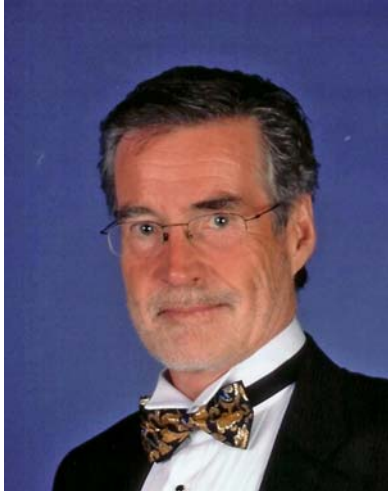


Editorial

Presidential message – AANA Newsletter May 2005



How do you learn a new arthroscopic procedure?

Things are very different from 1972 when I decided to learn how to do arthroscopy. I went to visit Bob Jackson for a few days, and watched him do a couple of cases. He said “go home and do 50 cases and then come back and we can discuss your experience.” Talk about being out there on your own! This technique worked at the time, but now we have many more resources available to the surgeon who would like to learn a new procedure.

It is important to have insight into your level of comfort with a new procedure. Are you an early or late adopter of new technology? You should also answer the questions, why do you want to do this and how good are your skills? Some surgeons can simply watch a video tape and then do the operation, but for many this will still leave them with a steep learning curve. How do you get over this unpleasant early learning curve, and how many cases do you need to do before you reduce the complication rate, and conversion to an open operation? No one knows the exact number, but it seem to vary between 10 and 50 cases. Jim Lubowitz and his partner, Dan Guttmann, presented an analysis of the first 100 cases of shoulder arthroscopy, and showed that the time of the operation significantly dropped after 10 cases, and again after 50 cases. The length of time of the operative procedure is not the best outcome measurement, but certainly is a guide. One of the things that I tell our fellows is “first you get good, then you get fast”

But, what is the process to learn how to do a new procedure? Initially you can attend an update meeting, listen, and perhaps watch an expert perform an arthroscopic cuff repair. If you have never experienced this type of operation the subtleties may be wasted by only watching an edited video. The next step is to go through the stages of the operation on a plastic model. This is a very sound

method to learn the principles and perform each part of the operation in the correct sequence. One of the facilities that offers this type of instruction is the SCOI classroom in Van Nuys, California. <http://www.scoiclasroom.com/> The shoulder courses at the learning center in Chicago also offer this same experience, but these master courses also follow the plastic model with the hands on cadaver practice. This is the ideal sequence to learn a new operation; listen to the expert present the technique of the procedure, practise on the plastic model, and finally, do the operation on a cadaver. Now you have significantly reduced a very steep learning curve to something more manageable. Jim Esch gave an excellent overview of how to learn a new procedure at the recent AANA winter course at Whistler. His recommendations are to record your procedures, and review the video. Draw and write out the steps of the procedure. Know the complications and bail out for each of the problem areas. Go to the recognized courses; listen to, and watch the experts. Do hands practice on the Alex model, and with cadavers. And finally practice, practice, practise. "After golf, golfers practise golf...." After surgery, surgeons practise golf...." His final questions were What does "Being Aware" mean to you? What does "Being All That You Can Be" mean to you?" I think that it means do the best possible job for your patients!

AANA winter meeting in Whistler BC



Fig 1 The skiing on top of the mountain was spectacular.

This first ever AANA ski meeting turned out to be very successful with approximately 250 registrants. This was just before the big meltdown, when all the snow was washed away. There is obviously a need for this type of venue that drew a different crowd compared to some of our other meetings. Many of the attendees were young surgeons who brought their families to ski for the week. Others were just die hard skiers looking for a CME event to combine with the ski trip. The format of practical lectures in the morning, with hands on plastic model labs and live surgical demonstrations after skiing provided something for everyone. This was a good format to improve ones skills and take home new information. However, the skiing was just like back east, cold, windy, and icy. This was not the usual western Whistler weather, but it was mostly sunny up top, and not too crowded.

What was new? One of the interesting concepts that I heard Buddy Savoie talk about was his experience with several cases of chondrolysis of the articular cartilage after thermal treatment of the capsule of the shoulder. He said that there is no evidence that thermal injury caused chondrolysis, but has been reported following thermal treatment of the capsule. He had not had a case himself. He has been doing an interposition arthroplasty with the Restore graft. He sutures this to the glenoid arthroscopically. This is a very novel approach to a difficult problem.

My thought was that there may be some other application for this, such as a patellofemoral interpositional arthroplasty. There was an old technique of turning down a fascial flap to put into the trochlea in very severe cases of chondromalacia. Perhaps the Restore patch could revive this procedure.

Femoral Tunnel Placement in ACL Reconstruction

The difficulty with the transtibial tunnel method of creating the femoral tunnel is that sometimes you can not get far enough down on the lateral wall. If this is the case, you can switch to the anteromedial portal to insert the femoral aimer. The disadvantage is having to remove the leg holder strap, and place the knee in hyperflexion. You might want to try this technique first. With the leg hanging free over the end of the bed, apply a varus force to the lower leg with your knee. Lift up and rotate the aimer to move to the 10 o'clock position on the right knee. Fig 2.



Fig 2. The femoral aimer is placed through the tibial tunnel. The position of the tibial tunnel must be just adjacent to the medial collateral ligament. Fig 3.

Extra-articular anterolateral rotatory instability reconstruction – a la David McGuire.

There are some patients who continue to have a positive Lachman with a firm end point, and a pivot shift examination after an ACL reconstruction. The graft is intact, and usually they only have a few mm of side to side difference on the anterior translation with the KT-1000 arthrometer. If the patient is symptomatic a revision reconstruction may be done. However, an option is the procedure described by David McGuire in Arthroscopy Jul-Aug 2000. This extra-articular reconstruction will control the persistent pivot shift. The epicondyle of the femur and Gerdy's tubercle are exposed on the lateral side of the knee. Fig 6. K-wires are inserted into the bone, and a suture placed around the wires. Fig 7 and 8.



Fig 6. The exposure of the tunnel sites.



Fig 7. The k-wires inserted into the tunnel sites.



Fig 8. The suture placed around the wires to locate the isometric points.

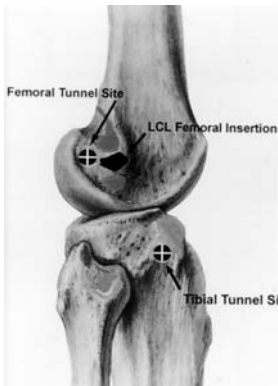


Fig 9. The tunnel sites. (courtesy McGuire)

Once the isometric point is found, the tunnels are drilled. The allograft is prepared the correct length, the ends are whip stitched, and pulled into the tunnel. The graft is passed subcutaneously between the 2 tunnels. The graft is fixed in the tunnels with interference fit BioScrews. The patient is protected with a brace during the rehab.

This is a much simpler procedure compared to a revision reconstruction. The missing point is how to determine which patients should have an extra-articular procedure, and do this at the time of the primary ACL reconstruction. It seems that I have only made this diagnosis after the fact, when the patient has a pivot shift in the post-operative period. This scenario of the positive Lachman with a firm end point, but a positive pivot shift may also be the result of a graft that is too vertical. In that situation, a revision ACL reconstruction is indicated. The vertical graft may be prevented by the technique shown on page 3.

Trauma and the bone tumor presentation



Fig 10. A lytic lesion of the medial tibial plateau.

This young student presented with pain after playing soccer. The routine x-ray revealed a probable Giant cell tumor of the medial tibial plateau.

The message is to x-ray everything! Tumor patients often present with a history of trauma to a sports medicine clinic. You can't afford to miss a bone tumor, use x-rays liberally.

Repair of posterior horn tear of lateral meniscus

This patient had an avulsion of the posterior horn of the lateral meniscus associated with an ACL tear. Fig 11. The meniscus and the attached ligament of Humphrey could be easily approximated to the tibia. Fig 12. The tibial attachment

site was prepared to bleeding bone with a curette. Fig 13. The spectrum hook is used to pass a suture around the root of the meniscus. Fig 14. The suture is pulled into the tunnel that was created for the passage of the ACL graft. Fig 15, and fig 16. This brings the posterior horn of the meniscus back to it's normal position on the back of the tibia.

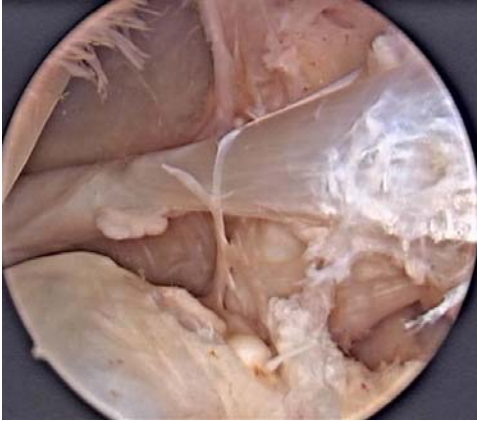


Fig 11. The avulsion of the root of the posterior horn of the lateral meniscus.

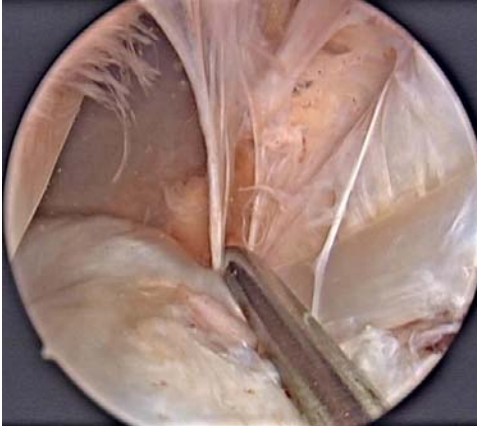


Fig 12. The approximation of the tear to the tibia.

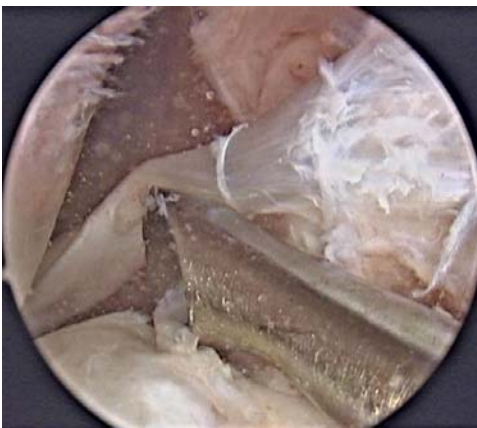


Fig 13. The preparation of the tibia.



Fig 14. The spectrum suture hook is used to pass a suture around the meniscus.

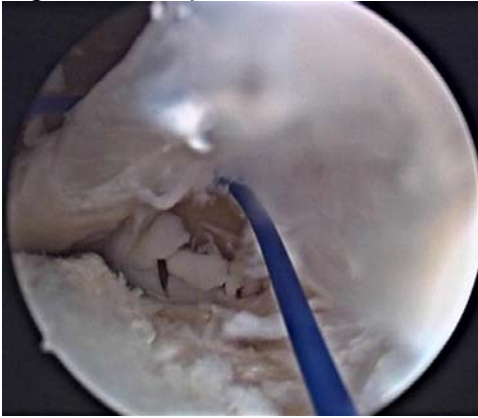
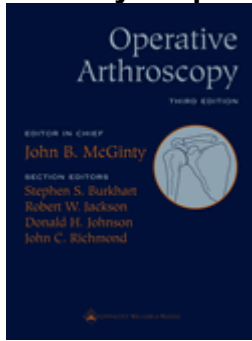


Fig 15. The suture is placed to allow the meniscus to approximate the prepared site on the tibia.



Fig 16. The suture is pulled into the tibial tunnel that was created for passage of the ACL graft.

McGinty's Operative Arthroscopy Textbook



Extensively revised and updated for its Third Edition, **Operative Arthroscopy** remains the most comprehensive and authoritative reference in this rapidly advancing specialty. World-renowned experts describe the latest instrumentation and techniques and detail proven minimally invasive procedures for the knee, shoulder, elbow, wrist, hip, foot, ankle, and spine.

This edition gives experienced and training orthopaedic surgeons the state-of-the-art information they need to stay current and increase the coverage in their practice. New topics include meniscus repair with implantable devices, arthroscopic knot tying, post-traumatic and post-surgical shoulder stiffness, the thrower's shoulder, thermal capsulorrhaphy, fractures about the shoulder, arthroscopic radial head resection, arthroscopic management of the stiff elbow, elbow arthroscopy in the throwing athlete, hip arthroscopy in the athlete, arthroscopic-assisted management of ankle fractures, osteochondral autografts of the talus, and subtalar arthroscopy.

Hundreds of quality illustrations--including full-color arthroscopic views, surgical exposures, and line drawings--guide surgeons in technique and clinical decision-making. The text offers stepwise intraoperative instruction on commonly performed procedures, including cruciate ligament reconstruction, meniscal repair, stabilization of the shoulder, treatment of rotator cuff tears, and meniscal and chondral allografts.

This edition includes a free DVD of surgical procedures, with over 200 minutes of select authors' video to demonstrate key surgical points and techniques.

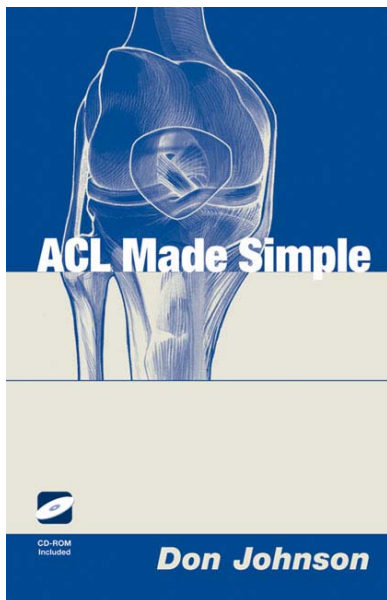
See full description at:

<http://www.lww.com/product/?0-7817-3265-4>

ACL Made Simple

All you wanted to know about the ACL is now available in this book and CD from Springer. See the web site at:

<http://www.springer-ny.com/detail.tpl?cart=10722687896533522&isbn=0387401466>



ACL Made Simple is a book/CD-ROM combination that educates orthopedic residents, athletic trainers, and various medical support staff about the fundamentals of ACL injuries. The content is both thorough and practical. Readers benefit from comprehensive discussions of diagnosis, partial tears, treatment options, operative techniques, and complications. This definitive guide also outlines a six-month rehabilitation program complete with goals, stages, and exercises. More than 150 photographs and diagrams illuminate key concepts. The CD-ROM is keyed to each chapter and complements the text, making it easy for users to locate sections of particular interest. The numerous graphics and narrated video clips are dynamic tools that highlight topics including the mechanism of injury, physical examination, and surgical techniques.

Table of Contents

Contents: Introduction, Diagnosis, Partial Tears of the ACL, Treatment Options, Graft Selection, Hamstring Graft Reconstruction Techniques, Patellar Tendon Graft Technique, Rehabilitation, Complications, Results, references

Upcoming Meetings

- **Banff Arthroscopy Meeting** Feb 26-Mar 1, 2005.
Contact Dr. Mark Heard
Phone 1 403 760-2897 Fax 1 403 760-8234
Email mheard@telusplanet.net
Winter Ski Meeting with fully guided back country skiing
- **AAOS Annual Meeting** – Washington DC Feb 23-27, 2005
Contact www.aaos.org
- **AANA Specialty Day at the AAOS** – Feb 26, 2005. Washington DC
Contact AANA www.aana.org

- **ISAKOS biennial Meeting** Hollywood Florida, April 1-7, 2005
Contact www.isakos.com
- **Residents and Fellows Arthroscopy Conference** Palm Island FL. April 22-23, 2005. Contact Karen Sousa at Linvatec - ksousa@linvatec.com
- **AANA Spring Meeting** – Vancouver BC, Canada May 12-15, 2005
Contact www.aana.org
- **San Diego Shoulder Course** - June 22-25, 2005
Contact www.shoulder.com