



Rotator Cuff Repair ***Pre-Operative Packet***

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A Message from Your Surgeon:

We are here to help throughout your recovery!

Dr. Brad Carofino specializes in shoulder and upper extremity surgery. He is one of the only surgeons in Virginia who has completed a Shoulder Surgery Fellowship. He performs hundreds of complex shoulder surgeries each year, and *we pride ourselves on delivering exceptional care to each of our patients.*

Recovering from Rotator Cuff Repair surgery is a long process. We are here to help you throughout the entire process, not just on the day of surgery. *If you are having a problem or concern, we want to hear from you. If you have a question, we want to hear from you.* Contact information for my team is listed below; please contact us if we can help in any way!

Most Sincerely,



Brad C. Carofino, MD, FAAOS
Shoulder Specialist
Team Physician: Norfolk Tides

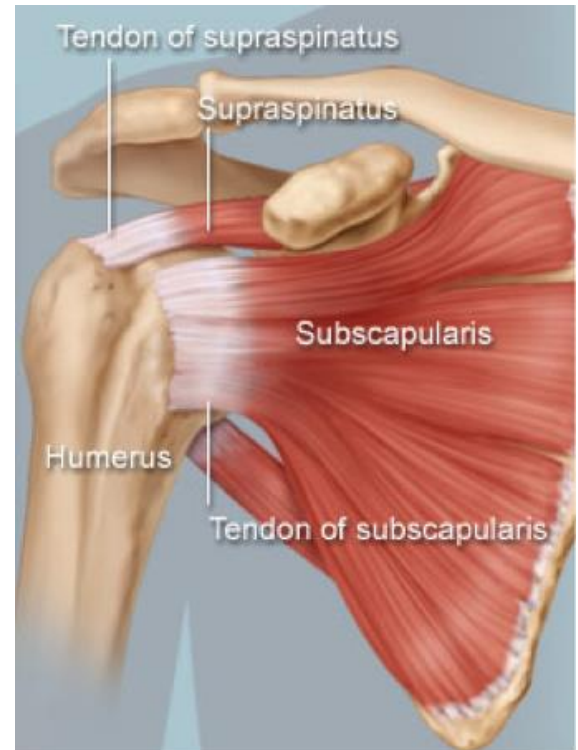


- Tammy English: Secretary to Dr. Carofino
 - Phone Number: 757-321-3300 ext. 3397
 - Email: EnglishT@atlanticortho.com
 - We find it best to utilize the Patient portal for communication. Please register at:
<http://www.atlanticortho.com/portal/>
- Jennifer Rascoe, NP-C
 - Nurse Practitioner to Dr. Carofino
- Brice Snyder, MSAT, LAT, ATC, OTC
 - Athletic Trainer to Dr. Carofino
 - Work Cell: 757-679-3407
 - Work Email: SnyderB@atlanticortho.com
 - Brice is available to answer your questions related to surgery and the post-operative rehabilitation plan.
- Dr. Brad C. Carofino, M.D., FAAOS: Shoulder Specialist
 - Email: CarofinoB@atlanticortho.com
 - Dr. Carofino is available for contact on non-surgery days via email.
 - If you need immediate communication with someone for questions or concerns about your surgery or rehabilitation, contact Brice Snyder.

All About the Rotator Cuff

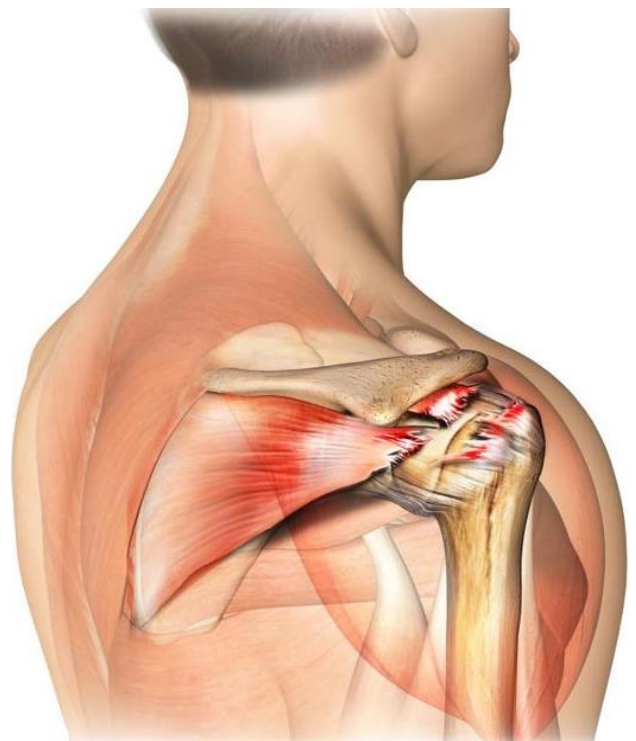
What is the Rotator Cuff?

- The Rotator Cuff is four muscles that attach to the ball of the shoulder (humeral head). These muscles attach to bone as tendons, which can be seen in the pictures as the white extension of the muscle. When the rotator cuff tears it occurs where the tendon attaches to the bone.
- The four rotator cuff muscles are called the:
 1. Supraspinatus
 2. Infraspinatus
 3. Teres Minor
 4. Subscapularis
- The rotator cuff muscles help raise the arm in the air and rotate the arm.



What is a tear of the Rotator Cuff?

- A rotator cuff tear occurs when a hole forms in the tendon. See attached picture.
- Most tears occur from a gradual wearing out over time. These are called chronic tears. The analogy we like to use is a pair of old blue jeans. Over time the fabric wears and breaks down. Eventually a hole forms in the fabric. The Rotator Cuff wears out also. Most patients that have a chronic tear do not remember a specific injury that caused their symptoms.
- Other rotator cuff tears may result from a large injury. These are called acute tears. These tend to occur in younger patients and are more severe. This may happen after a fall.

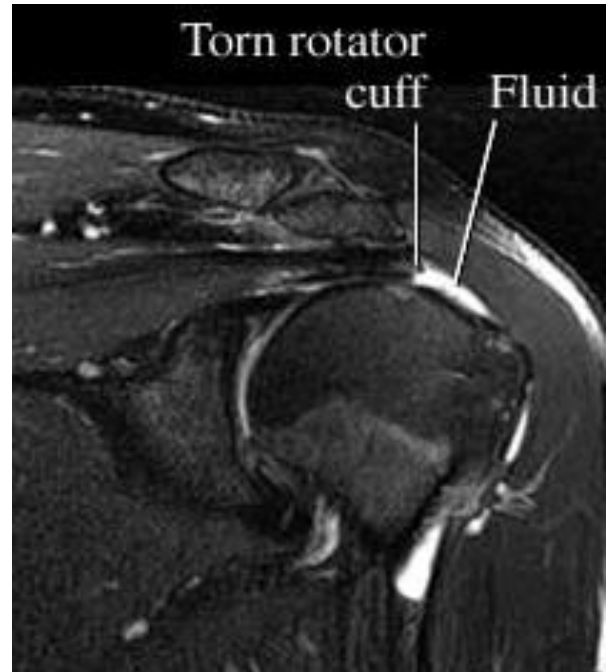


What are the symptoms of a rotator cuff tear?

Patients with rotator cuff tears often have pain when they raise the arm in the air, or rotate the arm to reach backwards, such as when reaching for a bra strap. Many patients also have pain at night that interferes with sleep.

Diagnosing a Rotator Cuff Tear:

- A proper medical evaluation needs to be performed by a trained professional.
- Examination of the shoulder begins with history gathering to determine the extent and timing of your injury.
- Next a physical exam is performed. Patients will demonstrate weakness or pain with tests of the rotator cuff. If a rotator cuff tear is suspected, we will next order an MRI.
- Magnetic Resonance imaging (MRI) is considered the gold standard for diagnosing rotator cuff tears, pre-operatively. These images will demonstrate tears of the rotator cuff.

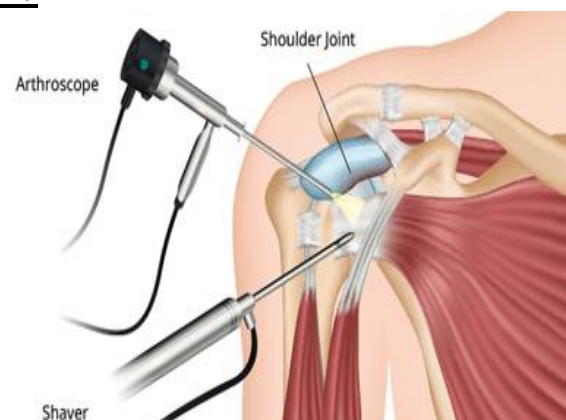


Treatment of Rotator Cuff Tears:

- The recommended treatment for a rotator cuff tear depends on the nature of the tear, size of the tear, and the individual patient.
- Many patients with small or medium tears will respond to physical therapy and may avoid surgery.
- Surgery is recommended for patients who do not improve with therapy. It is also recommended for younger patients, more active patients and individuals with large tears.

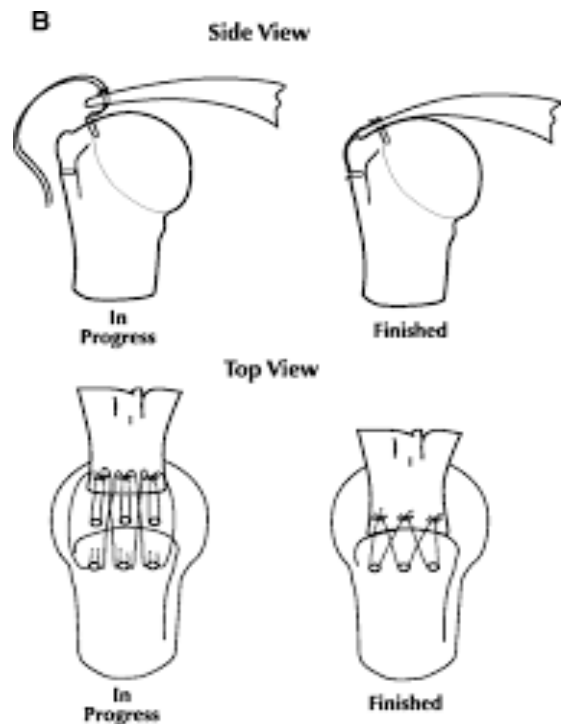
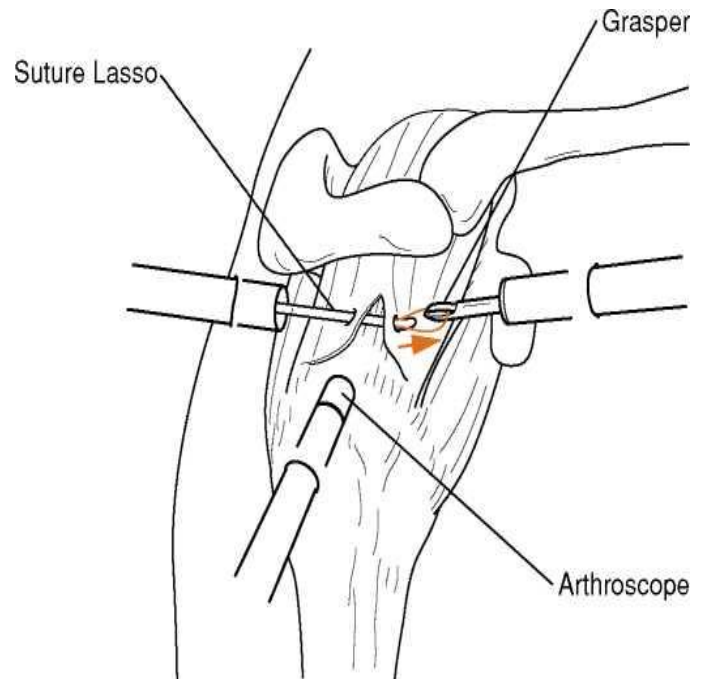
How does Dr. Carofino repair the Rotator Cuff?

- We perform a minimally invasive arthroscopic rotator cuff repair. This means a camera and instruments are placed into the shoulder joint through small incisions and used to repair the Rotator Cuff. Rotator Cuff surgery can also be performed via a larger open incision but is rarely used and only indicated in more severe chronic cases.



Details of the surgery:

- During surgery the patient is placed in a sitting position. The Anesthesiologist will administer a nerve block so that your shoulder will be numb and you will not experience any pain during surgery or immediately afterwards when you wake up. Most patients are asleep during the operation under a general anesthesia.
- Four to five small arthroscopic incisions are made around the shoulder.
- These small incisions allow us to work our instruments within the joint.
- A camera is used to visualize the rotator cuff within the joint. We are then able to arthroscopically fully examine the extent of the damage.
- The shoulder is filled with sterile fluid while we are working. This will make your shoulder swell and appear larger.
 - This swelling lasts for a few days after surgery.
- Once inside the joint, we use instruments to remove any scar tissue that has built up over time and shave down bone spurs that may be present.
- The rotator cuff tendon is then reattached to the bone using suture anchors. These are small screws that have stitches attached to them.
- After surgery, the patient is placed in a sling and the healing process is now underway!



Scheduling your Surgery

Scheduling Surgery

- Tammy English (Dr. Carofino's secretary) should contact you within 2-3 days of your office appointment. She will help you to select a date for surgery.
- If you do not hear from Tammy after a couple of days, please call her at 321-3397.
- *If you are having difficulty scheduling your appointment you may contact Tammy, Brice or Dr. Carofino at the email addresses listed on page 2.*
- Many patients will need pre-surgical physicals by their primary care physician. Some patients will also need to obtain a physical from other specialists such as a cardiologist, pulmonologist, etc.
 - Physicals may include lab work and EKG.
- These appointments must be within no greater than 30 days prior to your surgery date.
 - Tammy will help coordinate these appointments with your other doctors.
 - She will assist with scheduling lab work.

Preparing for Surgery

Preparing for the Day of Surgery

- **The surgery center or hospital will notify you of your scheduled surgery time the day before surgery.**
 - They will call and give you the exact time of surgery.
 - Don't expect to know the anticipated time of surgery until this phone call.
 - Make the day of surgery available for the entire day regardless of time.
 - Many patients prefer to have their surgery performed early in the day. Please keep in mind that the order of surgical cases is based on medical conditions and need.
- Schedule Transportation to and from the location of surgery.
 - You will need someone to be available to drive you to your location of surgery and transport you home following.
 - Per Hospital/Surgery Center rules, you will also need to have someone stay with you for the first 24hrs post-surgery. Please have that arraigned
- **Do not** eat or drink after midnight the night of your surgery date!
- Relax and get 8 hours of sleep.
- Take preemptive plans around your home to address comfort post-surgery for sleeping and easy access to commonly used things for eating and daily hygiene.
 - Many patients find it more comfortable to sleep in a recliner for a few weeks after shoulder surgery. However, that isn't true for everyone.
 - You may also want to stock up on shirts that will be easy to take on and off after your surgery.
 - Shirts that button or zip in the front tend to be the easiest to put on and take off following shoulder surgery.

Do I Need to Stop Any Medications Before Surgery?

- **Prescription blood thinners** should be stopped before surgery.
 - Aspirin and Plavix are stopped 10 days before surgery.
 - If these medications or other blood thinners are prescribed by your cardiologist or Primary Care Physician (PCP), you should discuss with them if you are OK to discontinue the medicines, and if other precautions need to be taken.
- **Other medications** that should be stopped 2 weeks before surgery: Over the counter anti-inflammatory medications, fish oil, herbal supplements.

The Day of Surgery:

- **Be on time.** The surgery center will let you know how far in advanced to show up when they give you your time of surgery.
- Map your route in advanced.
- We typically operate at one (1) of three (3) locations:



<i>Sentara Princess Anne Hospital</i> 2025 Glenn Mitchell Drive Virginia Beach, VA 23456	<i>Princess Anne Ambulatory Surgery Center (PAASC)</i> 1975 Glenn Mitchell Drive Suite 300 Virginia Beach, VA 23456	<i>Virginia Beach Ambulatory Surgery Center (VBASC)</i> 1700 Will O Wisp Drive Virginia Beach, VA 23454
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- When you arrive at your location, check in at the front registration desk and fill out any associated paperwork.
- Bring or wear comfortable clothing that you can easily get dressed into with post-surgery. **Shirts and jackets that zip or button up the front are easiest to manage.**
- Bring pillows for the car ride home for support under arm and general comfort.

Nerve Blocks on the Day of Surgery:

- We strongly recommend a nerve block for arthroscopic shoulder surgery.
 - The anesthesiologist performs this prior to surgery.
 - A numbing medication is injected around the nerves going to the shoulder. This will make the shoulder and arm numb so that you experience less pain.
 - This will last 12-18 hours post block.
- You may be offered an **On-Q pain pump** for post-surgery pain relief. This is a long acting nerve block medication that helps many patients get over the acute inflammation pain.
 - The medication is delivered via a catheter line that is placed at the same time as the original nerve block around the area of Neck/Shoulder. Typically lasts 3 days.

Driving:

- Generally, we recommend that you not drive for at least the first one-to-two weeks after surgery. You **should not** drive if you are still taking **narcotic pain medication**.
- You will be wearing a sling for six weeks. Wearing a sling impairs your ability to drive. It is ultimately **your responsibility** to determine if you can safely operate a vehicle with a sling on.

Follow-up Appointment Schedule:

- Typically, we like to see patients based on the healing process.
 - 2weeks (Jen Rascoe NP-C), 6wks, 12wks (3 months), 6 months' post-surgery.

The First 3 Days Following Surgery:

- After surgery your shoulder will be covered with waterproof bandages and you will have a sling on. We recommend that when you get home you find a comfortable place to rest.
 - The sling must remain on aside from showering, dressing, and doing rehab.
- Your arm will be numb from the nerve block, and you will probably be feeling drowsy for a few hours to a day. If you received the On-Q pump, the numbness will last approx. 72hrs.
- We recommend icing the shoulder, but limit the icing to, 20-25 minutes on, 40 minutes off.
 - Reusable ice packs should be wrapped in a towel and avoid being placed directly on the skin to avoid skin injury.
- The first sign your nerve block is wearing off will be the feeling returning to the fingers.
 - We recommend that you start taking your pain medication prior to this point, to avoid falling behind the pain. If you have the On-Q pump you should start taking medication at the same time regardless to maximize comfort.
- You have plastic bandages covering your incisions. These are waterproof, so you may shower with it on.
- **Don't** shower until the nerve block has worn off **OR** the On-Q pump line has been removed!
 - When showering rest your hand on across the stomach to limit shoulder movement.
 - No bathtubs, pool, hot tubs, ocean/bay. Don't submerge the shoulder below water.
- This bandage does not need to be removed until your first follow-up appointment, however, after the **3rd day from surgery**, you are **OK** to remove the waterproof bandage and the 3-5 steri-strips underlying the bandage if you'd like to. Typically feels better to take it off.
 - These steri-strips are covering the incision sites. Remove gently.
 - You have buried sutures (Vicryl) which close the incision. They dissolve over time. You will not see any sutures nor need to have any removed.
- After removing the bandage and steri-strips, you are ok to shower the incision sites after the **3rd day from surgery**.
 - Gently pat wash with warm, soapy water, rinse, and pat dry thoroughly; letting air dry for about 5-10mins as well.
- **Prior to bandage removal**, go to your local pharmacy and buy a small box of waterproof Band-Aids.
 - Find ones similar to the "3M" kind that are a "complete seal" around the incision site and roughly 1-2 square inches in size.
 - You will need to cover roughly 3-5 incision sites.
 - You can then shower with those on in place of the big bandage from surgery.
 - You may need to replace every other day.
 - You are ok to shower without them on following the instructions from above.
 - No need to apply any anti-biotic creams, etc. to the incision sites. Your body will do all the work!

Post-Op Medications:

- **Narcotic Pain Medication (Percocet, Norco, Vicodin):** You should plan to take this medication as needed. Many patients find that they need it regularly for the first two days and then less often afterwards.
 - We like for our patients to be completely off of narcotic pain medication 2-3 weeks post-surgery.
 - We encourage our patients to switch to over-the-counter Tylenol during this time point, taking it during the day hours in place of narcotics as
 - Max dosage of Tylenol is 4,000mg/day. There is 325mg of Tylenol in each pill of Percocet and Norco. 300mg in Vicodin. If you switch to Tylenol during the day, and still take pain medication at night or the morning, keep track of the amount.
- **Non-Steroidal Anti-Inflammatory Drugs:** If a physician (typically Cardiologist or PCP) HAS NOT prohibited you from taking NSAIDs like, Advil, Aleve, Motrin, Ibuprofen, you can take these medications post-op to help decrease swelling and pain.
 - You should not take them at the same time as your pain medication.
 - For example: Take them 2hrs after your dose of pain medication.
 - Only take NSAIDs for a brief duration (2-3days) post-surgery
 - Take as directed on bottle.
 - Taking NSAIDs regularly after surgery for a long duration can slow the healing process and delay your overall recovery time
- **Anti-Nausea:** If you typically get nausea post-anesthesia or from pain medication, make Dr. Carofino and the OR staff aware of this. He can prescribe Zofran to help your nausea
- **Stool softener:** You will be given a prescription for Colace, a stool softener, if you request.
- **Vitamin-C:** Increased levels of Vit-C consumption post-surgery has been shown to alter pain perception, and helps to keep your immune system strong.
 - Find 1,000mg packets of Vit-C powder supplement at a local pharmacy.
 - You can take one with breakfast, lunch, and dinner. Drink plenty of water

The First Six Weeks

Rotator Cuff surgery can be a tough recovery and the first few weeks are the hardest. You should be making steady progress during this time; feeling more comfortable each day, having less pain, and getting stronger.

Activity:

- You should be wearing your sling at all times except when removing to shower/dress and do therapy exercises if you are in physical therapy. You can use your hand and wrist to write/type. You can pick up light objects but nothing heavier than a coffee cup. You may work on bending your elbow so that it does not get stiff. You should not be lifting the arm in the air or using your shoulder muscles.

Returning to Work:

- *Return to work time depends on each patient and their particular situation.*
- In general, patients who have a **desk job** can return to work when they feel comfortable (within 2 weeks). We ask you to research and make sure that your job is accommodating in knowing you must wear your sling, will require frequent breaks for comfort, and might work slower than normal. You also will not be allowed to lift anything with the operated arm.
- Patients who work manual labor (heavy lifting) jobs should be advised that you will most likely not be able to return to work full duty for **4-6 months**.
 - You may be able to return sooner if your job is able to accommodate modified light duty. Below is a general guide to anticipated modified duty limitations following a rotator cuff repair.

0-2 weeks: no work

2-6 weeks: must wear sling at all times, no lifting with the operated hand, may be able to perform light desk work, will require breaks for therapy

6-12 weeks: no longer wearing the sling, may perform work at waist level, no work above shoulder level, no lifting more than five pounds

3-4 months: no lifting more than ten pounds at waist level, no lifting more than five pounds above shoulder level.

4-6 months: no lifting more than twenty-five pounds at waist level, no lifting more than ten pounds above shoulder level

Physical Therapy (PT) and the Recovery Process:

- Rotator cuff tears can be separated into two general categories **small/medium** size tears OR **large tears**.
- The timing of physical therapy and the recovery process is different for these two groups.
- Patients who have a small tear repair are at risk for developing stiffness after surgery. Therefore, we want to start these patients in PT quickly.
- Patients who have a large tear repair are at risk for repair failure, and re-tear. Therefore, we want to let the repair heal for a while before we begin moving the shoulder in PT.
 - These patients will start PT after six weeks and spend a longer time in the sling.
- We will let you know what category of tear you have after surgery, and arrange your PT at that time.
 - **If you have a small/medium size tear therapy will begin within one week of surgery.**
 - **If you have a large tear therapy will not start until six weeks after surgery.**
- A detailed Physical Therapy protocol will be provided to your physical therapist. It is important that this protocol be followed.
- **If your therapist has any questions about the protocol, please encourage them to contact us using the emails provided on page 2. Brice is the best person to contact for therapy questions.**
- You should strictly adhere to these guidelines under the guidance of your Physical Therapist.

An overview of the therapy protocols is provided below. The full protocols will be given after surgery.

Small/Medium tears:

- 0-6 weeks: *Stretching the shoulder to prevent stiffness:*
 - **Sling:** You should wear your sling all the time except during PT, showering, dressing and home exercises. If you are just relaxing, you can unclip sling but your shoulder needs to be supported with adequate pillows.
 - **Exercises:** You will begin stretching exercises called passive range of motion and will increase this motion over the next four weeks. You are not to perform any active range of motion of the shoulder (lifting the arm). PT will show you how to perform home exercises.
 - **Sleeping:** Most patients find it most comfortable to sleep in a recliner during this time, but you may sleep in a bed if you prefer.
 - **Appointments:** You will be seen in the office at 2 weeks & 6 weeks after surgery.
- 6-12 weeks: *Regaining Active Motion:*
 - **Sling:** Begin to stop wearing your sling over the 6-8week post-op mark. Let comfort be your guide but do not develop a dependence on the sling. *We encourage you to be out of the sling as much as possible.* But, if you're going to be in an uncomfortable setting or crowd it is Ok to use your sling.
 - **Exercises:**
 - 6-8 weeks: After your 6-week post-op visit we allow you to begin Active Range of Motion (AROM) and Active Assisted Range of Motion (AAROM) of the shoulder. This is where you begin to actively move your own shoulder compared to having someone move your shoulder for you. You should reach full passive range of motion by this time.
 - 10 weeks: Begin strengthening exercises
 - **Sleeping:** Many patients still struggle with sleeping comfortably during this time but should be improving.
 - **Appointments:** You will have an appointment at 6 weeks, 12 weeks after surgery.
- 3-6 months: *Building Strength & Getting Back to Normal Activity*
 - **Activity:** At this time, you will have progressed your activities and function and should be back to performing your Activities of Daily Living. We will discuss your return to sport or full work duty. If feeling strong and confident, you can do so. Usually this is between 4-6 months.
 - **Exercise:** You will be working on building strength
 - **Sleeping:** Most patients notice improved sleeping after three months.
 - **Appointments:** 6 months. After the 6-month post-op visit we will most likely release you and will only see you back in office "as needed".

It should be known that you will improve for up to 18 months after surgery.

Large/Massive tears:

- 0-6 weeks: *Allowing the repair to heal:*
 - **Sling:** You should wear your sling all the time except showering and dressing. Large rotator cuff tears are at risk of re-tearing following surgery. We want to allow the repair to heal before moving the shoulder.
 - **Activity:** You may move your hand, wrist and elbow. You can do some activity with the hand such typing and writing. You should not lift anything heavier than a coffee cup.
 - **Exercise:** There will be no physical therapy during this time.
 - **Sleeping:** Most patients find it most comfortable to sleep in a recliner during this time, but you may sleep in a bed if you prefer.
 - **Appointments:** You will be seen in the office at 2 weeks & 6 weeks after surgery.
- 6-12 weeks: *Regaining Motion:*
 - **Sling:** You will stop wearing the sling at 8-10 weeks after surgery. Your therapist will let you know when you can begin to stop sling wear.
 - **Exercises:** You will begin stretching exercises with your physical therapist.
 - 6-8 weeks. During this time, you will begin to stretch the shoulder. Your therapist will give you stretching exercises to do at home every day. You will still be wearing your sling when not doing therapy. You should not be trying to raise the arm under its own power.
 - After 8 weeks: Begin active range of motion exercises. Your therapist will let you begin to start using your shoulder muscles to raise the arm. At first you will do so with assistance by using a pulley. Gradually you will re-build strength in your arm. You will also stop wearing your sling at this time.
 - **Sleeping:** Many patients still struggle with sleeping comfortably during this time but should be improving.
 - **Appointments:** You will have an appointment at 6 weeks, 12 weeks after surgery.
- 3-6 months: *Building Strength & Getting Back to Normal Activity*
 - **Activity:** At this time, you will have progressed your activities and function and should be back to performing some light activity. We will discuss your return to sport or full work duty. If feeling strong and confident, you can do so. Usually this is between 4-6 months.
 - **Exercise:** You will be working on building strength in the shoulder.
 - **Sleeping:** Most patients notice improved sleeping after three months.
 - **Appointments:** 6 months. After the 6-month post-op visit we will most likely release you and will only see you back in office “as needed”.

It should be known that you will improve for up to 18 months after surgery.

~This packet of information is intended to keep you, the patient, informed and up-to-date about what to expect from beginning to end. These guidelines are always impacted by your recovery and progression and void of any post-surgical complications. This packet, though detailed, is not intended to be fully inclusive and all-encompassing and could change on a case-by-case basis. ~

~For further information, please visit my website, Facebook and YouTube pages:

Dr. Carofino Website: www.drcarofino.com

AOS Website: <http://www.atlanticortho.com/center-for-hand-to-shoulder-surgery/>

Facebook: <https://www.facebook.com/viriniabeachshoulder>

Visit my YouTube page! <https://www.youtube.com>, search Dr. Brad Carofino, and locate some operative videos of me performing a rotator cuff repair through the arthroscopic camera.

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