outcomes, indicating no evident elevation of the graft or disruption of the initial fixation. However, the effect of early weightbearing on the healing of articular cartilage damaged at the time of the ACL injury or meniscus repair is unknown.

OPEN VERSUS CLOSED KINETIC CHAIN EXERCISES

Open kinetic chain (OKC) versus closed kinetic chain (CKC) exercises following ACL reconstruction have been evaluated in four RCTs. Only one of these studies, all of which involved bone-patellar tendon-bone autografts, revealed any difference in the anterior laxity at the time of follow-up (one year or less). Byrnan's group showed increased anterior laxity and poorer post-treatment function at one year postoperatively whereas the other studies revealed no adverse effects on anterior laxity when OKC exercises were utilized. There were several differences in the timing and dosage of the treatments used and the determination of A-P laxity, which makes the results of these investigations difficult to compare. Thus, there appears to be no consensus about the effects of OKC knee extensor exercises during the early phases of healing following ACL reconstruction in spite of the potential disadvantages of early use of OKC exercises.

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LEARNING ARTHROSCOPIC ROTATOR CUFF REPAIR DOES NOT COMPROMISE PATIENT OUTCOME

James H. Lubowitz, MD
1219-A Gadourf Rd
Tularosa, NM 88352-6500
Tel: 505-758-0009
Fax: 505-758-8736
E-mail: jlbowitz@kitcarson.net

OUTCOME: A CONCISE FOLLOW-UP REPORT.

ABSTRACT:
Purpose: Arthroscopic rotator cuff (RC) repair is reported to have a steep learning curve with rapid decrease in rotator cuff repair time (RCRT) during a surgeon’s first 10 cases. Faster surgery may represent learning; however, faster surgery does not represent better surgery. The purpose of this study is to evaluate clinical outcome (rather than RCRT) during the learning phase of arthroscopic RC repair.

Methods: 100 consecutive patients having arthroscopic rotator cuff repair performed by a single surgeon beginning with his first case in private practice described their shoulder self-assessment numerical evaluation (SANE) rating after follow-up of no less than 24 months. Mean SANE ratings for consecutive blocks of ten cases were compared. SANE rating was also analyzed by constructing a best fit linear equation (y = mx + b) where m, the slope, illustrates the rate of increase in SANE rating as experience is gained (learning). Results: There were no significant changes in mean SANE rating when comparing other consecutive blocks of ten cases was not statistically significant. The initial phase of learning (as graphically represented by the slope of the learning curve) was steep but rapid (Figure 1).

However, as above, a limitation of Guttmann’s investigation is that ‘faster surgery may represent learning; however, faster surgery does not represent better surgery.’ This concise follow-up report addresses the limitation of the original manuscript by evaluating clinical outcome (rather than RCRT) in the original cohort of patients.

METHODS: The Methods of Guttmann et al. have been reported previously and in detail. After follow-up of no less than 24 months, the original cohort of 100 patients were telephoned by an orthopaedic technologist with no knowledge of the purpose or hypothesis of this investigation and asked to describe their shoulder self-assessment numerical evaluation (SANE) rating where 100 represents a normal shoulder and 0 represents the worst possible shoulder.

Key Words: Learning, arthroscopic, rotator cuff, repair, outcome

INTRODUCTION: With regard to arthroscopic rotator cuff (RC) repair, “faster surgery does not represent better surgery.” Yet, could the opposite also be true? Is it possible that slower surgery might represent worse surgery, specifically surgery resulting in compromised patient outcomes? There is support for this view. Among the wit and wisdom of surgical aphorisms, it is said, “There are three kinds of surgeons; good fast surgeons, bad fast surgeons, and slow surgeons.” This suggests that there are no examples of the forth permutation: a good, slow surgeon. ‘Is this wisdom or is this wit? The purpose of this manuscript is to answer this question.

More specifically, our purpose is to determine whether patient outcome is compromised during the learning phase of arthroscopic RC repair. Arthroscopic rotator cuff repair is demonstrated to have a steep learning curve. Guttmann et al. measured RCRT in 100 consecutive patients having arthroscopic rotator cuff repair performed by a single surgeon beginning with his first case in private practice and concluded that mean RCRT decreased significantly from the first block of ten cases to the second block of ten cases. While learning continued throughout the remainder of the cases, the changes in mean RCRT when comparing other consecutive blocks of ten cases was not statistically significant. The initial phase of learning (as graphically represented by the slope of the learning curve) was steep but rapid (Figure 1).

However, as above, a limitation of Guttmann’s investigation is that ‘faster surgery may represent learning; however, faster surgery does not represent better surgery.’ This concise follow-up report addresses the limitation of the original manuscript by evaluating clinical outcome (rather than RCRT) in the original cohort of patients.

RESULTS: At mean follow-up of 50.4 months (range 41–65), 82 patients were located for follow-up (transfer bias = 18%). Mean patient age was 57 years (range 53 to 85 years). There were 54 male and 28 female subjects. There were 5 small tears, 33 medium tears, 26 large tears, and 18 massive tears. Demographic variables, SANE rating, and transfer bias by block number are summarized in Table 1.

Statistical Methods: Statistical analyses were performed using SAS version 9.1.3 (SAS Institute, Cary, NC), and Figures were created using Excel (Microsoft, Redmond, WA). Descriptive statistics were calculated for the demographic variables of age, gender, and tear size (small, medium, large, massive). Consecutive blocks of ten cases were analyzed for mean SANE rating. Mean SANE ratings were compared using analysis of variance (ANOVA) as were the effects of age, gender, and tear size on SANE rating. P values less than or equal to 0.05 were considered statistically significant. SANE rating was also analyzed by constructing a logarithmic trend curve as well as a best fit linear equation (y = mx + b) where m represents the slope of the line, m, the slope, illustrates the rate of increase in SANE rating as experience is gained (learning).

At mean follow-up of 50.4 months (range 41–65), 82 patients were located for follow-up (transfer bias = 18%). Mean patient age was 57 years (range 53 to 85 years). There were 54 male and 28 female subjects. There were 5 small tears, 33 medium tears, 26 large tears, and 18 massive tears. Demographic variables, SANE rating, and transfer bias by block number are summarized in Table 1.

Mean SANE rating by case number is illustrated in Figure 2. There were no significant changes in mean SANE rating when comparing the consecutive blocks of ten cases (p = 0.18). Mean SANE rating by age is illustrated in Figure 3. In this Figure, a best fit linear (as opposed to logarithmic) trend line is applied. The slope (m) of the line equals 0.026 which represents the rate of increase in SANE rating (learning).

In sum, 26% of patients (21/82) reported a SANE rating of 100. 50% of patients (48/82) reported a SANE rating between 80 and 99, and 16% of patients (13/82) reported a SANE rating less than 80 (Table 2).

There is no significant difference in mean SANE rating when cases are stratified by age (p = 0.20). There is no significant difference in mean SANE rating when cases are stratified by gender (p = 0.13). There is no significant difference in mean SANE rating when cases are stratified by tear size (p = 0.22).

DISCUSSION: Our results demonstrate that in contrast to RCRT, patient outcome is not compromised during the initial phase of learning arthroscopic RC repair. Learning (improved patient outcome) was observed throughout the study; however, statistically significant changes in mean SANE rating were not observed. This is consistent with Guttmann et al.’s results. Our findings are corroborated by quantitation of the rate of learning, m, of only 0.026 demonstrates that the rate of improvement in outcome with increasing experience is small. Therefore, there is no significant learning effect on clinical outcome. There was no relationship between SANE rating and age, gender, and tear size (small, medium, large, massive).
LEARNING ARTHROSCOPIC ROTATOR CUFF REPAIR DOES NOT COMPROMISE PATIENT OUTCOME

DISCUSSION:
The purpose of this study is to determine whether patient outcome is compromised during the learning phase of arthroscopic RC repair. While RCRT (turnover) takes longer, our results demonstrate that in contrast to RCRP (Figure 1), patient outcome (SANE rating) is not compromised during the initial phase of learning. Learning (improved patient outcome) was observed throughout the study. However, statistically significant changes in mean SANE ratings were not observed when comparing consecutive blocks of ten cases. This finding is corroborated by evaluation of rate of increase in SANE rating (learning) as quantitatively represented by the slope (m) of the best-fit linear trend line derived when mean SANE is graphically analyzed by case number (Figure 3). In this study, the rate of learning was 0.006 (small rate of improvement in outcome with experience). In comparison, the rate of decrease in RCRT (absolute value of m) reported in the original investigation was 0.19 for the first 10 cases (large rate of improvement in RCRT with experience) and 0.23 for the subsequent 90 cases (moderate rate of improvement in RCRT with experience).

In sum, we interpret these results to indicate that so long as a surgical outcome may be expected. Our data supports the hypothesis: learning arthroscopic RC repair did not compromise patient outcome.

CONCLUSION

Our data supports the hypothesis: learning arthroscopic RC repair did not compromise patient outcome.

LIMIATIONS OF THIS INVESTIGATION

Limitations of this investigation have been reported previously and in detail. An additional limitation of this investigation is that evaluation of twenty-four month clinical outcome data was not part of the methods of the original investigation. Thus, while the original investigation was prospective, the current investigation is retrospective. Pre-operative SANE ratings are not evaluated. We are unable to report change in SANE ratings by case number. Such a report could yield different results in addition, SANE is a single patient reported outcome measure, while valid, other additional outcome measures could yield different results. An additional limitation is that the initial part of the current investigation was performed during the transition to arthroscopic rotator cuff repair. In addition, we are unable to be determined; transfer bias of less than 20%, while acceptable, is expected for twenty-four month follow-up evaluations. Finally, our sub-group analyses (of age, gender, and tear size) must be interpreted with caution; the limited number of study subjects results in a possibility of beta-error, and subgroup analysis was not our primary purpose.

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CONCLUSION

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SPORT SPECIFIC ETIOLOGY

Etiology in Sports Field

The majority of tennis elbow sports active patients with tennis elbow play a racquet sport, and most of them are amateur tennis players. The most frequent reason for developing the symptoms is an inappropriate technique of tennis strokes, mainly for the one-handed backhand stroke. Kelly et al reported a different muscle contraction pattern for tennis players who had a tennis elbow injury compared with those who did not suffer from that condition. They pointed out that the players whom were examined with painful tennis elbow presented the pain activity with a delayed activation pattern of the extensor carpi radialis brevis (ECRB) has to support a high amount of stress during the backhand stroke.

CLINICAL AND PATHOLOGICAL FINDINGS

The majority of tennis elbow patients continue to play tennis with mild symptoms and use various modalities after the first episode of treatment to manage the pain. The time between the onset of first pain at the elbow and the clinical consultation can vary from months to years. For this reason, we treat mostly chronic cases at the office. During the clinical assessment it is important to ask specific questions about tennis topics: the type of racquet that the athlete uses, whether or not, if he/she had changed the racquet before the beginning of the pain, the tension of the strings; the racquet weight, the type of backhand stroke (with one or two hands), and also if pain is felt during a specific type of stroke (serve, backhand, forearm or volley). Also we should usually ask about pain during activities of daily living. A typical pain is reported at the lateral aspect of the elbow, directly at the lateral epicondyle. The Maughan test is usually positive, and in some cases the strength of the forearm muscles (measured by the Jamar® dynamometer) is decreased.

RADIOLOGY ASSESSMENT

Radiographs of the elbow are usually normal, unless there is calcification present. A good ultrasound examination is usually sufficient to determine the injury. In some chronic cases, an MRI is obtained to assess the elbow joint (FIGURE 1), because in some chronic cases the pain may be associated with internal cartilage damage. In my opinion that’s the only justification for the high cost of this exam.

TREATMENT

Non surgical modalities such as activity modification, coaching of better techniques related to correct tennis strokes, physical therapy, and corticosteroid injections are reported to have between 75% to 90% success rates. Despite some good papers in the literature, my personal experience is that the corticosteroid injections just delay the surgical procedure in the active tennis players, because they will only relieve the pain for 2 or 3 months after the injections. There are many research papers which discuss this topic. We know that the corticosteroid injections cause the death of the tenocytes present within the tendon.
In resistant cases, open surgical debridement of the extensor carpi radialis brevis (ECRB) has been the gold standard of treatment. The surgery has to focus on the resection of the degenerative tissue present in the ECRB tendon—we do not have to release the tendon insertion (Fig. 2).

Many authors discuss the surgical technique, and our preference is to use an open procedure for the tendinous resection. Other techniques have been reported in the past such as the percutaneous surgery reported by Dunkow et al in 2004, when they compared their procedure with the open surgery. Other surgeons are now performing the arthroscopic resection of the lesion, and some have reported good results with this procedure. These authors agree that the injury involves a lateral capsule disorder also and, not just the tendon disease. The problem with those papers is that the patient population consists of non-tennis players, and the tendon disease. The problem with those papers is that the patient population consists of non-tennis players, and the results may not be extended to the sports practice. Figure 2: Degeneration of the tendon in a surgical case (tip of the knife).

Histologic examination of the pathologic tissue demonstrates angioblastosis and disorganization of fibroblasts and infiltrating vessels with no evidence of inflammation. When we examine the microscopic aspects of the resected tendon after the surgery, currently we also see a mixoid degenerative tissue present in the ECRB tendon—we do not have to release the tendon insertion (Fig. 2).

**ADVANCES IN THE TREATMENT**

Recently, alternative modalities such as ultrasound, laser treatment, botulinum injection, acupuncture, extra-corporeal shockwave therapy and autologous blood injection for resistant lateral epicondylitis have been investigated. A paper recently published by Mishra et al reported a good result in a cohort study (level 2 of evidence) among patients that were injected in the painful site with autologous platelet derived growth factors. We are using this method in our clinic, but at this stage now we do not have a sufficient number of patients with an adequate follow-up to report. The results so far are encouraging and we are continuing this study of this method in non-surgical and surgical patients, to improve the healing and to decrease the time away from tennis.

**INTRODUCTION**

Surgical treatment for cartilage injury is of major interest to orthopaedic surgeons because most lesions of articular cartilage do not heal spontaneously and may predispose the joint to the subsequent development of secondary osteoarthritis. In a series of 993 knee arthroscopies performed because of pain, substantial cartilage lesions considered suitable for surgical treatment were detected in 6% of the patients. Treatment for articular cartilage injuries includes the microfracture technique, autologous osteochondral transplantation, autologous osteochondral transplantation, autologous chondrocyte implantation with and without the assistance of various three dimensional matrices. In addition techniques utilizing allografts exist, though not widely used and therefore not a subject in this review. Much controversy is related the methodological limitations that may limit the value of the above-mentioned techniques. The average CMS for each criterion and the total CMS are given in Table I. The distribution of the studies with regard to type of treatment, type of study, and level-of-evidence rating is given in Table I.

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In our first update, we analyzed the outcome results with respect to type of therapy, but could not find any significant differences between the reported outcomes (forty-seven studies, p = 0.11). Indeed, large variations in reported outcome were demonstrated within each treatment modality (Fig. 1). We found that the CMS correlated positively with the level-of-evidence rating (r = 0.668, p < 0.0001), but the variations within each level were large. In this update we find the same trend (Fig. 2), but find an even larger variations in the level-IV evidence. Also in the first article we identified several double publications, in addition to one article describing a group of patients that may have been a subgroup of the patients included in a randomized trial. We found no double publications in the update.

Interestingly we noticed that in one article patients received identical surgical treatment but were divided into two groups with different rehabilitation protocols and another article reported on a new retrograde technique for treating tibial cartilage defects. One article also reported on autologous chondrocyte implantation in combination with autologous osteochondral transplantation and several papers on various types of matrix-assisted chondrocyte transplantation alone or compared to other treatments.

**RESULTS**

In our first article on this topic we included sixty-one studies reporting on 3987 operations of which 260 were from randomized controlled trials. The average CMS was 43.5 (95% C.I. 40.3 to 46.7) with especially low scores in five categories: type of study, description of postoperative rehabilitation, outcome criteria, outcome assessment and subject selection. At that time we found thirty-five retrospective studies, twenty-two prospective studies and only four randomized controlled trials.

In this update eighteen studies reported on 1003 operations (median 46) of which 915 were from randomised controlled trials and 118 from non-randomized controlled trials. The average CMS was 56.3 (95% C.I. 49.3 to 63.2), which was a statistical significant improvement (p<0.0001). However, methodological limitations were still frequently found in the above-mentioned categories. The average CMS for each criterion and the total CMS are given in Table I. The distribution of the studies with regard to type of treatment, type of study, and level-of-evidence rating is given in Table I.

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AN ANALYSIS OF THE QUALITY OF CARTILAGE REPAIR STUDIES — An Update (cont.)

DISCUSSION

We refer the reader to the original article for a detailed discussion on methods and previous results. This discussion only takes into account findings from the newly included articles. Research on the surgical treatment of cartilage injury has been extensive over the last two decades, and although numerous articles have been published reporting mostly good to excellent results, the methodology of the studies in general has been questioned.

We previously showed that the majority of papers in this area had methodological deficiencies. This is still the main finding even though it is encouraging to find a significantly improved CMS.

A total of 6 randomized controlled trials have been performed in cartilage treatment comparing autologous chondrocyte implantation and autologous osteochondral transplantation (mosaicplasty) (three studies), autologous chondrocyte implantation and microfracture, autologous osteochondral transplantation (mosaicplasty) and microfracture, and autologous chondrocyte implantation and matrix-assisted autologous chondrocyte implantation. The CMS varied between 56 and 79. Four of these found no significant difference between treatments. One well performed study (CMS = 79) found arthroscopic autologous osteochondral transplantation to be superior to microfracture. Another study found autologous chondrocyte implantation to be superior to autologous osteochondral transplantation (mosaicplasty), but were of lesser methodological quality (CMS = 56).

As of today no treatment modality has emerged clearly superior to other modalities and it seems that several surgical interventions have equal results. The CMS varied between 56 and 79. The majority of these studies had methodological deficiencies, and it seems that several surgical methods provide a comparable good-to-excellent functional outcome at least in the one to five year postoperative period. More well-designed and well-performed randomized controlled trials are needed to determine whether this is the case.

The increased focus on methodology in major journals by marking original articles with a level-of-evidence is highly appreciated. However, we would like to emphasize the fact that randomized controlled trials can have serious design flaws (i.e. not using independent reviewers, no statistical power analysis, not using an adequate randomization procedure, not accounting for eligible subjects not included in study), and therefore be rated as level-of-evidence II. We therefore recommend the reader to not entirely dismiss articles marked level-IV evidence, yet themselves assess the methodological quality of the paper when interpreting the results (for example using a grading system like the CMS).

On the basis of our findings in this update we maintain the recommendation to readers of cartilage studies to be cautious when interpreting results. In our first article we proposed the following guidelines for future studies, and although methodology has improved we find it worthwhile to repeat the guidelines here:

1. Studies should be prospective with a clearly defined hypothesis and one clearly defined primary end point. They should be randomized controlled trials with an adequate randomization procedure and power analysis for the primary end point. Secondary end point should only be used a supportive evidence to primary hypothesis.

2. Patient inclusion and exclusion criteria should be clearly established and reported. The recruitment rate should be reported, and attempts should be made to account for eligible patients that are not included and those who are lost follow-up.

3. The outcome measure should be validated for use on patients with cartilage injuries.

4. Outcome assessment should be made by an independent investigator. The assessment should be made in a written form and ideally be completed by the patient without investigator assistance.

5. The timing of the outcome assessment should be clearly stated. Results from various time-points after surgery should not be reported as one outcome. Assessments should be both clinical and functional. The minimum duration of follow-up should be more than twenty-four months.

6. Detailed rehabilitation protocols should be established and reported. Attempts should be made to monitor compliance. The protocols should be applied in a standardized manner to both patient cohorts.

Full article and references also available online at www.isakos.com

CONTACT ADDRESS:

Jerzy Widuchowski, MD, PhD
Regional Center of Knee Surgery, Arthroscopy and Sports Traumatology
62 Bytomka Street, Piekary Śląskie 41-940, POLAND
Phone: +44 32 383 4141
Fax: +44 32 391 4321
E-mail: sekretariat@uzrutowka.piekary.pl

Regional Centre of Knee Surgery, Arthroscopy and Sport Traumatology organizes yearly elementary courses in knee and shoulder diseases and injuries as well as sport traumatology for specializing doctors. It also organizes specialist courses in knee surgery including arthroscopy, meniscus and cartilage surgery, knee, shoulder and ankle joint arthroplasty and shoulder instability.

In the last three years the following courses were organized:
- knee surgery
- shoulder arthroscopy
- knee arthroplasty
- traumatology in sport medicine
- primary, total knee arthroplasty
- unicompartmental knee arthroplasty
- shoulder arthroplasty
- ankle arthroplasty
- revision knee arthroplasty
- shoulder instability
- numerous conferences (two or three days long)

Regional Centre of Knee Surgery, Arthroscopy and Sport Traumatology acts as a ward of II Independent Voivod Traumatology Hospital in Piekary Śląskie.

The hospital and its individual wards specialising in treatment of injuries and diseases relating to motion organs serve the whole Silesian macroregion as well as patients from other regions of Poland. Apart from the ward head and his deputy there are eight specialising doctors, six of whom have the doctor’s degree and one with habilitation.

The Centre carries on:
- consultation and out-patients’ treatment,
- surgeries of knee, shoulder and ankle joints (about 200 monthly),
- internal and external trainings, courses, conferences and show operations.

Apart from organized courses the staff tries to train themselves by participating in conferences and courses (EISSKA, ISAKOS). The doctors in the Centre have at their disposal two state-of-the-art surgical rooms. The Centre disposes of 50 beds in rooms for one to five patients equipped with bathrooms. Patients can also make use of fully equipped rehabilitation ward or the care of qualified rehabilitant in the patients’ rooms.

In the years 2001–2005 about 250 doctors participated in the courses organized by the Centre. 40 doctors took part in trainings, 100 in conferences and about 50 were present for the show surgeries. The participants comprised specialising or already specialized doctors from Silesia, the whole of Poland as well as from Ukraine, Byelorussia, Lithuania, Latvia, Hungary and Austria.

DISTRICT HOSPITAL of TRAUMATOLOGY
The 8th Congress of the Turkish Society of Sports Traumatology, Arthroscopy and Knee Surgery was held on October 10–14, 2006 in Kuşadası, Turkey. The congress site was located one hour from İzmir and next to Ephesus, which is known to be the commercial, religious and social center of antiquity and one of the highlights of any visit to Turkey. The famous Celsus Library hosted the Welcome Cocktail.

The Congress takes place every two years and rotates between the four chapters: İstanbul, Antalya, Ankara and İzmir. More than 500 colleagues participated in the meeting where all subjects of sports trauma, arthroscopy and knee surgery were addressed.

Philippe Lobenhoffer, MD (Germany) and Prof. Dr. Ahmet Sebik (Turkey) were the Honorary Presidents. In addition to the leading Turkish orthopaedic surgeons, outstanding international guest speakers were invited by the Congress President Prof. Dr Bülent Alparslan, the secretary Prof. Dr Halit Pınar and the local organizing committee: P. Lobenhoffer, R. Becker, W. Nebelung, J. Agneskirchner, Ü. Tanker, M. Yücel, E. Başar, K. Shino, K. Nakata, N. Nakamura, Y. Toritsuka, R. Voronk, P. Neyret, C. Evans, J. Nyland, and C. Ackroyd. The scientific program was comprised of 27 lectures, 14 symposia, 2 debates, and 12 instructional courses. The Meeting served as an excellent foundation for long term relationships and partnerships with ISAKOS.

Following the ISAKOS Global Leadership Retreat in Beijing, ISAKOS sponsored the Current Concepts in Sports Injuries meeting. This was an outstanding opportunity as China, a country with a population of 1.3 billion including 10 cities having a population of over 10 million each, and a rich history of Eastern medicine, looks to expand their Sports Medicine knowledge and expertise with some Western influence.

A residents and fellows course took place in Mexico City on November 16–17, 2006 and was a huge success. ISAKOS sponsored this workshop where 12 residents and fellows from several hospitals in Mexico City participated. Both knee and shoulder procedures were demonstrated on cadaveric specimens.

The participating companies did an excellent job and provided plenty of implants for the residents and fellows to practice with. This allowed the residents and fellows to experiment with different systems and techniques.
Getting To and Staying in Florence, Italy

Flying to Florence

Congress attendees can fly into the Florence International Airport “Amerigo Vespucci,” which is located only four (4) kilometers from the city center. The Florence Airport provides direct flights to the main European cities, which makes it easy to reach any final destination in the world. For more information on the Florence Airport, please visit http://www.aeroporto.firenze.it.

It is also possible to fly into the Pisa International Airport “Galileo Galilei,” which is located fifty (50) minutes by train into the Florence Central Railway Station. For more information on the Pisa Airport, please visit http://www.pisa-airport.com.

Ground Transportation

The Florence Central Railway Station (Santa Maria Novella) is centrally located and is within walking distance to the Congress facilities and many hotels. Direct Eurostar trains are available from Florence to Rome, Milan and Naples. For more information on train schedules and ticket reservations, please visit www.trenitalia.com/home/en/index.html.

Local buses (ATAF) and white RADIO TAXI cars are also available for convenient transportation around Florence.

Hotel Accommodations

ISAKOS will offer special congress rates at a number of hotels in Florence. Hotel reservations can be made by visiting www.oic.it/ISAKOS2007. Room Reservation Deadline: March 27, 2007.

Welcome Reception at the Fortezza da Basso

ISAKOS welcomes all congress attendees and their guests to the ISAKOS Welcome Reception. This grant, festive affair is a highlight of the congress, offering music, hors d’oeuvres and cocktails to all congress attendees and their families.

Attendence is included with the cost of registration. Dress is business casual.

Date: Sunday, May 27
Time: 18:30 – 21:00
Cost: Included in registration
Location: Fortezza da Basso

Lunchtime Breakout Sessions

A lunchtime series of hands-on laboratories and lectures will allow attendees to gain hands-on experience while learning the latest innovations in research and techniques.

The sessions will be located at the Spinadelli Pavilion of the Fortezza da Basso and will last 90 minutes on Sunday, Monday and Wednesday. Topics are likely to include meniscus repair, ACL and PCL reconstruction, shoulder stabilization, rotator cuff repair and Alex shoulder model workshops.

Attendance is free of charge to all congress registrants. Attendance will be awarded on a first-come, first-served basis.

Dates: Sunday, Monday and Wednesday
Time: 12:00 – 13:30
Cost: Included in registration

Day Tours

Sunday, May 27, 2007
Guided Tour of Siena and S. Gimignano
(full day tour by bus)

Monday, May 28, 2007
Guided Tour of Florence
(half day walking tour)

Tuesday, May 29, 2007
H. Chianti, Smalltowns, Castles and Wine Tasting
(full day tour by bus)

Wednesday, May 30, 2007
Guided tour of Lucca
(full day tour by bus)

Thursday, May 31, 2007
Michelangelo tour
(half day walking tour)

For Day Tour descriptions, pricing and registration visit www.oic.it/ISAKOS2007

Spouse Program

Enjoy the ISAKOS Congress as a registered spouse for the week in Florence. Spouse Program registration fees are $40 for the spouse daily breakfast program at the Fortezza da Basso and spouse directory. See the ISAKOS Congress Registration Form to register.

Sunday, May 27
07:30 – 09:30 Morning Coffee
Begin your day with coffee and assorted pastries with other spouses in the Spouse Lounge at the Fortezza da Basso.

18:30 – 21:00 Welcome Reception
This grand and festive affair, one of the many highlights of the congress, offers music, hors d’oeuvres and cocktails to all congress attendees and their guests at no additional cost. Dress is business casual.

Monday, May 28
07:30 – 09:30 Morning Coffee
Begin your day with coffee and assorted pastries with other spouses in the Spouse Lounge at the Fortezza da Basso.

Tuesday, May 29
07:30 – 09:30 Morning Coffee
Begin your day with coffee and assorted pastries with other spouses in the Spouse Lounge at the Fortezza da Basso.

Wednesday, May 30
07:30 – 09:30 Morning Coffee
Begin your day with coffee and assorted pastries with other spouses in the Spouse Lounge at the Fortezza da Basso.

Thursday, May 31
07:30 – 09:30 Morning Coffee
Begin your day with coffee and assorted pastries with other spouses in the Spouse Lounge at the Fortezza da Basso,

Ground Transportation

The Florence Central Railway Station (Santa Maria Novella) is centrally located and is within walking distance to the Congress facilities and many hotels. Direct Eurostar trains are available from Florence to Rome, Milan and Naples. For more information on train schedules and ticket reservations, please visit www.trenitalia.com/home/en/index.html.

It is also possible to fly into the Pisa International Airport “Galileo Galilei” which is located fifty (50) minutes by train into the Florence Central Railway Station. Also navigators (Amerigo Vespucci), politicians (Niccolò Machiavelli) and scientists (Galileo Galilei) will be featured in order to complete the picture of a civilization that contributed some of the best culture to the western world.

Professor Cianchi wrote extensively on the Renaissance and Leonardo da Vinci (machines, anatomical studies, etc). His other fields of interest are Modern and Contemporary Art.
ISAKOS Masters Course

ADVANCES IN KNEE ARTHROPLASTY
Saturday, May 26, 2007 • Florence, Italy
Fortezza da Basso • Room 201

08:00 Registration and Breakfast
10:25 Coffee Break
11:30 ROOM 102
Arthroscopic Rotator Cuff Footprint Repair Using Novel Double Tunnel Anatomical ACL Reconstruction
Moderator: Paola Aglietti, MD (Italy)
Sponsored by Smith & Nephew
12:00 ROOM 101
Combined ACL RetroConstruction and High Tibial Osteotomy
Moderator: Gianfranco Raselli, MD (Italy)
12:30 Lunch
14:00 ROOM 102
Combined ACL RetroConstruction and High Tibial Osteotomy
Moderator: Gianfranco Raselli, MD (Italy)
14:30 Coffee Break
15:00 ROOM 101
Arthroscopic Rotator Cuff Footprint Repair Using Novel Double Tunnel Anatomical ACL Reconstruction
Moderator: Paola Aglietti, MD (Italy)
Sponsored by Smith & Nephew
15:30 ROOM 100
Novel Double Tunnel Anatomical ACL Reconstruction
Moderator: Giuseppe Carbone, MD (Italy)
Sponsored by Smith & Nephew
16:00 ROOM 102
Arthroscopic Rotator Cuff Footprint Repair Using Novel Double Tunnel Anatomical ACL Reconstruction
16:30 ROOM 101
Combined ACL RetroConstruction and High Tibial Osteotomy
17:00 Adjourn
UPCOMING ISAKOS APPROVED COURSES

III INTERNATIONAL HIP ARTHROSCOPY MEETING
IEP Hospital Sírio-Libanês
São Paulo, Brazil
March 1–3, 2007
For further information, please contact:
Giancarlo Polesello, MD, PhD
Tel:  +55 11 50551528
Fax:  +55 11 21146950
giancarlopolesello@hotmail.com
gpe@terra.com.br

THE 23RD INTERNATIONAL JERUSALEM SYMPOSIUM ON SPORTS MEDICINE
Jerusalem, Israel
March 14–15, 2007
For further information, please contact:
Gideon Mann, MD
drmann@regin-med.co.il

29TH FRESH CADAVER KNEE ARTHROSCOPY WORKSHOP
Yonsei University Hospital
Seoul, Korea
March 31, 2007
For further information, please contact:
Sung-Jae Kim, MD
Tel:  +82 2 22285679
Fax:  +82 2 3636248
www.severanscopy.com
sungjaekim@yumc.yonsei.ac.kr

16TH FRESH CADAVER KNEE ARTHROSCOPY COURSE
Shangri-La Hotel
Antalya, Turkey
April 5–7, 2007
For further information, please contact:
A. Merter Ozenci, MD
Tel:  +90 242 2496171
Fax:  +90 242 2274329
www.arthroscopy.org
merterc@yahoo.com

30TH FRESH CADAVER KNEE ARTHROSCOPY WORKSHOP
Yonsei University Hospital
Seoul, Korea
April 7, 2007
For further information, please contact:
Sung-Sae Kim, MD
Tel:  +82 2 22285679
Fax:  +82 2 3636248
www.severanscopy.com
sungjaekim@yumc.yonsei.ac.kr

A KNEE SUMMIT: FROM BIRTH TO DEATH
InterContinental Hotel and MHQA
Conference Center
Cleveland, OH, USA
April 11–14, 2007
For further information, please contact:
John A. Bergfeld, MD
Tel:  +1 216 444 2618
Fax:  +1 216 445 7162
bergfej@ccf.org

2ND CONGRESS OF THE GREEK ARTHROSCOPY SOCIETY
Zagio Megaro
Athens, Greece
June 14–16, 2007
For further information, please contact:
Michael Hartos, MD
Tel:  +30 210 69722
Fax:  +30 210 670107

16TH SEVERANCE ARTHROSCOPY LIVE SURGERY AND SYMPOSIUM
Severance Hospital
Seoul, Korea
June 21, 2007
For further information, please contact:
Sung-Sae Kim, MD
Tel:  +82 2 22285679
Fax:  +82 2 3636248
www.severanscopy.com
sungjaekim@yumc.yonsei.ac.kr

31ST FRESH CADAVER KNEE ARTHROSCOPY WORKSHOP
Yonsei University Hospital
Seoul, Korea
November 3, 2007
For further information, please contact:
Sung-Sae Kim, MD
Tel:  +82 2 22285679
Fax:  +82 2 3636248
www.severanscopy.com
sungjaekim@yumc.yonsei.ac.kr

32ND FRESH CADAVER KNEE ARTHROSCOPY WORKSHOP
Yonsei University Hospital
Seoul, Korea
November 10, 2007
For further information, please contact:
Sung-Sae Kim, MD
Tel:  +82 2 22285679
Fax:  +82 2 3636248
www.severanscopy.com
sungjaekim@yumc.yonsei.ac.kr

33RD FRESH CADAVER KNEE ARTHROSCOPY WORKSHOP
Yonsei University Hospital
Seoul, Korea
December 8, 2007
For further information, please contact:
Sung-Sae Kim, MD
Tel:  +82 2 22285679
Fax:  +82 2 3636248
www.severanscopy.com
sungjaekim@yumc.yonsei.ac.kr

34ND FRESH CADAVER KNEE ARTHROSCOPY WORKSHOP
Yonsei University Hospital
Seoul, Korea
December 15, 2007
For further information, please contact:
Sung-Sae Kim, MD
Tel:  +82 2 22285679
Fax:  +82 2 3636248
www.severanscopy.com
sungjaekim@yumc.yonsei.ac.kr

KINSA Anchor, knot included.

When performing shoulder instability repairs with the new KINSA Suture Anchor from
Smith & Nephew Endoscopy, you control the amount of tension in the suture without
driving the anchor deeper into the bone. This is possible because the KINSA Suture
Anchor includes a preloaded anchor with a self-locking, sliding knot contained inside.
Discover the golden difference for yourself.

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