



ORTHOPAEDIC SPECIALISTS OF SCOTTSDALE

Shoulder Arthroplasty/Replacement

A Patient's Guide

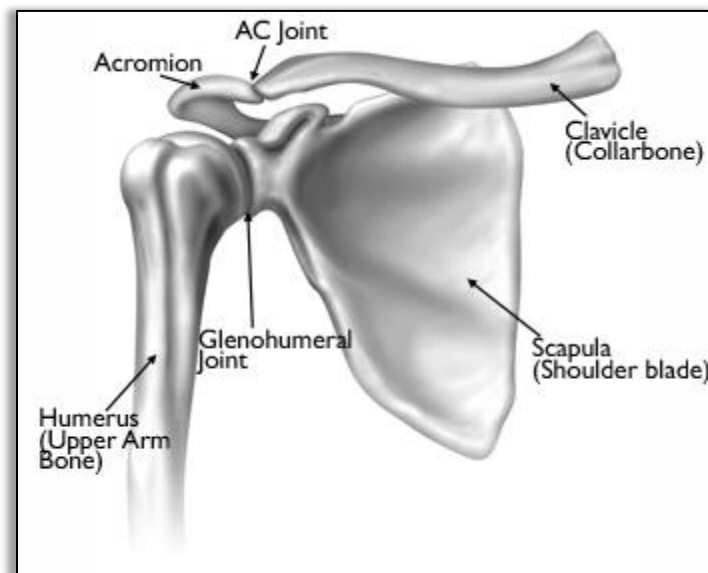
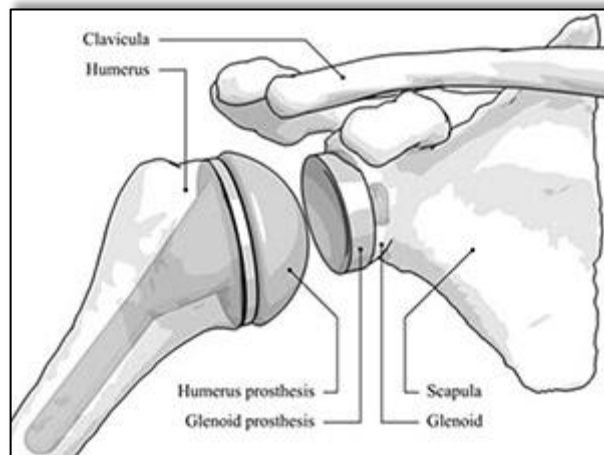


Table of Contents

Foreword	3
Introduction	4
Anatomy of the Shoulder	5
Surgical Overview	6
Pre-admission Evaluation	7
Helpful Hints in Preparation for Surgery	8
The Day of Your Surgery	9
After Your Surgery	10
Physical Therapy	12
Going Home	13
Shoulder Replacement Patient Precautions	14
Surgical Risks	15
Frequently Asked Questions	17
Long-term Care of Your Shoulder Replacement	18

Foreword

This booklet has been developed by Dr. Kaper for his orthopaedic surgery patients at Orthopaedic Specialists of Scottsdale. It is used in conjunction with instruction from the rehabilitation and nursing staff. This booklet should not be given to patients under the care of other orthopaedic surgeons, whose surgical approaches and post-operative management of shoulder replacements may vary from his.



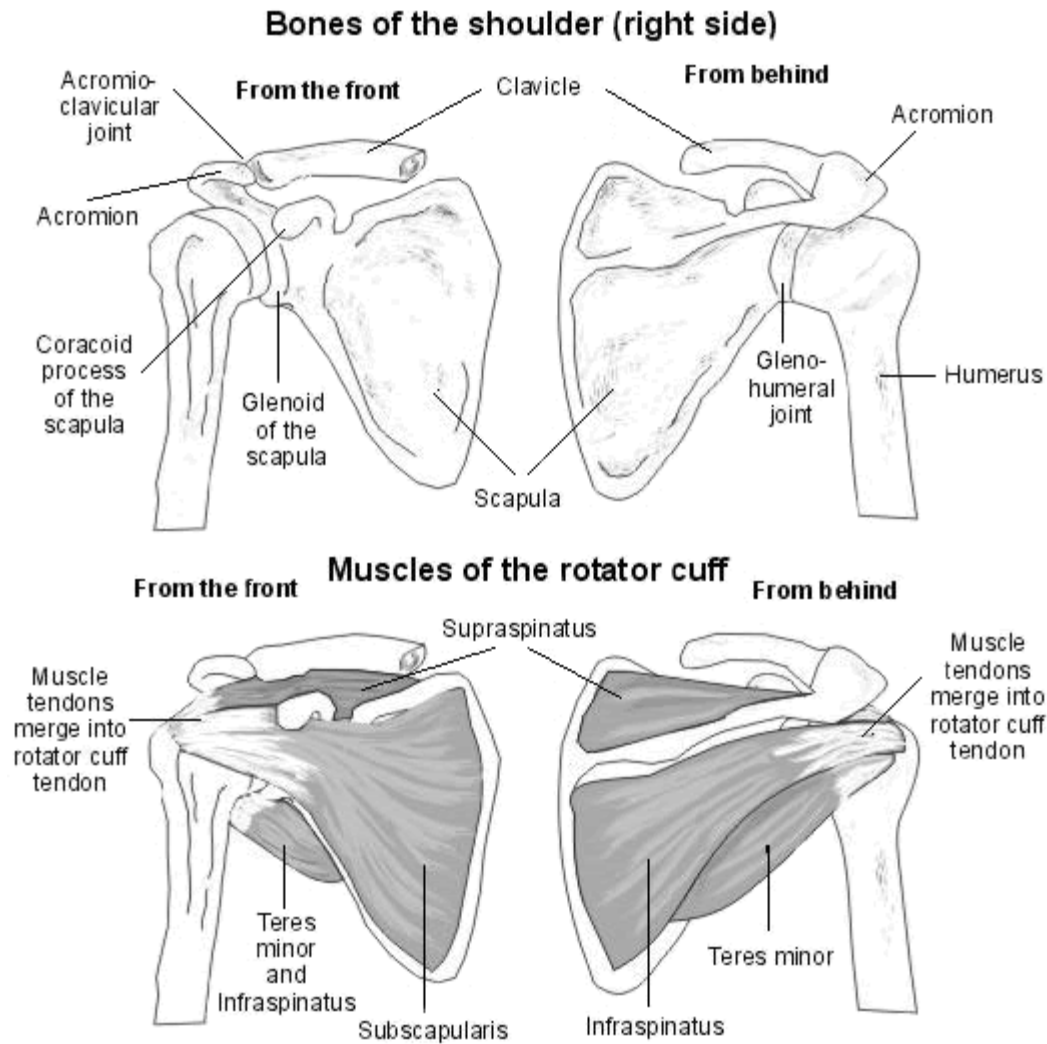
Introduction

Welcome to Orthopaedic Specialists of Scottsdale. In preparation for your surgery, we have provided you with this information booklet to help answer some of your questions and concerns about Shoulder Replacement surgery. We hope that you find this booklet helpful. If after reading this guide, you still have any concerns about the surgery, hospitalization, or other aspects, we encourage you to contact us. Our office telephone # is: 480-305-0034. Further helpful information is also available at our websites: www.ScottsdaleOrthoSpecialist.com.



Please remember that each patient will respond and recover from shoulder replacement surgery according to their own individual situation. It is helpful to “compare notes” with others who have undergone or are undergoing the same surgery. However, because everyone is different in terms of their medical condition and needs, do not place undue importance on “keeping up” with your neighbor/friend/relative.

Anatomy of the Shoulder



Surgical Overview

Shoulder replacement, or “arthroplasty” surgery, is a surgical procedure to replace the damaged cartilage within the shoulder with an artificial prosthesis or implant. This surgery is an option for patients who have severe arthritis of the shoulder. Patients with severe degenerative joint disease of the shoulder are often challenged by even simple activities, such as lifting, carrying or sleeping on their side. Surgery can be considered when all other available treatment options to control pain have been exhausted and your quality of life is significantly affected by your arthritic shoulder.

Various types of arthritis may affect the shoulder joint. Osteoarthritis, a degenerative disease of the joints, is the most common form of arthritis. It affects mostly middle-aged and older adults with breakdown of the joint cartilage. Rheumatoid arthritis causes inflammation of the synovial membrane of the joint with secondary deterioration of the joint cartilage. Previous injury or injuries to the shoulder may result in post-traumatic arthritis, with significant damage to the joint cartilage. Patients with long-standing, severe rotator cuff problems may also go on to develop significant arthritis of the shoulder (a.k.a. Rotator Cuff Arthropathy). Any of these forms of arthritis can lead to irreversible damage to the shoulder joint, resulting in pain, swelling, stiffness, weakness, or even instability in which the shoulder may “give-way”.

Shoulder replacement surgery is a treatment option for shoulder pain and disability. The surgery is designed to replace the ball and socket of the shoulder joint. The goal of shoulder replacement surgery is to reduce or relieve pain in the shoulder. Realistically speaking, shoulder replacement surgery does not give you the shoulder you had when you were twenty-one. It does, however, significantly improve the quality of your life, which is often severely limited by the pain of shoulder arthritis.

Many shoulder replacement systems have been developed over the past 50 years. There are many different orthopaedic implant manufacturers whose products do vary in design and materials utilized.

Pre-Admission Evaluation

Before your scheduled surgery date, arrangements will be made for pre-operative testing. This will give us the opportunity to have all necessary medical testing and registration done before your surgery. Although a common surgery, shoulder replacement is a major procedure that can stress even the healthiest body. For this reason, it is important that we check and optimize your overall medical condition prior to surgery.

Typical testing before surgery may include:

- *Laboratory tests*
- *EKG (heart tracing)*
- *CT scan of shoulder*

A thorough check-up with your primary care physician is usually recommended. If there are specific medical concerns, additional pre-operative evaluation may be necessary.

You will have the opportunity to meet with one of the anesthesiologists on the day of surgery to discuss the different types of anesthesia available. These include:

- General anesthesia – when you are “asleep” for the surgery.
- Regional anesthesia – when a nerve block is administered to “numb” the shoulder and arm.

Discuss any questions you may have with the anesthesiologist. Do not feel that your questions are “silly”. To be informed and knowledgeable about your surgery is important and will help you to understand what to expect during and after your surgery.

Helpful Hints in Preparation for Your Surgery

STARTING NOW:

Prepare yourself:

- Stop smoking- it is extremely detrimental to your health and healing
- Participate in the recommended “pre-hab” program- a course of physical therapy that will aid in your post-operative recovery
- Exercise to improve and maintain muscle strength
- Eat well-balanced meals and take a multivitamin
- Get plenty of rest
- Stop or cut-back on alcohol consumption
- Keep a notebook handy to write down any questions you may have for the doctor, therapist or staff

Prepare your home:

- Stock your refrigerator and pantry (e.g. pre-cooked or frozen dinners)
- Obtain or rent a walker and/or crutches, a raised toilet seat / shower chair
- Arrange for support from family and/or friends for everyday activities

THE DAY BEFORE SURGERY:

- Confirm your surgery time- you will be contacted by the surgery coordinator to confirm your surgery time. Make sure we have an up-to-date telephone number to contact you, if there are any changes in your surgery schedule.
- You may have your regular dinner
- Wash your body from the neck down with Hibiclens soap as instructed.
- Consult with the nurse or your doctor to determine if you should take your morning medications the day of surgery.
- Make sure you have filled any prescriptions that you were prescribed for you at your pre-operative visit.

The Day of Your Surgery

On the day of your surgery, you will report to the Admitting office at the hospital.

Remember:

- **Do not** eat anything within EIGHT hours of your scheduled surgery time
- It is OK to drink “clear” liquids (any fluid that you can see light through) up till THREE hours prior to surgery
- You may brush your teeth
- Wash the affected shoulder and arm with Hibiclens soap as instructed.
- Please do not wear or use any skin moisturizers, cream, lotions or make-up.
- Wear comfortable, loose-fitting clothing.
- Remove hairpins, wigs, and jewelry.
- Please do not bring any valuables with you.

From the admitting desk, you will be brought to the Pre-op area. The nursing staff will be there to assist and prepare you for surgery. You will typically be asked on several occasions which shoulder will be operated on- this is simply a precautionary step to prevent any problems whatsoever.

To reduce the risk of phlebitis (swelling of your veins) and deep venous thrombosis (DVT or blood clots), intermittent compression sleeves will be placed on your legs. These will help maintain good circulation. The sleeves will be used while you are in bed.

After Your Surgery

Recovery Room

When your surgery is completed, you will be taken to the recovery room, also called the Post-Anesthesia Care Unit (PACU). There, the nurses will monitor you- they will check your blood pressure and pulse frequently; check your dressing; check your neurologic function; and have you take deep breaths.

Your orthopaedic surgeon will tell your immediate family when the surgery has been completed. Please inform your family that even if your surgery takes only a short time, you will have to remain in the recovery room until you are awake and considered to be “stable”. Once the nurses have determined that you are “stable”, you will be transferred to the orthopaedic unit.

Movement

Performing simple ankle pumps and circles is recommended after surgery. Your nurse and therapist will remind you of this. This movement helps promote good circulation to your legs and feet.

After surgery, our goal is to mobilize our patients as soon as possible. Depending on the timing of your surgery, this will mean that the therapist will either get you out of bed the afternoon of your surgery, or first thing the next morning. During your post-operative stay, the therapist will work with you on your shoulder exercise program.

Breathing

To prevent respiratory (lung) complications, such as pneumonia, after surgery, you will be encouraged to take deep breaths and cough regularly.

Wound Care

Your incision will be covered with an occlusive surgical dressing. Under this dressing you will have a dark gray/black “silver nitrate” dressing used to reduce the risk of infection.

This entire dressing will be removed at your postoperative visit- you do not need to change the dressing prior to that time. The incision used for shoulder replacement surgery is approximately three-four inches long and will be closed with absorbable sutures or a Zipline dressing. There are usually no staples or sutures that will need to be removed. Showering is permitted 24 hours after surgery. Soaking the wound is not recommended for an additional 4 weeks (**NO** swimming, hot tubs, or tubs baths) until the skin is completely healed.

Additional information about the Zipline can be found on these websites:

<https://www.ziplinemedical.com/>

It is important to monitor your wound for any signs of infection. Possible signs of infection include increased redness, worsening swelling, drainage from the wound, fever (greater than 38.5° C or 101° F) or chills. If any of these symptoms occur, please notify our office.

Diet & Hydration

You will be able to drink and eat solid foods right away, according to how you feel. Hydration after surgery is very important for a healthy recovery. It is a good idea to drink twice as much fluid as you normally would for the first several days after surgery. This should include water, juices, ginger ale, and sport drinks. Your appetite may not return for several days or even weeks following the surgery. This is not uncommon.

Dr. Kaper routinely recommends peri-operative vitamins and supplements, including: a daily multivitamin, Vitamin D3 5000 IU once a day, Zinc 50mg twice a day, Vitamin C 500mg twice a day and Vitamin B1 (thiamin) 100mg twice daily. These should be used for four weeks prior and four weeks after surgery.

Pain Management

After surgery you will have shoulder and muscle pain- this is normal. Pain management is one of the most important factors influencing the outcome of your rehabilitation. While in the hospital, we encourage the use of oral, rather than intravenous (or IV), pain

medication- this reduces the possibility of nausea, vomiting, and confusion, which are common side effects of IV pain medications. Pain medication is intended to keep any pain at a “manageable” level. The goal of pain management is to allow you to participate in your rehab and physical therapy, while keeping any pain at a tolerable level. A prescription for pain medication will be provided to help manage postoperative pain. The use of any narcotic or opioid should, however, be approached with significant caution. There are multiple ways to control pain that are far more effective than using “pain pills”. This includes ice, non-steroidal anti-inflammatory medications and Tylenol. We strongly encourage you to minimize and discontinue narcotic pain medications as soon as you are able. Please be aware that addiction to narcotics can develop within only one week of use.

ICE, ICE, ICE!

The use of ice on your shoulder is extremely helpful to control inflammation, which is the cause of post-operative pain and swelling. Specific icing instructions and guidelines are provided to you. Icing a minimum of four times per day, 15-20 minutes at a time, is recommended for the first several weeks after surgery. It is OK to ice more frequently to help control pain. Ice the area around the shoulder anytime you notice significant pain or after exercise.

Physical Therapy

Physical Therapy

Pre-operative physical therapy is routinely recommended and can be prescribed for you. A physical therapist will instruct you for exercises that will help strengthen your muscles and improve the flexibility of your shoulder prior to your surgery. The therapist will also teach you the exercises that are recommended after surgery. One of the most important factors influencing the results of shoulder replacement surgery is *your* active participation and commitment to the rehabilitation process. The exercises and stretching that are necessary to recuperate from shoulder replacement surgery should be looked at as an investment in the long-term success of your surgery. The more you put into your rehab, the more you stand to gain.

A physical therapist will show you the kind of exercises that are recommended after shoulder replacement. A regular and regimented physical therapy and exercise program should be part of your everyday schedule for three months after surgery.

Going Home

Typically, your surgeon will clear you for discharge home if:

- You are medically stable;
- You are cleared for discharge by the physical therapist;
- Your temperature is normal (less than 38.5° C or 101.5° F);
- You are comfortable on oral pain medication.

The trend over the last ten years has been for shorter and shorter hospital stays. While the trend was initially driven by cost concerns, orthopaedic surgeons have come to realize that shorter stays in the hospital actually decrease the post-operative complication rate. The longer the hospital stay, the higher the risk of hospital-acquired infection. Typically, a patient will only be in the hospital for one night. For some patients, the surgery can actually be done very safely on an outpatient basis, without the need for a hospital admission.

For patients going home, home health is typically arranged- several home health agencies are available locally. Home health offers in-home physical therapy, nursing services, and social services as needed. Services are usually provided for the first one to two weeks after discharge from the hospital.

You will be discharged with pain medication- these are narcotics or “opioids”. Opioid overuse is, unfortunately, widespread in the USA. Only a limited quantity of opioids should be used after surgery. Arizona state law only allows very limited prescribing of opioids. We therefore just prescribe a small quantity of Oxycodone for post-op pain management. The use of opioids should, therefore, be stopped as soon as possible after surgery.

Occasionally, patients have problems with constipation, usually secondary to the pain pills. You may use Colace (a stool softener), Milk of Magnesia, a Dulcolax suppository, Magnesium citrate or a Fleets enema, if necessary. You can help prevent problems by drinking plenty of fluids, eating high-fiber foods, walking, and exercises.

Shoulder Replacement Patient Precautions

For the first six weeks after surgery:

DO NOT:

- Overdo activities

DO:

- Continue your exercises as taught by physical therapy, one to three times a day



Surgical Risks

Shoulder replacement is a major undertaking. Just as with any other surgery, there are significant risks involved. Fortunately, the benefits that you stand to gain from the surgery have been shown to significantly outweigh the risks. Nonetheless, it is important that you are aware of what may occur during or after surgery. Just as you do not want to have any problems related to your surgery, your doctor does not either.

Risks include, but are not limited to the following:

Wound Infection- you will be given antibiotics before and after your surgery; this will reduce but not eliminate the risk of infection; infection risk is typically less than 1%; if your new shoulder becomes infected, the prosthesis may have to be completely removed and an extended course of antibiotics administered

Pneumonia- can occur after surgery; breathing deeply and using the spirometer are very important to prevent congestion in the lungs which may lead to pneumonia

Bleeding- bleeding complications are extremely rare after surgery. Transfusion is rarely needed.

Dislocation- your artificial shoulder is not as stable as your own shoulder; consequently, dislocation or “popping” the shoulder out of joint can occur.

Nerve or Blood Vessel Injury- there are several large nerves and blood vessels that lie very close to your shoulder joint; the potential for injury to one or more of exists during the surgery.

Fracture- fractures of the upper arm bone can occur at the time of shoulder replacement; this risk is increased in patients with underlying osteoporosis or weakening of the bone.

Need for Future Revision- although the prostheses used today are the product of many years of research and development, the science has not yet been perfected; typical shoulder replacements will last between 10 and 15 years.

Medical risks- shoulder replacement surgery is a major operation, and can stress even the healthiest body; medical complications, as well as problems with anesthesia, may be severe enough to result in death. If there are any questions or concerns in this regard, please feel free to discuss them with your surgeon.

Muscle weakness- weakness involving the shoulder muscles is common with severe arthritis. Appropriate therapy and exercise before and after surgery will help strengthen the muscles and aid in your recovery.

Frequently Asked Questions

Q: When will I need to return for follow-up?

A: You will be seen about seven days, six weeks, and four months after your shoulder replacement. After that time, periodic follow-up appointments with x-rays are typically recommended.

Q: Will I set off the metal detector at the airport because of my shoulder replacement?

A: Yes, you may. We recommend that you advise airport security that you have a total shoulder replacement. The TSA, unfortunately, no longer recognizes joint replacement identification cards.

Q: Should I tell my dentist or doctor that I have had a shoulder replacement?

A: Yes. For routine dental work however, antibiotics are no longer recommended.

Q: When can I resume any exercise program?

A: You should discuss this with your surgeon before engaging in any form of exercise other than walking or the exercises your therapist prescribed. Your therapist will give you exercises to do in the hospital and then at home.

Q: When can I drive?

A: Driving is not permitted until you return for your follow-up visit with your doctor.

Q: When the weather is cold, will I notice the temperature in my new shoulder?

A: No, most people do not notice any significant difference.

Long-term Care of Your Shoulder Replacement

Protection- Treat your new shoulder with care. The better care you take of the shoulder, the better it will take care of you. Remember that just as your own shoulder was worn out, your new shoulder can also wear out with time.

Sports- Your new shoulder is designed for activities of daily living (ADL's), not high-impact or high-demand activities.

Infection- Your new shoulder is a prosthesis and the body considers it a foreign object. If you become sick with a serious infection, the bacteria can travel through your blood stream and enter your shoulder joint. Infection in an artificial shoulder is a very difficult problem to manage. Therefore, prevention is the best type of medicine. If you develop a high fever, or an infection (for example, bladder, skin, or dental), seek medical attention immediately. Your medical doctor will determine if antibiotics are necessary, and if needed, he or she may consult with our office to prevent any problems.

Dental Work- Antibiotics are no longer routinely recommended prior to dental work. Exceptions would include patients with diabetes, rheumatoid arthritis, or those patients receiving active chemotherapy or taking immune-suppressive treatment.

Surgical Procedures- In the future, if you are scheduled for any major surgery, you must receive antibiotics before the procedure. This does not apply to all surgery-minor procedures such as colonoscopy and dermatology treatments typically do not require antibiotics.

Follow-up care- Because the material technology being used for total shoulder replacement is not perfect, your artificial shoulder can wear out with time. It is, therefore, important, that you return to see your surgeon for periodic check-ups. Although you may not notice any symptoms, x-rays can often detect early signs of

problems with artificial shoulders. If such problems are detected early enough, they are often much easier to treat.



Our goal is to provide you with the highest quality of orthopaedic care that will lead to the most successful outcome, with the lowest possible risk of complications. If you have any additional questions or concerns, please let us know. We appreciate the confidence you place in us and look forward to aiding you through the entire surgical process.

If you have any additional questions or concerns, please do not hesitate to let us know.

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