



## Banff Sport Medicine

# PRE-OPERATIVE INSTRUCTIONS

## PREPARING FOR SURGERY

### 1 Month Before:

**If you are taking acne medication:** Research has shown that Accutane (Isotretinoin) which is used to treat acne can interfere with healing after orthopaedic surgery and may be a factor in tissue and graft stretching or failure. To ensure that your surgery is not cancelled ***please stop taking Accutane at least 1 month prior to your surgery date.*** You should not restart Accutane medication for at least 3 months after your surgery.

### 2 Weeks Before:

**Stop taking:** Advil, Motrin, and Aspirin as well as all Herbal Supplements for ***10-14 days prior to your surgery date.*** This is important because these medications and supplements can increase your risk of bleeding.

**Do not go to the dentist** 2 weeks before surgery as this can increase your risk of infection.

### 1 Week Before (approximately):

A nurse from the hospital will contact you approximately one week prior to your surgery date to give you information regarding your surgery.

### Day/Night Before:

**CLEAR FLUIDS ONLY** (Gatorade, apple or cranberry juice, water - pulp free, clear) ***from Midnight (24:00) to 3hrs prior to arrival to hospital*** (4 hrs before surgery).

Do not shave your surgical site the day before or the day of your surgery.

You may brush your teeth and rinse your mouth but do not swallow any water.

## DAY OF SURGERY

- Date and time will be confirmed with you approximately 2 weeks before your surgery.
- Check-in at the Admitting Desk or Emergency Department of the hospital.
- If required for your surgery, please bring your own crutches to the hospital, clearly marked with your name. The hospital has a VERY limited supply of crutches for sale at this time. The hospital does carry braces for purchase if needed after your surgery.
- You **MUST** have someone drive you home from the hospital.

## AFTER YOUR SURGERY

- **Do not go to the dentist** up to 6 weeks after surgery as this can increase your risk of infection.
- Your first Follow up Appointment details (if required) will be included in an email from our office which you will receive on or shortly after the day of your surgery.
- If you have any problems or complications after your surgery please refer to the Post-Op Concerns section included in your surgery package or refer to our website - <https://banffsportmed.ca/after-your-surgery/>.



## Banff Sport Medicine

### Rotator Cuff Repair

#### What is a rotator cuff tear?

The rotator cuff is a group of four tendons that attach the shoulder blade to the upper arm (humerus) bone. The rotator cuff is responsible for starting movements of the shoulder, and also helps to stabilize it. When these tendons are torn, a patient will have pain and/or stiffness and/or weakness. Usually there is an underlying degenerative process or wearing of the tendons that weakens them, making them easier to tear. For this reason, this type of tear is more common in middle aged and older people. Rotator cuff tears are uncommon in younger people but can be caused by a significant trauma or injury.

#### *Diagnosis:*

- Patients may have a history of repetitive strain and/or shoulder trauma. In many cases there is a gradual onset of shoulder pain without any significant injury.
- Physical examination shows muscle wasting, weakness and/or a lack of range of motion.
- MRA (magnetic resonance arthrogram), or an ultrasound is usually required to confirm the diagnosis.

#### Why fix it?

- The reason for repairing a rotator cuff tear is to reduce pain
- Repairing the torn rotator cuff may also improve strength and function of the shoulder
- Repairs are more successful in younger patients. The failure rate increases to over 30% in patients over the age of 70.

#### Options other than Surgery

- **Rehabilitation** - most patients with a rotator cuff tear can be successfully treated with physiotherapy and a long-term rotator cuff strengthening program
- **Anti-inflammatory medications** - some patients can manage their pain by taking these common medications
- **Lifestyle modifications** - pain from a rotator cuff tear can also be decreased by avoiding the activities that aggravate it such as repetitive use of the arm in an outstretched or overhead position, heavy lifting and overhead throwing
- **Cortisone injections** – can be used to reduce the pain caused by a rotator cuff tear so that the patient can properly strengthen their muscles and regain movement. No more than two injections are recommended due to the risks of decreasing the strength of the tendons with these injections.

#### About the Surgery Timing

- The best form of treatment for a painful rotator cuff tear that has not responded to a complete rehabilitation program and other non-surgical treatment is a surgical repair.
- We recommended all patients stay as active as possible before surgery by following the pre-surgery rehabilitation program.
- Regaining the strength and movement in your shoulder before surgery, as well as maintaining your fitness will prepare you for surgery and also help you to recover faster after surgery.

## The Procedure

- Rotator cuff tears can be repaired arthroscopically (using a very small camera inside the joint) or through a small 3-4 cm incision (a mini-open technique). In arthroscopic surgery the surgeon puts the camera into the shoulder through a small incision, which allows them to see all of the structures inside the joint. As the surgeon moves the camera around, magnified views are shown on a TV screen. The surgeon can then perform any necessary procedures inside the shoulder joint by using their instruments through another 2-3 small incisions around the shoulder.
- With both techniques, to repair the tear/s, the surgeon will usually use 1-3 suture anchors (screws) to attach the torn rotator cuff back onto the bone.
- During the procedure, a tear in the biceps tendon is sometimes discovered. This abnormality is often difficult to detect on pre-operative MRA or U/S, but is easy to see arthroscopically. In this situation a biceps tenodesis, (release and fixation of the tendon to the upper humerus) may be performed.
- Occasionally, with very large tears it is not possible to repair the tendons. Unfortunately, the exact size of the tear is not always known before the operation.

## RISKS

### *Risk of Infection: less than 1 in 100*

- Intravenous (IV) antibiotics are given before and/or after surgery to help prevent infection.
- If an infection occurs, it will usually happen within 5-7 days of your surgery. Some minor wound infections can be treated with a few days of oral antibiotics, but more severe wound or skin infections may require a longer course of intravenous (IV) antibiotics. In less than 1 in 400 cases, a deep infection can occur in the joint. In these cases, surgery is required to wash out the infection, followed by 2-3 months of IV antibiotics.

### *Risk of Injury to Artery or Nerve: less than 1 in 1,000*

- Neurovascular injury is very rare in arthroscopic shoulder surgery, but in open shoulder surgery, especially if bone grafting is required, there is a 1 in 100 chance of a serious nerve or blood vessel injury, which could potentially lead to long-term disability such as weakness, paralysis, or decreased sensation in the arm.

### *Risk of Failure: approximately 1 in 10*

- Failure of a rotator cuff repair can occur if the repair does not heal or if there is further trauma to the shoulder. The rate of failure increases as the size of repair increases, with smaller repairs having the lowest failure rate. Patients with very large rotator cuff tears can have a failure rate of up to 50%.

### *Skin Numbness around Incision*

- Every patient gets some numbness around their incision because some small surface nerves are cut during surgery. This may disappear slowly over time.

### *Risk of Shoulder Stiffness: 5 in 100*

- Some patients have problems with shoulder stiffness after rotator cuff surgery. Most patients will improve with intensive physiotherapy, but if this does not work, another surgery to mobilize the joint may be needed.

## Your Stay in Hospital

- You will be admitted to the hospital on the day of your surgery. Your admission time will be approximately 2-3 hours prior to your surgery time. Your surgery will take approximately 2 hours. You will be called approximately 5 days prior to your surgery date with your arrival time.
- A general anaesthetic (go to sleep) and/or a nerve block are the common types of anaesthesia for your shoulder surgery. Your anaesthesiologist will discuss these options with you on the day of surgery.
- Although shoulder surgery is usually day surgery, in rare instances, your surgeon or the anesthetist may recommend that you be admitted to the hospital overnight, so be prepared for this.
- Please provide the office with any insurance forms you have prior to the day of your surgery, as it can take up to 2 weeks to have them completed and returned to you. Please note we do charge a fee as completion of forms is not covered by Alberta Health Care.

## Medical Aid Products

- **Cold Therapy Unit** – is used to help control pain and swelling after surgery. You can order a Cold Therapy Unit, complete with a shoulder pad, through the Shop found on our website or at our clinic. Alternatively, you can purchase a Cold Therapy Unit from your local healthcare provider or from an online health supply store. For portable use you can purchase a battery pack, which allows you to use your Cold Therapy Unit without an electrical outlet. We recommend that you buy your Cold Therapy Unit at least a week before your surgery to make sure that you have it delivered in time.
- **Shoulder Immobilizer**- a shoulder immobilizer will be put on your arm in the operating room and you will spend 4-8 weeks wearing this brace. You will have to pay the hospital for the cost of the brace.

## Postoperative Pain Control and Wound Care

- You will be given a prescription for anti-inflammatory medication (ie Naproxen) and a narcotic analgesic (ie Oxycodone) depending on the surgeon's preference and the patient's history of allergies and drug intolerances, before you leave the hospital.
- Refer to the Post Op Concerns and Opioid Medications sheets included in your surgery package for more information
- For arthroscopic surgery, you may shower two (2) days after surgery and should dry your incisions gently with a clean towel. For open shoulder repair you may shower four (4) days after surgery and should dry your incisions gently with a clean towel. Due to the risk of infection, do not fully immerse the incisions in bath water for 2-3 weeks after your surgery and do not enter a swimming pool or hot tub for at least 3-weeks after surgery.

## Discharge from Hospital

- Ensure you have your prescriptions for pain and anti-inflammatory medications before you leave the hospital.
- You must have someone to drive you home.
- You should plan to spend a minimum of one week resting at home with regular application of ice packs or cold therapy to your shoulder
- You will spend 4-8 weeks in the shoulder immobilizer brace. Your surgeon will tell you when and if you are allowed to remove the brace.

## Follow-up Visits

- Your surgeon will see you 3-4 weeks after surgery to assess your wounds, check for shoulder stiffness, and to monitor your progress. Additional follow-up appointments will be arranged based on your progress and/or in discussion with your surgeon.  
Our office will provide you with the time, date and location of your first post-operative appointment, usually included in your physiotherapy prescription email approximately one week after your surgery.

## Return to Work Guidelines (depends on size of tear and symptoms)

- Sedentary work: 3-4 weeks
- Light manual work: 3-4 months
- Heavy manual work: 6-12 months

## Physiotherapy

- See your physiotherapist between 1-3 weeks after your surgery. You will be provided with a physiotherapy prescription via email from our office approximately one week after your surgery.
- Please note if you reside in Alberta you may be eligible for physiotherapy funding, please refer to the AHS website for more information: <https://www.albertahealthservices.ca/rehab/page17783.aspx>
- The hospital will provide you with the Banff Sport Medicine Post-operative Rehabilitation Protocol, it may also be found on our website: <https://banffsportmed.ca/resources-ortho/#surgeryinfo>

## Return to Full Activities

- Your surgeon will tell you when you can return to your usual activities. For most patients this is between 4-9 months after surgery. The type of activity and your level of strength and function (when we test you) will help to guide the surgeon's recommendations.
- Some patients who have a larger tear and more damage in their shoulder may be told to protect their rotator cuff muscles by doing fewer sports and activities such as throwing, overhead positions or heavy lifting. Avoiding these activities is important because it decreases the amount of load on these damaged joint surfaces and may help to delay the symptoms of arthritis. Your surgeon will give you advice about return to activity based on the amount of damage seen inside your shoulder at the

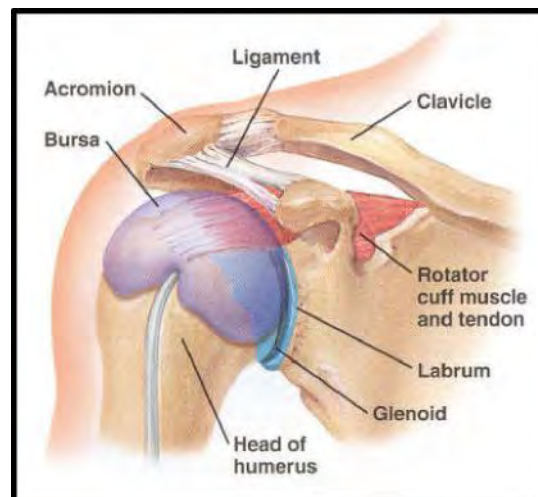
The page is decorated with several faint, light-brown maple leaves scattered across the background. There are five leaves in total, positioned at various angles and sizes.

# Pre-Operative Rehabilitation Program for Shoulder Injuries

This protocol is designed to assist you with your preparation for surgery and should be followed under the direction of a physiotherapist.

## Overview of the Shoulder:

Your shoulder joint is composed of three bones: the clavicle (collarbone), the scapula (shoulder blade), and the humerus (upper arm bone). Your shoulders are the most mobile joints in your body. They are prone to instability because the ball of the upper arm is larger than the shoulder socket that holds it. To stay in its normal position, the shoulder must be stabilized by the muscles, tendons and ligaments that attach the ball to the socket. The shoulder is the site of many common problems including, sprains, strains, dislocations, separations, tendinitis, bursitis, rotator cuff tears, frozen shoulder, fractures and arthritis.



## The Importance of Pre-Surgery Exercises:

The surgeons at Banff Sport Medicine recommend an exercise or 'pre-habilitation' program before surgery. Regaining or maintaining the strength and movement in your shoulder before surgery will improve your recovery after surgery. Muscles around your shoulder blade and shoulder play a very important role in shoulder stabilization and they react to the amount of stress placed on them. With a decreased amount of stress (for example from immobilization, instability, decreased exercise), the muscles will weaken and atrophy (waste away). For this reason, the exercises in this program are extremely important to help you to prepare for surgery.

This exercise program has several important benefits:

- Return range of motion to normal and decrease the risk of post-operative stiffness
- Increase muscle strength in your shoulder and around your shoulder blade
- Increase your core strength and stability
- Maintain fitness in preparation for surgery

Ideally, these exercises should be performed **daily**, as recommended below

## Exercises:

- 20-30 min of cardio **at least 3x** week
- 15-20 min of strength training (choose 3-4 exercises each day and do them with each arm)
- 10-15 min of stretching

## Strength Exercises

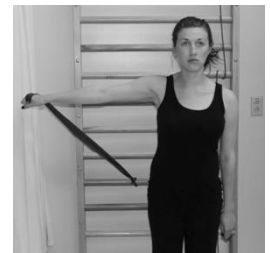
- **Internal Rotation** - Attach an elastic band on a door handle or a stable object that is at hip height. With your elbow bent at 90 degrees and always in contact with your rib cage, pull the elastic towards your stomach. Hold for a count of three and then slowly return to the start position. Perform 2 sets of 10 repetitions, 3 times a week.



- **External Rotation** - Attach an elastic band on a door handle or a stable object that is at hip height. With your elbow bent at 90 degrees and always in contact with your rib cage, pull the elastic away from your stomach and rotate your arm out to your side. Hold a count of three and then slowly return to the start position. Perform 2 sets of 10 repetitions, 3 times a week.



- **Lateral Raises** - Attach an elastic band to a doorknob or a table structure that is at hip height. With the elastic behind your body and with your arm straight, pull the elastic out laterally, until your arm is in line with your shoulder, hold for a count of three and then slowly return your arm back to your side. Perform 2 sets of 10 repetitions, 3 times a week.



- **Seated Row** - Take a 3-foot long elastic band and loop the band around a stable object. Sit facing the object, holding the ends of the band with your hands, with your elbows bent by your side. Keep your arms close to your sides and slowly pull your elbows straight back. Concentrate on pulling your shoulder blades together in a controlled manner. Hold for a count of three and then slowly return to the start position. Perform 2 sets of 10 repetitions, 3 times a week.



- **Ball on the Wall** - Using a small ball against a wall at around shoulder height, place a small amount of weight through your arm and draw the letters of the alphabet by actively moving your shoulder and arm. Perform the alphabet 2-3 times, taking a 30-60 second break between repetitions.





- **Rotations with Elastic Band** - Attach an elastic band to a doorknob or a stable structure between hip and shoulder height. Facing away from the structure, hold the elastic above your head and then rotate your arm in both clockwise and counter-clockwise directions. Repeat with your other arm. Perform 2 sets of 10 rotations in each direction in the over-head position, T-position, and hands-down position.
  - Do not continue in the over-head position if it causes pain.
- **Forward/Backward with Elastic Band** - Attach an elastic band to a doorknob or a stable structure between hip and shoulder height. Facing away from the structure, hold the elastic above your head and gently pull forward and backwards. Repeat with your other arm. Perform 2 sets of 10 repetitions with each arm in the over-head position, T-position, and hands-down position.
  - Do not continue in the over-head position if it causes pain.



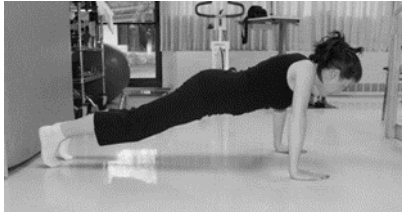
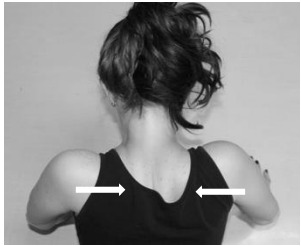
Over Head Position



T-Position



Hands-down Position

- **Scapula Push-ups** - With your hands shoulder width apart, place yourself in a push-up position. Lower down slightly while squeezing your shoulder blades together, at the same time as you squeeze your abdominal muscles to maintain a flat back. Keeping your arms as straight as possible, push yourself back up to the start position by lifting your shoulder blades. Perform 2 sets of 10 repetitions, 3 times a week. This exercise can also be done in the forearm push-up position.
 


- **Over-head Straight-arm Pull Down** - Hold the elastic band between your hands. Starting with the elastic **over** your head, slowly lower your arms down into the T-position, keeping the elastic behind you, until you reach shoulder height. Slowly move back to the start position and repeat. Perform 2 sets of 10 repetitions, 3 times per week.



- **The Whippet** - Hold the elastic band behind your back with your arms in the T-position. Pull your arms forward towards the center of your body. Hold for a count of 3 and then slowly return to the start position. Perform 2 sets of 10 repetitions, 3 times per week.



# Stretches

All stretches should be done within your pain limits. If any stretch causes you pain, either decrease the amount of stretch or discontinue the exercise

- **Assisted Internal Rotation Stretch** - Holding a towel overhead with your right, grasp the towel at the bottom with your left arm. Use your left arm to pull your right arm up until a comfortable stretch is felt. Hold for 10 seconds. Repeat 5 times on each arm.
  - Avoid if you have Posterior Instability



- **Parallel Arm Shoulder Stretch** - Extend your left arm across your chest, keeping your arm close to your body. Use your right arm to put gentle pressure on your left upper arm to stretch your shoulder muscles. Hold for 20 seconds and then slowly release. Repeat 5 times on each arm.
  - Avoid if you have Posterior Instability



- **Over-Head Palms Up Stretch** - Interlock your fingers with palms facing up. Extend your arms above your head and stretch through your chest and arm muscles. Hold for 20 seconds then slowly release. Repeat 5 times.



- **Swimmers Stretch** - Either standing up or on bent knees, bend over at your waist, extending your arms onto either a counter top or an exercise ball. Keep your head straight and aligned with your arms. Move backwards to extend the stretch throughout your back, shoulder and arm muscles. Hold for 20 seconds then slowly release. Repeat 5 times.

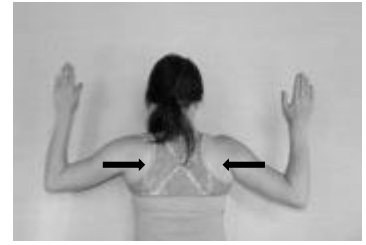


- **Triceps stretch** - Raise your right hand over your head and bend your elbow to place right hand behind your left shoulder. Press gently on your right elbow with your left hand to stretch the back of your arm. Hold for 20 seconds, and then relax your arms. Repeat 5 times on each side.
  - Avoid if you have Posterior Instability



- **Scapular Retraction Stretch** - Lay flat on your stomach with your arms out to the side and elbows bent. Rest your head on a small ball or rolled up towel, keeping your chest touching the floor at all times. Squeeze your shoulder blades together while lifting your elbows and hands off of the floor. Keep your elbows and hands at the same level. You should feel a gentle stretch at the front of your shoulder joint. Hold this stretch for ten seconds and then lower your arms. Perform 2 sets of 10 repetitions.

- Avoid if you have Anterior Instability



- **Reverse Shoulder Stretch** - Interlock your fingers behind your back with your palms facing up. Lift your arms up and away from your back to extend your shoulders back. Hold for 20 seconds then slowly release. Repeat 5 times.





# MANAGING PAIN SAFELY

Pain is an expected part of having surgery.

Managing your pain safely is important to help your recovery.

## PAIN AFTER SURGERY



After surgery, a moderate amount of pain is a normal and expected part of the process.

The goal of pain medication is to keep you moving and help you cope with your pain, but these medications *will not eliminate your pain entirely.*

In general, the most painful time is the first 72 hours (3 days) after surgery.

The amount of pain usually decreases after these first few days.



Scan to watch a short video on managing your pain

# MANAGING PAIN SAFELY

Opioids, such as morphine, oxycodone (Percocet), tramadol, hydromorphone or codeine, are strong pain relief medications that may be prescribed to help you manage the most intense postoperative pain.

Opioids should be used with caution as research shows that up to 1 in 12 patients prescribed an opioid for short-term use after surgery are at risk of becoming chronic users.

The regular use of over-the-counter Tylenol® and Advil, in addition to Cold Therapy\*, can effectively manage pain and significantly reduce, or eliminate the need for opioids.

If you are still experiencing intolerable pain after regularly using Tylenol® and Advil in addition to Cold Therapy\*, take the opioid in the lowest dose possible.

Also, only use the opioid for the shortest amount of time. No more than 2 - 7 days.



\*Scan for more information on Cold Therapy



Banff Sport Medicine

## CONTACT US

If you have questions about managing your pain, or your pain increases or does not decrease with medication, please contact our team:

- Banff Sport Medicine 403-760-2897 ext 1 (during business hours 8 am - 4 pm Monday to Friday)
- Banff Mineral Springs Hospital 403-762-2222 (for urgent concerns outside of regular business hours)





## Banff Sport Medicine

### Opioid Medication: Pain Control after Surgery

#### What are my options for safe and effective pain control?

Managing your pain after surgery is important. Combination therapy (using different medications together) along with education can offer the best pain relief. Some of these medications work via different pathways and can be used together. After surgery a moderate amount of pain is a normal and expected part of the process. Pain medications help you function better and cope with the amount of pain you are experiencing, but **these medications will not eliminate your pain entirely.**

Talk to your surgeon about medication options, which can include both prescription strength and over the counter drugs. These medications include:

- **Non-steroidal Anti-inflammatory Drugs (NSAIDs)** can be used to decrease swelling and fever, and to treat mild to moderate pain. (These can be prescription or over-the-counter medications, such as Naprosyn, naproxen: *Aleve*, ibuprofen: *Advil*, *Motrin*).
- **Acetaminophen** is used to decrease mild to moderate pain and fever. (These are over-the-counter medications such as Tylenol or Paracetamol).
- **Local anesthetics** which can be injected near a set of nerves (nerve block) or the surgery wound site. (This option is performed immediately after your surgery at the hospital).
- **Opioids** are used to decrease severe pain. (These are prescription medications such as Morphine, Tramacet, Percocet, OxyContin, Vicodin or Tylenol #3 which contains codeine).
- **Nerve pain medication** used to prevent nerve pain and irritation. (These are prescription medications such as Lyrica and Neurontin).

#### When should I take pain medication?

The goal is to keep you moving and control your pain. In general, the most painful time is the first 72 hours (3 days) after surgery. The amount of pain usually decreases after these first few days. If your pain increases or does not decrease with medication you should contact your surgeon. Call our office at 403-760-2897 (during regular business hours 8am-4pm Monday to Friday), or the Banff Mineral Springs Hospital at 403-762-2222 (outside of business hours).

Some medication is taken on a schedule (for example, every 4-6 hours) and other medications can be taken when you feel pain. Here is a useful guide:

- I am moving slowly and either have no pain or only a little pain = I don't need any medication.
- I am feeling some pain and having trouble moving around = I could use some over-the-counter medication. (For example, ibuprofen: *Advil/Motrin* or acetaminophen: *Tylenol*).
- I am thinking about my pain all the time and it is painful for me to move = I should take some stronger medication. (For example, a prescription medication such as Morphine, Percocet or Tramacet).

It usually takes 25-40 minutes for the medications to start working effectively so you should take your medication before your pain becomes severe or you are unable to move because of the pain.

#### Are there ways to reduce my pain besides medication?

**Yes!** You can do a number of things to help decrease your pain (*continued on next page*)

- Use ice packs or cold therapy to decrease swelling and pain.
- Rest for the majority of time for the first few days after surgery.
- Elevate and support your surgical limb as shown on your rehabilitation exercise protocol.
- Keep moving after the first few days, without over doing it.

- Distraction such as watching movies, listening to music, playing games, or talking to friends and family, has been shown to help reduce pain after surgery.

## Why are opioids used?

Opioids are strong medications and when used properly, they can help to relieve short-term pain like the pain experienced after surgery. When opioids are used improperly, they can cause dependence or addiction, overdose and death.

## How to use your prescribed opioid medication.

### If you have been prescribed an opioid medication, such as Percocet or Tramacet, it should:

- **Only** be taken as prescribed
- **Never** be used by someone for whom it was not prescribed
- **Never** be taken with alcohol or other medications (except as prescribed).
- **Never** to be used while driving or operating machinery

### Keep your medication safe to help prevent use by others by:

- **Never** sharing your medication with anyone else. (Sharing opioid medication is illegal and may also cause serious harm or death to the other person).
- **Keeping track** of the number of pills remaining in the package
- **Storing** opioids in a safe and secure place, out of the reach of children and teenagers

### Unused portions of opioid medicine should always be:

- Kept out of sight of children and pets
- Stored in a safe place to prevent theft, problematic use or accidental exposure
- **Returned to the pharmacy** for safe disposal when no longer needed or expired. Medications should never be thrown in the trash or flushed down the toilet.
- This will prevent the possibility of illegal use and protect the environment from contamination.

## Opioid Side Effects

Short-term side effects	Long-term side effects
Drowsiness	Increased tolerance
Decreased reaction time, which can impair driving and decision-making	Substance use disorder or dependence (addiction)
Constipation	Liver damage
Impotence in men	Infertility in women
Nausea and vomiting	Worsening pain
Difficulty breathing, which can lead to or worsen sleep apnea	Life-threatening withdrawal symptoms in babies born to mothers taking opioids
Euphoria (feeling high)	Overdose
Headaches, dizziness and confusion, which can lead to falls or fractures	

### Anyone who takes prescription opioids can become addicted.

If you take opioid medications for more than a few weeks, your body becomes used to that dose. This physical dependence means you may experience withdrawal symptoms if you stop taking the drug.

**Withdrawal symptoms include:** insomnia, anxiety, racing heartbeat, and headaches. Withdrawal symptoms can be managed by gradually decreasing your medication dose with advice from a health care provider.

**Signs of opioid overdose include small pupils, trouble breathing and unconsciousness. Call 911 immediately if you think you or a family member took too much pain medication.**



## Banff Sport Medicine

### Post-Operative Concerns

Contact us if you have any concerns after your surgery

#### *For Surgery performed at Banff Mineral Springs Hospital (Banff)*

- ✓ During regular business hours - 8 am to 4 pm, Monday to Friday (closed Statutory Holidays):

403-760-2897 Ext 1

*Note: Call our office and **not** the hospital. If you get a voice mail response, please leave a detailed message, our office staff will call you back as soon as they are able.*

- ✓ Weekends and after regular hours:

If you have any urgent concerns **after** regular business hours that cannot wait please call the Mineral Springs Hospital at 403-762-2222 and ask for Acute Care.

- ✓ Anytime:

Health Link (811) will connect you to a nurse 24hrs a day who is able to give advice.

#### *For surgery performed at other locations:*

- ✓ Golden and District General Hospital (Golden): 250-344-5271
- ✓ Hinton Healthcare Centre (Hinton): 780-817-5019
- ✓ Elk Valley Hospital (Ferne): 250-423-4453

### Common Concerns

1. **Uncontrolled pain**, if the prescribed pain medications and cold therapy are not controlling your pain, try loosening the tensor bandage and elevating the leg. If these do not improve the pain, please contact us.
2. **Calf, foot and ankle pain and swelling** within the first 2 weeks after knee surgery is common. If you have calf pain and swelling, you should loosen the tensor bandage around your knee and also elevate your leg so that your knee and ankle are above your heart. (Please see the Cold Therapy and Elevation picture on the first page of your rehabilitation protocol). If this does not improve the pain and swelling, please contact us. *If the pain and swelling is associated with sudden chest pain and/or shortness of breath immediately go to the nearest emergency department.*
3. **Swelling and redness of the shin** after ACL or other knee ligament surgery is not uncommon. Contact us only if the redness extends into the surgical incision sites or if there is persistent drainage of fluid (yellowish or cloudy fluid) after removing your bandage at the recommended time.





## Banff Sport Medicine

4. **Skin redness above or below the bandages**, when you get home from the hospital, you may notice that the skin is red above or below the bandage. The most likely cause of this is the surgical preparation solution that was used to clean your skin before the operation. This solution has a red dye in it so if you are concerned that the redness may be caused by an infection, try washing that area with soap and water to see if it comes off. If your leg is still red and/or hot to touch after you have washed the area, then you should go to your local doctor or hospital to be assessed.
5. A **fever** is not uncommon within the first 48 hours after surgery. Call us only if the fever continues more than 2 days after surgery and is associated with a feeling of general unwellness. Fevers occurring within the first 48 hours post-operatively can be managed with Tylenol and deep breathing exercises.
6. A small amount of **bleeding** through the bandage can occur within the first 48 hours after surgery. Call the office or hospital if the bandage becomes saturated with blood, or if bleeding continues after removing the bandage at the recommended time.
7. **Swelling of the hand** is common after shoulder and elbow surgery. This swelling can be prevented or reduced by frequent pumping of the fingers (or squeezing a rubber or foam ball) and by taking your arm out of the sling and fully straightening your elbow (as when doing a pendulum exercise).
8. For post-operative **nausea and vomiting** if you can tolerate the pain, try stopping your prescribed painkiller, or take gravol (can be purchased over the counter in pill and suppository form). Sometimes taking the painkiller with food will help. Call us if you have uncontrolled vomiting.
9. Occasionally, an itchy, red, blotchy **skin rash** can occur with the use of ice packs or a cold therapy unit. This is not an infection but is a skin reaction to the cold. This can happen when cold is used for long periods of time, even when a cloth is used to protect the skin. If this happens, stop using the cold therapy until the rash settles down (this may take hours or even a day or two). When you start using cold therapy again, apply it intermittently (20 minutes on, then 20 minutes off).
10. After ACL surgery using your **hamstring tendons**, it is not uncommon to strain or pull the hamstring muscle in the first 6-weeks after surgery. This may occur while pulling on your socks or shoes, or bending over to pick something up. You may feel a sudden painful “pop” in the back of your knee or lower thigh. This does not mean that you have torn your ACL graft and the pain will settle down within a few days. You may also notice some bruising or swelling at the back of your thigh. However, if the pain is not improving after a few days, or is associated with a significant increase in knee swelling, please call our office and not the hospital, as this concern can wait until regular office hours.
11. When you remove your bandage for the first time, you may notice a clear string that looks like fishing line sticking out of the skin near the incision(s). This is a **biodegradable stitch or suture** that is used to close the skin incision. It will eventually fall off. However, you may snip these clear strings off at the level of the skin as early as 2 weeks after surgery, or you can wait to have this done by your surgeon at your first follow-up appointment. After removing your bandage, avoid the temptation to touch your healing incisions as your own hands are the most common source of bacteria which can cause wound infections.
12. **Steri-strips** are white strips of tape that are used to reinforce the stitching of the skin incisions. You may peel these strips of tape off by yourself 2-weeks after surgery, by which time the incision should be healed.



## **Banff Sport Medicine**

### Patient Services

#### Questionnaires

We aim to provide excellent post-operative care. As such, we ask you to come back for appointments for up to 2-years after your surgery.

In addition to these visits, you may be asked to complete questionnaires, these provide the Surgeon with information regarding your overall function, your ability to participate in recreational or sporting activities, and your social and emotional well-being, both before and after surgery. From each questionnaire a score is generated reflecting your current level of function. Using these scores, the Surgeon can assess your recovery progress.

These questionnaires will be provided to you via an email with a link to a secure site to complete the questionnaire electronically before your appointment.

#### Online Shop

Our Online Shop (<https://banffsportmed.ca/shop/>) offers medical aids for purchase to help with your recovery and rehabilitation. You may order cold therapy units, range of motion (ROM) and off-the-shelf braces, electric muscle stimulator (EMS) units, and exercise kits from our site. Purchases are made through PayPal or via a secure credit/debit transaction.

The electronic receipt received through the website may be used to submit for insurance claims.

Prescriptions required for Cold Therapy Units will be provided to you by our office.

Some medical aids such as cold therapy units and knee walkers can also be rented for defined periods of time.

#### Frequently Asked Questions (FAQ)

You can consult our Frequently Asked Questions page on our website (<https://banffsportmed.ca/faq/>) to find answers to questions that are common to many patients in your situation. Answers include what your surgery will involve, how to manage your pain, when you can drive after surgery, how long you should avoid contact with water at the site of your surgical incision, common physical effects after surgery, and what to do if you require medical attention. If your question is not answered on the FAQ page, please contact your surgeon's medical office assistant with your question by phone or email for more information.



## Cold Therapy Information

### What is Cold Therapy?

Cold therapy is the use of ice or cold to reduce pain, inflammation, swelling and spasm from an injury or after surgery. Cold therapy can be applied with a bag of ice, an ice pack, gel pack, cold compress or by using a specialized Cold Therapy Unit.

Cold therapy is used as part of rehabilitation after knee, shoulder and ankle surgeries, such as arthroscopy, anterior cruciate ligament (ACL) reconstruction, shoulder reconstruction or rotator cuff repair.<sup>1</sup>

### What does it do?

Cold therapy slows down the blood flow to an injured area. Research has shown that cold therapy decreases pain, inflammation, swelling, blood loss, and medication use after surgery.<sup>2</sup>

WHEN To Use Cold Therapy	WHAT Do We Recommend?	HOW OFTEN To Use Cold Therapy
> For the first 3 months after surgery	> bag of ice / ice pack / gel pack / cold compress	First 5 - 7 days - <b>minimum</b> 5 x per day for 20 minutes*
> When experiencing pain and swelling	> Kodiak Cold Therapy Unit	After 7 days - as needed
> After therapy and exercise sessions	> Polar Care Wave Compression Cold Therapy Unit	*up to 5 hours if using a Cold Therapy Unit

To prevent skin injury when using cold therapy, it is essential that you protect your skin by using a cloth or towel.  
Always carefully follow the specific Cold Therapy Unit instructions

### Where can I buy a cold therapy unit?

You can order a Cold Therapy Unit, complete with a knee or shoulder pad, through our website. Visit <https://banffsportmed.ca/shop/> or scan the QR code.

Alternatively, you can purchase a Cold Therapy Unit from your local healthcare provider or from an online health supply store, or rent one from the clinic for a defined period.

**We recommend that you buy your Cold Therapy Unit at least two weeks before your surgery to make sure that you have it delivered in time.**



<sup>1</sup> Raynor MC, Pietrobon R, Guller U, Higgins LD. Cryotherapy after ACL reconstruction: a meta-analysis. J Knee Surg. 2005 Apr;18(2):123-9.  
<sup>2</sup> Wilke B, Weiner RD. Postoperative cryotherapy: risks versus benefits of continuous-flow cryotherapy units. Clin Podiatr Med Surg. 2003 Apr;20(2):307-22.

# OPTIMIZE YOUR RECOVERY

Along with physiotherapy, we offer several services to help you reach your optimal recovery after surgery.

Getting you back to your activities and reducing your risk of another injury.



## DIETETICS & NUTRITION

Consulting a Registered Dietitian\* prior to surgery can help in many ways. They can:

- Conduct a nutrition pre-screen to ensure optimal surgery outcomes
- Support your increased nutrition needs during the inflammatory and healing phases of surgery
- Provide strategies that help to reduce muscle loss
- Help you manage post-surgical symptoms such as reduced appetite, nausea, and constipation

\*Our Registered Dietitian works with clients 18 years and older

# STRENGTH & CONDITIONING

Our strength and conditioning coaches (kinesiologists) and physiotherapists work together to help you:

- Prepare for surgery
- Recover after surgery



While our physiotherapists focus on reducing your pain, restoring range of motion, and progressing your rehabilitation exercises, our kinesiologists gradually reintroduce functional exercises to help you return to sport, activity, and performance.

This seamless collaboration is tailored to your surgery and goals to help you optimize your recovery and reduce your risk of another injury.



## OTHER SERVICES

Our multidisciplinary team can also provide the following services for your surgery:

- Bracing
- Cold Therapy
- Massage Therapy
- Medical Devices and Equipment
- Blood Flow Restriction Therapy

## BOOK A CONSULT



403 760 2897 ext 3



[banffsportmedphysio.janeapp.com](https://banffsportmedphysio.janeapp.com)

Patient education is proudly supported by the Banff Sport Medicine Foundation

