

Minimally Invasive Shoulder Surgery Advances the Management of Shoulder Problems

By Rod Herrin, M.D.
Orthopedic Center of Illinois

A painful or unstable shoulder is relatively common in our society. Two of the common problems seen by orthopedic surgeons managing shoulder problems are with the rotator cuff and the unstable shoulder. Generally problems with instability are seen in a younger population whereas rotator cuff problems are more typically seen as we get older. As with many musculoskeletal problems the initial treatment is usually nonoperative, but sometimes surgery is required. As medical advances continue open procedures on the shoulder are starting to be replaced by less invasive arthroscopic procedures.

Shoulder arthroscopy was first used to treat shoulder problems in the late 1980's. It initially was used primarily as a diagnostic procedure. However, with advances in technology, skill and training orthopedics surgeons are now able to accomplish major shoulder procedures arthroscopically. In other words, procedures on the shoulder that previously required relatively large incisions (and probably more pain) can now be done through several small portals while viewing the operation with the arthroscope. In some instances, due to the fact that what is seen with the arthroscope is magnified, the procedure can be done more precisely.

Some of the techniques can be technically difficult to perform, so the surgeons performing them typically have spent time obtaining additional training so they can perform them well. Overall, as the techniques have improved the results for most of these procedures have been comparable if not better than with the open procedures with the advantage of less overall postoperative pain.

In addition to potentially less postoperative pain, other advantages to the arthroscopic technique are being noted. For example, the procedure is more cosmetically appealing due to the fact that the portals used to perform the procedure are essentially small punctures in the skin. This naturally leads to much less scarring as compared to an incision. There is also less risk to the deltoid attachment which is a benefit, which can be a risk with an open rotator cuff repair. Also, when performing a stabilization procedure arthroscopically the risk of losing motion or developing stiffness of the shoulder appears to be less as compared to an open (with an incision) stabilization procedure.

The unstable shoulder has been dealt with in the past with an open procedure and these have worked fairly well but there are some concerns such as loss of motion and injury to the front rotator cuff tendon (subscapularis). These risks are much less when doing the procedure arthroscopically. In the past the risk of recurrent instability was higher with the arthroscopic procedure than with the open procedure. However, as our technique and technologies improve, recent studies have indicated the risk of recurrence will be the same or possibly lower with the arthroscopic techniques. In other words, the same benefit may be obtained with fewer risks.

Recent studies indicated a high level of patient satisfaction with an arthroscopic rotator cuff repair. That is expected to continue and probably improve with continued advancements in surgical technique and specifically designed instrumentation.

Not all problems are necessarily amendable to the arthroscopic method, but the number that are does appear to be increasing. Whether or not they are done this way is best left up to the discretion of the treating orthopedic surgeon. This would be dependent on the surgeons training, skill, and comfort with the procedure. If you have any questions regarding the advantages and disadvantages of arthroscopic shoulder procedures please contact us at the Orthopedic Center of Illinois.