Banff Sport Medicine

BANFF SPORT MEDICINE
P: 403 760 2897 F: 403 760 8234
banffsportmed.ca

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. Please let them know about ***any breaks in the skin*** (bites, scrapes, wounds) as these can act as an entry point for bacteria, increasing the risk of infection. If present, your surgery may need to be re-scheduled.

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
Orthopaedic Surgeons

P: 403 760 2897 F: 403 760 8234
banffsportmed.ca

Banff Sport Medicine

Shoulder Stabilization

What is shoulder instability?

After a shoulder dislocation or subluxation (partial dislocation) the ligaments and/or labrum (cartilage ring) in the shoulder are torn or stretched. After the first shoulder dislocation, the main factors that influence the ability to manage your injury without surgery are your age and activity level. Often the damaged ligaments and labrum don't heal, resulting in ongoing instability of the shoulder. Chronic instability of the shoulder requires surgery to repair the ligaments and/or labrum. The most effective treatment for recurrent shoulder instability is surgical repair.

Diagnosis:

- The surgeon will diagnose your shoulder injury by taking a detailed history of how it occurred and by completing a careful physical examination.
- A history of shoulder dislocation or subluxations, and/or feelings of instability.
- Physical examination shows looseness of the shoulder joint.
- Plain x-ray films are usually all that is required. If the x-rays suggest that there is also involvement of the bone of the humeral head (ball) and/or the glenoid fossa (socket) of the shoulder, then a CT scan may be required.
- Once the diagnosis is made the surgeon will discuss treatment options with you.

Why fix it?

- To restore normal shoulder stability and function, allowing most patients to return to their previous activities
- To prevent further damage to the bony cartilage of the shoulder, thereby decreasing the risk of osteoarthritis

Alternatives to Surgery

- **Rehabilitation** - some patients can cope with their instability by undergoing intense rehabilitation to strengthen muscles around the shoulder
- **Lifestyle modifications** – avoiding activities that cause instability episodes.
- **Bracing** – some patients can manage their instability by wearing a stabilizing brace

About the Surgery Timing

- 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 through muscle strengthening exercises before surgery and maintaining your fitness will prepare you for surgery and also help you to recover more quickly.
- After a dislocation some patients may be able to get through a sports season with proper rehabilitation and the use of a fitted shoulder brace before having their surgery.

The Procedure

- In most cases shoulder instability surgery is done arthroscopically. Arthroscopic surgery uses a very small camera to look inside a joint. The camera is inserted through a small incision and allows the surgeon to see all of the shoulder structures. 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.
- During surgery the shoulder ligaments and/or labrum can be re-attached to the bone through 2-3 small incisions. Absorbable anchors (screws) are placed in the glenoid fossa (socket) and stitches are used to attach the labrum (cartilage ring) to the bone.
- Open shoulder repair may be necessary in complex cases where there is bone loss or if a stabilization surgery has failed. An open shoulder repair may involve a bone grafting procedure to reconstruct the shoulder socket (glenoid fossa) in cases where there is a lack of bony stability.

RISKS OF SURGERY

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 5-10 in 100

- The risk of failure (recurrent shoulder subluxation or dislocation) in patients without generalized ligamentous laxity or bone loss is 5-10%. The risk of failure in patients who have generalized ligamentous laxity or a loss of bony stability can be up to 20%. Other factors which may increase the risk of failure are a higher number of shoulder dislocations before surgery, younger age, male gender, bone loss and involvement in contact sports.

Skin Numbness around Incision

- Numbness around incision is common because some small surface nerves may be cut during surgery. This may disappear slowly over time.

Risk of Shoulder Stiffness: approximately 5 in 100

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

Risk of Hematoma: less than 1 in 100

- Hematoma (collection of blood under the skin) is very rare in arthroscopic shoulder surgery, but can occur after open shoulder stabilization surgery, especially if bone grafting is required.

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 stabilization. Your anaesthesiologist will discuss these options with you on the day of surgery.
- Although stabilization 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 4-6 weeks wearing this brace. You will have to pay the hospital for the cost of the brace.

Postoperative Pain Control

- Rest, ice, compression, and elevation of your surgery shoulder
- You will be given a prescription for pain medication (Tylenol 3, Percocet or Tramacet) before you leave the hospital. You may take an over-the-counter anti-inflammatory medication, such as Advil, along with your pain medication if you find that your pain medication is not controlling your pain. If you have medication allergies or intolerances, you should discuss these with your surgeon.

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 4-6 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. A second appointment 12+ weeks after surgery may be needed to determine fitness for return to sport.
- 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

- Sedentary work: 1-2 weeks
- Light manual work: 6-7 weeks
- Heavy manual work: 3-4 months

Physiotherapy

- See your physiotherapist between 1-4 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 Sport

- Your surgeon will be able to tell you when you can safely return to sport. In general, it takes three to four months to return to non-contact sports, and approximately 6 months to return to contact sports. The type of sport, and your level of strength and function will guide the surgeon's recommendations.
- Patients who have more bony cartilage damage at the time of surgery may be told to protect their shoulder joint by doing fewer sports and activities that use 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 sport based on the amount of damage seen inside your shoulder at the

BANFF SPORT MEDICINE
P: 403 760 2897 F: 403 760 8234
banffsportmed.ca

Pre-Surgery Rehabilitation Program

for

Shoulder Injuries

October 2025

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

Banff Sport Medicine

Banff Sport Medicine FOUNDATION

Covenant Health Banff Mineral Springs

Shoulder Injuries Pre-Surgery Rehabilitation

Scan the QR code to watch a short video about the importance of pre-surgery rehab.

Why are these exercises important?

- Your surgeon recommends that you complete this exercise program to prepare for your upcoming surgery and/or to get the best possible result from your injury rehabilitation.
- Strengthening the muscles around your shoulder will make your shoulder more stable and will help with your recovery from surgery.
- You should also incorporate 20-30 minutes of cardio exercises at least 3x/week (all low-impact and low risk activities e.g. elliptical trainer, cross-country skiing, stationary cycling or hiking).

How often should I do these exercises?

- All exercises should be done **1 - 2 times per day.**
- It is important that you do all of the exercises on both arms.
- Whenever you can, do your exercises in front of a mirror to make sure you are doing them correctly.

How many exercises should I do?

- Each exercise should be done smoothly and slowly.
- Start with one set for each exercise. Your therapist will recommend the number of exercises you should do based on your muscle strength and endurance.
- Once you can comfortably do one set of each exercise, progress to 2 sets and once you are strong enough, then 3 sets. Your physiotherapist might recommend for some exercises to be done until you fatigue or until you lose the form of the original exercise position.
- Aim to challenge yourself when doing your exercises to get the greatest strength and stability improvements.

What if I have increased pain or swelling?

- If you have increased pain that lasts longer than 1 or 2 hours after you have finished your exercises, decrease the amount you are exercising by 20% the next time.
- If you have increased swelling after these exercises please use rest, ice, compression and elevation.
- If symptoms do not improve, or swelling lasts longer than 48 hours, call your physiotherapist to review your program.

Notes for Physiotherapists:

Please assess the number of sets/repetitions and ranges of motion for the exercises as applicable. Thank you.

***If you have any questions please contact Sarah Kerslake at:*
*sarah@banffsportmed.caor 403 760 2897 ext 6***

Phase 1: Strength Basics

- **Supine Punch**
  Lie down with your knees slightly bent, feet flat, your arms at your side, and your elbows bent at 90 degrees. Keep your shoulders relaxed, your core engaged, and your spine in a neutral position. From the bent-arm position, slowly extend your arm by straightening your elbow. As you do this, reach your hand upward as if you're punching straight toward the ceiling. At the top of the movement, your arm should be straight and your shoulder blade slightly lifted.
  Slowly lower your arm by bending the elbow back to the 90-degree starting position.
  Sets: 3 Reps: 12

- **Isometric Rotator Cuff Contractions**
  Sit or stand with your shoulders relaxed, back straight, and head in a neutral position. Place a rolled towel or small cushion between your upper arm and torso. Your elbow should be bent to 90 degrees, forearm parallel to the floor. Don't allow your shoulder to shrug or your torso to rotate. The movement should come from gentle muscular engagement, not from actually moving your arm/body.

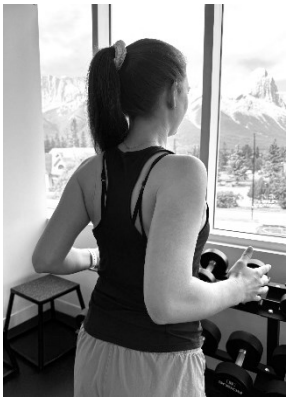
  For **internal rotation**, place your **palm** against a wall or door frame and gently press **inward**, as if trying to rotate your arm toward your belly without moving it.

  For **external rotation**, place the **back of your hand** against the wall and gently press **outward**, as if rotating your arm away from your body.
  Sets: 3 Reps: 10 Hold: 8-15 seconds

Note: You should feel a focused activation deep in the front of your shoulder (for internal rotation) or back of your shoulder (for external rotation). Keep the effort firm and controlled and avoid holding your breath or tensing your neck.

- **Isometric Anterior Deltoid Hold**
  Stand facing a wall with your feet shoulder-width apart, core lightly engaged, and back in a neutral position. Place a rolled towel or small cushion between your elbow and torso. Bend your elbow to 90 degrees so that your forearm is parallel to the floor. Make your hand into a fist, gently press it into the wall. Engage the front of your shoulder (anterior deltoid) while keeping your shoulder blade stable and core engaged. Avoid shrugging your shoulders or leaning forward.
  Sets: 3 Reps: 10 Hold: 8-15 seconds

- **Scapular Retraction (Shoulder Blade Squeeze)**
  Squeeze your shoulder blades gently together and downward. Avoid shrugging or moving your shoulders upward. Focus on smooth symmetrical movement and avoid arching your back.
  Sets: 3 Reps: 8 Hold: 10-15 seconds



- **Ball Stabilization Wall Circles**
  Stand facing a wall with your feet shoulder-width apart. Press a small ball (e.g., tennis ball, lacrosse ball, or soft therapy ball) against the wall using the palm of the hand of your affected shoulder.
  Apply gentle, consistent pressure into the ball so that it stays in place against the wall.
  Begin drawing small, slow circles with your hand clockwise for 30 seconds. Reverse the direction and repeat the motion counterclockwise for 30 seconds.
  Sets: 4

Note: Focus on moving from your shoulder and not your wrist or elbow (avoid winging your elbow out or shrugging your shoulder upwards).

Caution is advised for the following "wall push-up plus" exercise if you have posterior shoulder instability. Please consult your physiotherapist prior to completing this exercise if you are having a posterior stabilization procedure.

- **Wall Push-Up Plus**
  Place your hands flat against a wall, slightly below shoulder height, and shoulder-width apart. Keep your feet shoulder-width apart, core lightly engaged, and back in a neutral position.
  Bend your elbows and lower your chest slightly toward the wall in a controlled motion. Keep your elbows pointing down and slightly out (not flaring wide).
  As you press back up to the starting position, continue pushing your hands into the wall until your shoulder blades move away from your spine. Imagine you are trying to reach forward without rounding your upper back.
  Slowly return to your neutral starting position. Avoid rushing or collapsing the movement.
  Sets: 3 Reps: 10



Phase 2: Progressive Conditioning

After you have completed 4 - 6 weeks of Phase 1 exercises, you should be reassessed by your physiotherapist and progress to the second phase. Before you start Phase 2, you must be able to complete 3 sets of ≥ 10 repetitions of the Phase 1 exercises with good control.

- **Prone Rows**

  Lie face down on a firm elevated surface such as a bench, table, or therapy ball, with your chest supported and arms hanging straight down toward the floor.
  Maintain a neutral neck position by keeping your gaze downward (don't tilt your head up).
  Bend your elbows to 90 degrees and drive them up towards your body.
  Pause briefly at the top of the row, squeezing your shoulder blades together.
  Slowly lower your arms back down to the starting position with control. Avoid letting your shoulders round forward or collapsing through your upper back.
  Sets: 3 Reps: 8

Note: To progress this exercise, you can hold light weights (2 - 5lbs) in both hands.

- **Side Lying External Rotations**

  Lie on your unaffected (healthy) side, with your affected (injured) arm on top. Place a rolled towel or small pillow between your elbow and your torso. Keep your shoulders stacked, core engaged, and neck relaxed.
  Bend your affected arm's elbow to 90 degrees, so your forearm rests across your abdomen and your elbow is tucked against your side.
  Hold a light dumbbell or small weight (1-3 lbs) in your top hand with your palm facing inward.
  Rotate your arm outward, lifting slowly towards the ceiling. Rotate only at the shoulder while keeping your elbow fixed in place at your side.
  Stop when your forearm is vertical, pause briefly, then slowly return to the starting position with your forearm across your abdomen. Avoid letting the weight drop.
  Sets: 3 Reps: 10

- **Straight Arm Pull Down**
  Anchor a light resistance band overhead (e.g., in a door, railing, etc.).
  Hold the resistance band with your hands at shoulder height. Keep your elbows straight and pull the band down and back towards your hips (not straight down).
  Pause briefly when at the bottom, then slowly return to the starting position.
  Sets: 2 Reps: 10

Note: Don't let the band pull you back to the starting position; move slowly and with control.

- **Band Pull Aparts**
  Stand upright with your core engaged. Hold a light to moderate resistance band out in front of you with your elbows slightly bent and your palms facing upwards.
  Slowly pull your arms straight out to the side, forming a "T" shape with your body. Keep your hands and arms at shoulder height throughout the movement.
  Focus on squeezing your shoulder blades together as your hands move outwards. Maintain even tension in both arms and avoid shrugging your shoulders. Pause briefly, then slowly return to the starting position.
  Sets: 3 Reps: 10

Note: Don't let the band pull you back to the starting position; move slowly and with control.

- **Shoulder Flexion with Resistance Band**
  Use a light to moderate resistance band securely anchored under your foot.
  Stand upright with your feet hip-width apart and your core engaged.
  Hold the end of the band with your palm facing inward (thumb facing forward) and arm at your side with your elbow straight but not locked.
  Slowly raise your arm straight in front of you to shoulder height (90 degrees of flexion), keeping your palm facing in and the motion smooth. Do not shrug your shoulders or lean back. Pause briefly at the top, then slowly return to the starting position. Avoid letting the band pull you back, lower with control.
  Sets: 3 Reps: 10

- **Serratus Wall Slides**
  Stand facing a wall about arms length from the wall with your feet hip-width apart. Place your arms into a pillowcase, up to the elbows, and position your forearms against the wall with your elbows bent at 90 degrees and your hands at shoulder height. Keep your shoulders relaxed, core gently engaged, and spine neutral (looking straight forward). Slowly slide your forearms upward along the wall, focusing on allowing your shoulder blades to rotate upward and outward as your arms rise. Keep gentle pressure against the wall the whole time. Slide up to a comfortable end range, ideally just above shoulder height, or as tolerated. Pause briefly at the top, then slowly return to the starting position maintaining contact with the wall the whole time. Avoid letting your shoulders shrug or collapse.
  Sets: 3 Reps: 8

Caution is advised for the following "wall plank shoulder taps" exercise if you have posterior shoulder instability. Please consult your physiotherapist prior to completing this exercise if you are having a posterior stabilization procedure.

- **Wall Plank Shoulder Taps**
  Stand facing a wall and place your hands flat at shoulder height, slightly wider than shoulder-width. Form a straight line from your head to your heels. Keep your shoulder blades wide and stable, avoiding letting your chest collapse towards the wall.
  Slowly lift one hand off the wall and tap your opposite shoulder. Keep your hips level and your body as still as possible. Avoid twisting and shifting your weight from side-to-side. Return your hand to the wall and repeat on the other side. Continue alternating sides with slow, controlled taps.
  Sets: 3 Reps: 12

Note: To progress this exercise, perform this exercise on an incline bench or step, on the ground in a modified high plank (on your hands and knees), or in a full high plank (on your hands and toes). Talk with your physiotherapist before attempting this progression.

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

Banff Sport Medicine FOUNDATION

Patient education is proudly supported by the Banff Sport Medicine Foundation

Banff Sport Medicine

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.

*Scan for more information on Cold Therapy

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.

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

BANFF SPORT MEDICINE
Orthopaedic Surgeons

P: 403 760 2897 F: 403 760 8234
banffsportmed.ca

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

BANFF SPORT MEDICINE
Orthopaedic Surgeons

P: 403 760 2897 F: 403 760 8234
banffsportmed.ca

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 (Fernie): 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

BANFF SPORT MEDICINE
Orthopaedic Surgeons

P: 403 760 2897 F: 403 760 8234
banffsportmed.ca

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

BANFF SPORT MEDICINE
Orthopaedic Surgeons

P: 403 760 2897 F: 403 760 8234
banffsportmed.ca

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.

Banff Sport Medicine

BANFF SPORT MEDICINE
Orthopaedic Surgeons

P: 403 760 2897 F: 403 760 8234
banffsportmed.ca

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.[1]

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.[2]

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 - **minimum** 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.

[1] Raynor MC, Pietrobon R, Guller U, Higgins LD. Cryotherapy after ACL reconstruction: a meta-analysis. J Knee Surg. 2005 Apr;18(2):123-9.
[2] 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.

BOOK A CONSULT

403 760 2897 ext 3

banffsportmedphysio.janeapp.com

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

Patient education is proudly supported by the Banff Sport Medicine Foundation

Banff Sport Medicine FOUNDATION