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Arthroscopic Rotator Cuff Repair

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Rotator cuff tears are a very common injury seen in any orthopedic practice. They occur commonly between the ages of 35 and 60, secondary only to decreased blood supply, arthritis and chronic wear and tear injuries. In patients younger than 40 years old, trauma is usually the cause of rotator cuff tear.

The rotator cuff is a complex of four muscles around the shoulder girdle that allow elevation of the upper extremity so that the hand can be placed in space to perform overhead tasks. The muscles start at the shoulder blade and insert into the humerus, the large bone of the upper arm. Without a functional rotator cuff, it is difficult if not impossible to perform simple duties such as putting on a shirt or getting objects out of a cupboard.

Common symptoms of a rotator cuff injury are pain and dysfunction. Frequently, patients are unable to cite a specific time when an injury occurred. Patients often complain of having difficulty performing overhead tasks and feeling weak when doing so. Night pain is also a frequent symptom that occurs when the rotator cuff has been injured. Pain is typically present in the upper part of the arm and can be accompanied by radiating pain down the arm and pain and numbness into the hand.

Treatment for rotator cuff injuries is dictated by the chronicity and the size of the tear. The initial treatment of most

injuries consists of focused physical therapy on regaining range of motion and strength in the shoulder. Physical therapy is often coupled with anti-inflammatory medication or injections to get optimum results. Rotator cuff tears are not repaired with physical therapy but it does strengthen the muscles around the shoulder so that the patient can compensate for the injury. Small tears do tend to become larger with time, however treatment is focused toward symptoms and not just the size of the tear.

If conservative treatment fails and pain and dysfunction persist, then surgery is a viable and effective option. The goal of surgery is to fix the rotator cuff tendon back to the humerus so that the patient's shoulder can regain normal function. There are several techniques that have been used for surgical fixation. Traditionally, open techniques were used. But over the last decade, newer, less-invasive arthroscopic techniques have become the standard of care.

Arthroscopic repair has several advantages over open repair. The first is that typically only a few small stab incisions are needed to perform a successful repair. This results in less surgical trauma and post-operative scarring and the recovery time is shorter. Another advantage of arthroscopic repair is that a full direct arthroscopic

examination of the shoulder can be done at the time of surgery. Other structures such as the labrum, biceps tendon, distal clavicle, acromion, etc. are all inspected during surgery and repaired if necessary. Although pre-operative radiographic studies such as MRI examinations are excellent diagnostic tools, they do have limitations and direct inspection of all structures within the shoulder helps with these shortcomings. Often with open repair all of the anatomy of the shoulder is not directly inspected and thus other damage to the shoulder can be missed and not addressed at the time of surgery.

Following surgery, physical therapy is a key part of the treatment process. Therapy protocols are geared toward the size of the repair that was required. Typically, the entire recovery process takes 12-16 weeks but again is dependent on the size of the initial tear. The surgeon and the therapist need to work closely together to get an optimal result for the patient.

Rotator cuff injuries are common but often patients have excellent recovery with appropriate management. Arthroscopic techniques have become the standard of care over the last decade and are being performed locally in Yankton.