News from the FASIG Research Chair

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Hello FASIG! As the new-this-year FASIG Research Chair, I would like to share a summary from the 17th ESSKA Congress that I recently returned from.

I have attended the ESSKA Congress 5 times since 2006 and must say it is one of my favorite meetings due to the interdisciplinary focus, good organization, and wonderful people. They also host the conference in great locations. This year's conference, in Barcelona, was no exception.

The European Society of Sports Traumatology, Knee Surgery & Arthroscopy (ESSKA) consists mainly of Orthopedic Surgeons, but Physical Therapists can also hold a conditional membership. The ESSKA consists of 3 sections, the Ankle and Foot Associates (AFAS), European Knee Associates (EKA), and European Shoulder Associates (ESA). Biannually, they organize a congress with a scientific program consisting of 6 concurrent sessions. For 3 out of the 4 days, there is also a physical therapy track organized by physical therapists. As part of the physical therapy track, there are also practical workshops for smaller groups. This year in Barcelona there were 4000 delegates.

The official clinical journal of ESSKA is the *Knee Surgery Sports Traumatology Arthroscopy* (KSSTA). The April issue this year was focused on the ankle and had the title "There is no simple ankle sprain." Twenty-five articles were on the lateral ankle ligament, 5 on peroneal tendons, 6 on syndesmotic ligament, 12 on talar osteochondritis dissecans, and 2 on osteoarthritis. The AFAS section had several scientific sessions based on the articles in this special issue during the congress. Hot topics were discussions on whether lateral ankle ligament reconstruction should be performed as an open or arthroscopic procedure, and the importance of anatomical reconstruction of the lateral ankle ligaments.

Other interesting sessions were called debates where the presenters were tasked with talking about their most challenging case. My favorite was the debate, "My worst Achilles case" where 5 orthopaedic surgeons, who are experts on Achilles tendon, presented. Often we just hear about success, but understanding the challenges raises both good clinical and research questions. The session provided for an interesting and informative discussion among the panel.

My favorite event of the week was a 1.5 hour session titled, "Peroneal tendon pathology-update from anatomy to surgery." There were 7 different presentations coupled with time for discussion. Again the session was partly based on articles published in the recent issue from KSSTA. Here I have summarized some of the sessions/articles on peroneal tendons from the KSSTA issue that I found of interest.

Peroneal Tendon Anatomy

Dr. Madirolas Alonso started the session with an excellent presentation of the peroneal anatomy based on a cadaveric study published in the KSSTA ankle issue.[1] The background to the article was the premise that peroneal tendon tears are relatively common and described to have poor healing tendencies. It has been assumed that the peroneal tendons have avascular zones in the area of the tears and this would explain the poor healing. For this study, dissections of 10 fresh frozen cadavers were performed. To visualize the blood vessels, the femoral artery (at the level of knee) was injected with natural colored latex. This study found that the peroneal tendons are well vascularized by distal branches of the peroneal artery. It was also described that the blood was supplied through a common posterolateral vincula connecting both tendons. The authors therefore recommended that the surgeons should aim for leaving the vincula intact to maintain the blood flow to the tendons. No avascular zones could be found in the peroneus brevis tendon.

Peroneal Tendon Dislocation

Dr. P. van Dijk presented their findings from a systematic review evaluating the return to sports and clinical outcomes in patients treated for peroneal dislocation.[2] The background for this study was that the majority of peroneal dislocations occur in the athletic population as part of a traumatic ankle event. The literature reports numerous surgical treatment strategies but there is no consensus how to best treat this condition. Since return-to-sport is of importance for an athlete, the authors wanted to compare the rates of return to sports and clinical outcomes between different surgical techniques. The eligibility criteria for inclusion were (1) diagnosis of peroneal subluxation or dislocation confirmed during surgery, (2) the AOFAS or return-to-sports was described, (3) the surgical technique was well described, and (4) full texts were available in English. A total of 13 studies were included in the study. All the included studies were rated as having low quality. The return-to-sports rate ranged from 55% to 100%, and the time-to-return was 1.2-12 months. Surgical treatment that combined repair of the superior peroneal retinaculum and groove deepening of the retro-malleolar groove had higher rate-of-return to sports compared to solely repairing the retinaculum. The authors concluded that surgical treatment provided good outcomes, high satisfaction, and a quick return to sports; however, remember that this is based on low quality studies. The rehabilitation was also not mentioned.

Rehabilitation After Surgical Treatment of Peroneal Tendon Tears and Ruptures

The presenters at this session were all orthopaedic surgeons; I really missed a good presentation on rehabilitation. I did, however, find an article in the special issue of KSSTA addressing rehabilitation after surgical treatment of peroneal tears and ruptures.[3] This was a systematic review and a total of 47 studies were included. The authors found that the rehabilitation protocols varied in number of weeks of nonweight bearing, partial weight bearing, and when range of motion were allowed. In summary the median duration of total immobilization after

primary repair was 6 weeks (range 0-12), after tenodesis 7 weeks (range 3-13), after grafting 6 weeks (range 3-13), and after end-to-end suturing 8 weeks (range 6-11). The authors pointed out that in recent years there seem to be a trend towards starting range of motion and rehabilitation within 4 weeks after surgery. The authors proposed a rehabilitation protocol in this article based on the reviewed articles and personal clinical experience. My disappointment with this program is that it is another protocol where the progression of the rehabilitation is mainly guided by the time since surgery. Since patients recover at a different pace, it is also of importance to evaluate if the patient can safely progress to the next stage of rehabilitation. It would have been nice if the authors had included suggestions for outcome measures to evaluate recovery and function, and described important milestones for each phase of the rehabilitation. Seems to me that there is a need for physical therapy research to evaluate the outcome of early mobilization and rehabilitation compared to the more conservative postoperative regimes.

In summary, this was another great conference but I think more research is needed in the area of physical therapy guided treatment and rehabilitation for patients with peroneal tendon injury. Hope to see you at the 18th ESSKA Congress May 9-12, 2017 in Glasgow, Scotland, UK.

REFERENCES

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