

PRACTICAL ARTHROSCOPY

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Information
on Arthroscopy
and Sports Medicine

N E W S L E T T E R

The Arthroscopic Surgeons' Blog – Don Johnson

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Editorial

The AANA annual spring meeting in Washington DC was one of the busiest meetings for me in recent years. I thought that the past past past president just got to go to all the parties in the presidential suite. Guess not, as I had a lot of committee meetings to attend, and had to be well organized to get to the knee sessions. I am very happy that AANA now has an Educational fund of 9 million dollars that will be used to support our future educational activities. This puts us in a very strong healthy fiscal position. I still remember the days when the membership was asked to give at least \$500 each to prop up a seriously ailing association. Our current meetings have been very successful with about 900 attending the latest meeting in Washington. We have added the Metcalf

winter meeting in Sun Valley hosted in conjunction with Bob Burks to our agenda for next year.

The Journal of Arthroscopy is also very solid with 5,000 subscriptions. In Jan of 2009, a Spanish translation of the abstracts will be available online. Portuguese will be added soon after. The Journal is one of the most successful orthopaedic publications. With the help of ISAKOS, and quality international submissions, it is continuing to improve.

We also have a North American traveling fellowship that spends 3 weeks touring centers around the country ending up at the annual meeting next year in San Diego. This fellowship is open to anyone who is in practice in North America and is within 10 years of finishing his training. I would encourage you to apply for this opportunity by downloading the application from the AANA website, www.aana.org

AANA Spring Meeting in Washington DC

Knee Ligament Reconstruction

Central Quadriceps Tendon Graft for ACL Reconstruction

I did manage to hear the 2 back to back talks on the use of the quads tendon for ACL reconstruction.

Fulkerson and his group reported on their experience with the no bone quads tendon graft. This was a retrospective review of 168 patients followed for an average of 5 years. There was 42% of the group lost to follow up. The KT results showed that 86% of the patients were less than 3 mm. The average IKDC score was 87. The authors felt that this graft had the lowest donor site morbidity, and I would have to agree. There was no significant anterior knee pain, as with BTB, and no flexion weakness as with hamstrings.

The companion paper to this was by Walter Shelton who also has had a long standing interest in the quads tendon autograft. Their study was on 205 quads tendon ACL

reconstructions with a follow-up of 56 months. The patients were divided into 4 groups, isolated, with meniscal injury, with chondral injury, and those with meniscal and chondral injury. These were compared to a group of BTB patients. The IKDC showed that 87% had a rating of A and B. The KT showed 1 mm greater on the operative side compared to the normal knee. 90% of the patients had a single leg hop >90% of the normal side. As expected, the isolated ACL patients had better results.

This is certainly a good option to the BTB and HS grafts. It might be the best option for the middle aged soccer player who still wants to play at a high level and not lose his sprint speed. My only hesitation is that the only fixation is with interference screws. As we have found out in the past the fixation strength is certainly dependent on the quality of the bone. I would be cautious with this method of fixation in middle aged females or anyone who has had a long standing ACL deficient knee due to the possible osteopenia.

ACL reconstruction over 40 years of age

A statistical paper (values decision analysis) by James Lubowitz came to the conclusion that for active patients over 40 years of age the surgical treatment of an ACL rupture is the optimum management. Like many other statistical analysis this one has to be taken into context when counseling a patient on his best course of treatment. Many relatively inactive patients over 40 can cope with their ACL deficient knee if they modify their activities.

Knee dislocations

Another interesting paper by Peter MacDonald from Winnipeg reviewed the outcome of knee dislocations that had the posteromedial or posterolateral corner repaired primarily or with a late reconstruction. Seven of the 16 repairs had to have a late reconstruction. The authors concluded that a primary repair was not indicated in the knee dislocation due to the high failure rate, 42%, and suggest a primary reconstruction should be done.

Having said that, the difficulty is deciding which technique should be used to primarily reconstruct the corners. I recently heard James Stannard from the trauma center in

Birmingham, Alabama describe his approach to the posteromedial corner reconstruction. He does a primary repair of whatever tissue he can and then uses an allograft to sling around the semi-membranosus to augment the repair.

I have also heard a good review by Jung Bok Jung from Korea who advises a fibular head sling for the augmentation of the acute lateral repair.

So the consensus seems to be to augment the acute repair of the corners in the knee dislocation.

Double vs Single bundle PCL reconstruction

Greg Fanelli gave his update of his consecutive case series of PCL reconstruction. He now has 45 cases in each of the double bundle and single bundle PCL reconstruction. He is still not able to show any significant subjective or objective difference in the 2 groups. He is continuing to do double bundle reconstruction and has now done 100 double bundle with the same surgical technique. He uses an inside out drilling of a complete femoral tunnel. For the anterolateral bundle he uses an 11mm Achilles allograft without bone, and for the posteromedial bundle an 8 mm tibialis allograft. Both grafts are passed from the femur to the tibia, anchored on the periosteal surface with a large button, and interference screw. On the tibial side, the graft is anchored in the tunnel with an interference screw, and backed up with screw post. The only difference in the single and double technique is to use the additional tibialis graft for the posteromedial bundle.

It seems to me to be a lot of extra work, without significant benefit. If both Fanelli and Stannard are doing double bundle, and neither one can show a real difference, I think that the rest of us should wait until they can demonstrate an improvement with 2 bundles.

DVT prophylaxis.

Just an aside comment on the post-op regime that I have changed in the past year is DVT prophylaxis. Based on some of the total knee literature and the recent study by

Kevin Bozic from San Francisco which shows the efficacy of ASA to prevent Deep Venous Thrombophybitis (DVT) and Pulmonary Embolism (PE), I have advised all knee ligament reconstruction patients to use 325 mg of ASA daily for one month. In addition, they wear a long leg compression stocking on the involved knee for one month post op.

The Bozic study was a multicenter trial on the comparison of ASA, Warfarin, and LMWH post total knee replacement. Aspirin had a lower rate of DVT than Warfarin, and was comparable to the injectables. There was no difference in bleeding, wound infection or mortality.

I have concluded, based on some discussion with my American colleagues, that ASA is a safe and effective regime to prevent DVT post ACL reconstruction. I would still be more aggressive with someone with significant risk factors for DVT, but for all the others ASA is the choice. I think that it is about time that we recognize the frequency of post-op DVT and use some preventive measures.