Aurora BayCare Medical Center

Aurora Health Care® BayCare Clinic

FAQ's frequently asked questions: Rotator Cuff Repair

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1. What is the rotator cuff?
The rotator cuff is a group of 4 tendons that arise from the shoulder blade and attach to the upper arm, surrounding the humeral head. While each of the named tendons has a specific individual function, the main function of the group is to keep the humeral head (ball) centered on the glenoid (socket).

2. What is a rotator cuff tear?
This is when 1 or more of the named tendons tear away from the upper arm. Tears can range in size from involvement of only a portion of the tendon (partial thickness), to full thickness tears of varying sizes (small to massive)

3. What causes a rotator cuff tear?
There are a number of factors that contribute to tearing of the rotator cuff. There are intrinsic factors, such as normal aging of the tendons and impaired vascularity. There are extrinsic factors, such as overuse or injury. In addition, the acromion process (the bone that overhangs above the rotator cuff) may develop downward protruding spurs that can rub on the rotator cuff tendons, weakening them and predisposing them to tearing. This is referred to as “impingement”.

4. What are common symptoms of a rotator cuff tear?
The most common complaint in patients with a rotator cuff tear is pain. It is usually worse with activity, but commonly is present even at rest. In fact, many patients have significant difficulty at night. They can have trouble getting to sleep, and awaken frequently because of pain in the shoulder.

5. How is a rotator cuff tear diagnosed?
The diagnosis is usually suspected following a history and physical examination performed by a physician, therapist, or other health care provider. Plain X-rays may be performed to look for other causes of shoulder pain that may mimic rotator cuff disease. Commonly, simple conservative treatment is begun and response is monitored. If there is no relief of symptoms, an MRI may be recommended to see if the rotator cuff is torn.

6. What non-surgical treatments are available to treat rotator cuff disease?
Non-surgical treatment focuses on rehabilitation, and this can be done in a supervised setting (physical therapy), or with a home exercise program. The goal of rehabilitation is to improve the function of the rotator cuff. Frequently, this alone can help dramatically. To help control symptoms of pain, non-steroidal medications may be prescribed. Occasionally, modalities such as ultrasound, may be used to help alleviate symptoms. In addition, selective use of cortisone injections may provide some benefit.

7. When is rotator cuff repair considered?
Rotator cuff repair is considered when non-surgical management fails to provide adequate relief of symptoms, and MRI of the shoulder shows a repairable rotator cuff tear.

8. What is a rotator cuff repair?
Rotator cuff repair is a procedure that involves reattaching the torn tendon(s) back down to bone. It is commonly performed in association with smoothing down the acromion bone spur (acromioplasty), as well as other procedures that may be required to treat all areas of pathology that may be contributing to pain.

9. What are the different techniques used to perform rotator cuff repair?
While there are differing methods of repairing rotator cuff tears, the goal of all of these methods is to achieve healing of the torn tendon.

Open repair: the deltoid is detached, and the repair is performed.
- **Pros**- excellent results
- **Cons**- painful, risk of deltoid detachment, cannot assess/repair other sources of pathology inside the joint (present in over 50%).

Mini-open repair: deltoid "split", or so called deltoid-on approach
- **Pros-** similar results to an open repair, but with a smaller incision. By not detaching the deltoid, this surgical approach tries to avoid potential complications with the deltoid. Typically done in conjunction with an arthroscopic component, so additional pathology can be diagnosed and treated.
- **Cons-** This approach can be quite painful, and has been associated with slightly higher rates of post-operative stiffness.

Arthroscopic repair: small incisions, cannulae placed through the deltoid
- **Pros-** similar results as open and mini-open. Minimal damage to the deltoid. Able to diagnose and potentially address all pathology. Less painful than other 2 approaches.
- **Cons-** steep learning curve for surgeon and OR team, cost of implants, ? higher re-tear rate

10. Are there advantages to having my rotator cuff tear repaired arthroscopically?

The main advantages to an arthroscopic repair are smaller incisions, and therefore less pain and scarring. Additional advantages include the ability to diagnose and treat all potential sources of pain in the shoulder joint.

11. What happens the day of surgery?

Patients typically arrive 2 hours before their scheduled procedure. This allows for enough time for pre-operative nursing assessment, starting IV's, receiving pre-op medications, and consultation with the anesthesiologist.

Surgery typically takes between 60-90 minutes, after which the patient is brought to the recovery area. Patients typically spend between 30-60 minutes in the initial recovery. Once they have recovered enough, and meet certain criteria, they are brought into the next phase of recovery. There, they continue their recovery process for another 60-90 minutes. Once discharge criteria are met, the patient is given their prescriptions, and all of the discharge instructions are gone over in detail. The patient is then released from the hospital to go home.

12. What about anesthesia concerns?

The majority of patients who have shoulder arthroscopy performed receive a combination of a general anesthetic and a regional anesthetic (interscalene block). The block is recommended pre-operatively to decrease post-operative pain. An additional benefit to doing the block pre-op is a reduced need for narcotic use during the procedure, which is associated with post-op nausea.

Specific questions about anesthesia, including the risks and potential complications, can be answered by the anesthesiologist the morning of the procedure.

13. I hear rotator cuff surgery is painful. What are the tools available to help control post-op pain?

We routinely offer pre-op interscalene blocks to minimize the patient's post-op pain. There are occasions when a pre-op block may not be recommended, or is performed but doesn't work. In those circumstances, we may place a small catheter (tube) into the shoulder after the procedure, which delivers medication directly into the surgical site. This can be very effective at reducing post-op pain. Additionally, patients are discharged from the hospital with prescriptions for narcotic pain medication. Finally, ice therapy is recommended to reduce pain and inflammation following surgery.

14. How long do I need to wear my sling after surgery?

A sling is worn for 6 weeks following rotator cuff repair. It can be removed for hygiene, dressing, or therapeutic exercise. It is used to maintain the arm in a comfortable position while the repair heals. An additional benefit is that it serves as a reminder to the patient that the arm should not be actively used to lift or reach at all during the first 6 weeks. Reaching or lifting during the first 6 weeks can cause the repaired tendon to pull away from the bone, preventing the repair from healing.

15. What activities can I do following surgery?

Activities that do not require reaching or lifting with the arm are permitted. I prefer no active use of the operated arm for the first 6 weeks.

16. Do I need physical therapy?

Physical therapy is critical following rotator cuff repair. Most commonly, patients are instructed in a passive home exercise program that they perform on their own for the first month. On occasion, patients may experience difficulty in getting their motion back on their own. On those occasions, physical therapy may be initiated sooner.

Once PT begins, the therapist can assist in helping patients regain their range of motion. Once motion has been restored, they will initiate a series of exercises aimed at restoring strength and function. This includes trying to get the rotator cuff muscles and the muscles around your shoulder blade to work together in a coordinated fashion. Physical therapists typically follow a protocol as outlined by your surgeon. Additionally, therapists are very skilled at helping to minimize symptoms of pain associated with rotator cuff repair.

17. What outcome can I expect from rotator cuff repair?

Patients who undergo arthroscopic rotator cuff repair can typically expect a significant improvement in pain. In fact, when patients are asked about their satisfaction with the procedure, nearly 95% say they would have the same thing done on the other shoulder if presented with the same problem again.

Commonly, when patients with a painful rotator cuff tear undergo repair, their improvements in pain translate into more function with the affected arm. However, improvements in strength are not as predictable following rotator cuff repair.

18. Are there any specific complications following arthroscopic rotator cuff repair that I need to be aware of?

In contrast to open rotator cuff repair, complications with the deltoid are very rare. Additionally, post-op frozen shoulder is less common than with the mini-open repair.

The main complication seen with arthroscopic rotator cuff repair is re-tear of the rotator cuff repair. Initial reports had a significantly higher re-tear rate than published reports using other techniques. However, through a combination of improved techniques, and improved implants designed to complete the repair, the healing rates are much improved. In fact, the gap between the techniques has narrowed to the point that the difference is negligible.

Logically, there is a direct correlation between the number of rotator cuff repairs a surgeon performs and the clinical results.

19. Am I a candidate for arthroscopic rotator cuff repair?

This determination can be made only following consultation with an orthopaedic surgeon. Not all patients with a rotator cuff tear need, or will benefit from, rotator cuff surgery.