Essential Imaging
BC PATIENT SAFETY & QUALITY COUNCIL

Low Back Pain: A Guide for Essential Imaging

Recommendation:
"Imaging is not recommended for low back pain unless red flags are present."[1]

The BC Patient Safety & Quality Council has put together these Essential Imaging Conversation Guides for Patients to support and guide conversations with care providers based on the *BC Guidelines for Appropriate Imaging*.[1]

While low back pain can be uncomfortable and challenging, you probably do not need an x-ray, CT scan or MRI.

Back pain usually goes away on its own and people tend to recover after a few weeks. You can help avoid complications and encourage recovery by following a few simple tips.[2]

Take Action

Here are some ways that you can take an active role in managing your lower back pain: [1,2]

- Stay active. The sooner you start moving—even if it is gentle range of motion or going for light walks - the faster you are likely to improve.
- Apply heat. A heating pad, warm shower or bath can help to relax muscles.
- Take an over-the-counter pain reliever such as acetaminophen (Tylenol®), ibuprofen (Advil®) or naproxen (Aleve®).
- Partner with a professional. Call 8-1-1 to speak with an exercise physiologist to receive individualized care, which can include:
  - Exercises to address your low back pain;
  - Advice on how to increase physical activity; and
  - Support for motivation, education, identifying and overcoming barriers, and returning to work.

Stay Informed

Seek medical attention if you experience any of the following: [1,2]

- Severe continuous back pain and/or a fever that lasts longer than 48 hours
- Back pain with accompanying pain, numbness or weakness in one or both legs or feet
- Leg symptoms that are more disabling than your back symptoms
- Back pain and the onset of numbness in your genital area or changes in your ability to control your bladder and bowel function

If none of these additional symptoms are present, you likely do not need an imaging test.[1,2]

Start the Conversation!

Talk with your care provider about appropriate medical imaging.
Learn more and find additional clinical resources at **BCPSQC.ca/imaging**.

BCPSQC.ca
604.668.8210
info@bcpsqc.ca
@BCPSQC

BC PATIENT SAFETY & QUALITY COUNCIL
Working Together, Accelerating Improvement.

BRITISH COLUMBIA
Supported by the Province of British Columbia

Choosing Wisely Canada™

[1]BC Guidelines. Appropriate Imaging for Common Situations in Primary and Emergency Care. 2020. Diagnostic Imaging. Available from: https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines/diagnostics-imaging

[2]Choosing Wisely Canada. Imaging tests for lower back pain. When you need them and when you don't. [Internet pamphlet]. Toronto Canada; 2017. [cited 2020 March 10]. Available from: https://choosingwiselycanada.org/wp-content/uploads/2017/05/Low-Back-Pain-EN.pdf

Essential Imaging
BC PATIENT SAFETY & QUALITY COUNCIL

Minor Head Injury: A Guide for Essential Imaging

Recommendation: "CT head scans are not recommended in adults and children who have suffered minor head injuries unless positive for a head injury clinical decision rule."[1]

The BC Patient Safety & Quality Council has put together these Essential Imaging Conversation Guides for Patients to support and guide conversations with care providers based on the *BC Guidelines for Appropriate Imaging*.[1]

Head Injuries Need Time to Heal

An injury to the head can be scary—a concussion affects how your brain works and results in changes in how your brain functions.[2]

Over the next few days to weeks you may experience headaches, dizziness, nausea, feeling unsteady, sensitivity to light or sounds and difficulties with memory or concentration.[2]

Take Action

Here are some ways that you can take an active role in your recovery:[1,2]

- Take it easy and reduce stress on the brain
- Drink enough fluids and limit alcohol
- Gradually return to work
- Talk to your care provider about taking pain medication
- Avoid strenuous physical activity or exercises

When Would You Need a CT Scan of Your Head?[2]

Possible signs of skull fracture and bleeding in the brain include:

- Weakness on one side of your face or body
- Trouble speaking, hearing, or swallowing
- Reduced vision
- Seizures
- Relentless vomiting
- Severe headache
- One pupil is larger than the other
- Sudden fluid or blood coming out from an ear or nose
- Tenderness in a specific area on your head
- You regularly take a prescribed blood thinner

Stay Informed

Seek medical attention if you experience any of the following:[2]

- Your headache gets significantly worse
- You have extreme drowsiness and it is difficult to wake up
- You have difficulty recognizing people or places
- You cannot stop vomiting
- You don't feel like your usual self
- You experience seizures of the arms or legs (uncontrollable jerking)
- You have weak or numb arms or legs on one side of the body
- Your balance is off, or you have difficulty in speaking

Start the Conversation!

Talk with your care provider about appropriate medical imaging.

Learn more and find additional clinical resources at **BCPSQC.ca/imaging**.

BCPSQC.ca
604.668.8210
info@bcpsqc.ca
@BCPSQC

BC PATIENT SAFETY & QUALITY COUNCIL
Working Together, Accelerating Improvement.

BRITISH COLUMBIA
Supported by the Province of British Columbia

Choosing Wisely Canada

[1]BC Guidelines. Appropriate Imaging for Common Situations in Primary and Emergency Care. 2020. Diagnostic Imaging. Available from: https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines/diagnostics-imaging

[2] Choosing Wisely Canada. CT scans for adults with head injuries. When you need one and when you don't. [Internet pamphlet]. Toronto Canada; 2017. [cited 2020 March 10]. Available from: https://choosingwiselycanada.org/wp-content/uploads/2017/06/CTs-for-adults-with-head-injuries-EN.pdf

Essential Imaging
BC PATIENT SAFETY & QUALITY COUNCIL

CT Scans for Uncomplicated Headache in Adults: A Guide for Essential Imaging

Recommendation: "Imaging is not recommended for uncomplicated headache unless red flags are present."[1]

The BC Patient Safety & Quality Council has put together these Essential Imaging Conversation Guides for Patients to support and guide conversations with care providers based on the *BC Guidelines for Appropriate Imaging*.[1]

While a headache can be difficult, you likely do not need a CT scan of your head.[2]

A headache usually goes away on its own and people tend to recover after a few weeks. You can help avoid complications and encourage recovery by following a few simple tips.

Take Action

Here are some ways that you can take an active role in your recovery:[2]

- Talk with your care provider to better understand what may be causing your headache.
- Avoid or reduce smoking.
- Manage and control your stress.
- Sleep is key. Aim for 6-8 hours each night.
- Talk about non-prescription pain relievers or muscle relaxers. Take an over-the-counter pain reliever such as acetaminophen (Tylenol®), ibuprofen (Advil®) or naproxen (Aleve®).

Stay Informed

Seek medical attention if you experience any of the following:[2]

- Your headaches are sudden—it may feel like something is bursting in your head
- They are different from your usual headaches
- There is a change in your speech or alertness

Start the Conversation!

Talk with your care provider about appropriate medical imaging.
Learn more and find additional clinical resources at **BCPSQC.ca/imaging**.

BCPSQC.ca
604.668.8210
info@bcpsqc.ca
@BCPSQC

BC PATIENT SAFETY & QUALITY COUNCIL
Working Together, Accelerating Improvement.

BRITISH COLUMBIA
Supported by the Province of British Columbia

Choosing Wisely Canada™

[1]BC Guidelines. Appropriate Imaging for Common Situations in Primary and Emergency Care. 2020. Diagnostic Imaging. Available from: https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines/diagnostics-imaging

[2]Choosing Wisely Canada. Imaging tests for headaches. When you need one and when you don't. [Internet pamphlet]. Toronto Canada; 2017. [cited 2020 March 10]. Available from: https://bit.ly/3bevvzM

Essential Imaging
BC PATIENT SAFETY & QUALITY COUNCIL

MRI for Hip and Knee Pain: A Guide for Essential Imaging

Recommendation: "MRIs of hip or knee joints are not recommended in patients with co-existent pain and moderate to severe osteoarthritis unless red flags are present."[1]

The BC Patient Safety & Quality Council has put together these Essential Imaging Conversation Guides for Patients to support and guide conversations with care providers based on the *BC Guidelines for Appropriate Imaging*.[1]

While hip or knee pain can be difficult, generally you don't need an MRI.[2] Here's why:

- The research shows that if you have significant osteoarthritis, there is no benefit to having an MRI.
- Most knee and hip pain problems can be diagnosed by better understanding your symptoms, the location of the pain and what makes the pain better or worse, without an MRI.

Take Action

Hip and knee pain usually go away when you are provided with a guided exercise program for improving your strength and mobility.

Here are some ways that you can take an active role in your recovery:[2]

- Start by booking an appointment with a physiotherapist to set up a personalized treatment plan
- Joint-friendly physical activity such as walking, swimming or cycling can improve your pain and quality of life
- Try applying heat or cold before activities to help loosen the joints
- Choose appropriate and supportive footwear to help reduce stress to your joints
- Over-the-counter medications can help manage your pain—talk with your care provider about options for treatment and pain management

Stay Informed

If you are experiencing one of the following, an MRI may be appropriate:[2]

- An MRI is recommended on a previous imaging report
- You've had previous knee or hip surgery
- You have a suspected infection
- Your care provider suspects a tumour
- You have either been previously diagnosed or may have lost some bone tissue (Osteonecrosis)
- You have a fixed/locked knee
- You have had a weight-bearing x-ray in the past six months showing minor or no evidence of osteoarthritis (OA)

Start the Conversation!

Talk with your care provider about appropriate medical imaging.
Learn more and find additional clinical resources at **BCPSQC.ca/imaging**.

BCPSQC.ca
604.668.8210
info@bcpsqc.ca
@BCPSQC

BC PATIENT SAFETY & QUALITY COUNCIL
Working Together, Accelerating Improvement.

BRITISH COLUMBIA
Supported by the Province of British Columbia

Choosing Wisely Canada™

[1]BC Guidelines. Appropriate Imaging for Common Situations in Primary and Emergency Care. 2020. Diagnostic Imaging. Available from: https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines/diagnostics-imaging

[2]Choosing Wisely Canada. Orthopedics. Ten things physicians and patients should question. [Internet pamphlet]. Toronto Canada; 2017. [cited 2020 March 10]. Available from: https://bit.ly/2RNwDTo

Essential Imaging
BC PATIENT SAFETY & QUALITY COUNCIL

CT Scans to Find a Blood Clot in The Lungs: A Guide for Essential Imaging

Recommendation: "Chest CT for suspected pulmonary embolism is not recommended in low-risk patients with a normal D-dimer result."[1*]

The BC Patient Safety & Quality Council has put together these Essential Imaging Conversation Guides for Patients to support and guide conversations with care providers based on the *BC Guidelines for Appropriate Imaging*.[1]

What is a Pulmonary Embolism?

A pulmonary embolism (PE) is a blood clot in the lungs that has traveled from the veins of your leg or pelvis and causes a blockage in the blood flow.[2] It can be life threatening if not diagnosed and treated. Thankfully, your health care providers have many good ways to test for a PE.[1] Pulmonary embolism can be diagnosed through different scanning techniques.[1]

However, sometimes a chest CT scan may not be required, and the test may be harmful.[2]

Take Action

Here are some ways that you can take an active role in your recovery:[2]

- Continue your usual activities without over-exerting yourself.
- Use medications as instructed by your health care providers.
- Over the next few days, keep an eye on how you are feeling. If your symptoms persist or change then see a health care provider.

Stay Informed

CT scans come with some risk[2]

- A CT scan is a machine that uses large doses of radiation to takes pictures of bone, organs or soft tissues. CT scans looking for a PE also use dye that can cause damage to kidneys or cause an allergic reaction.
- Exposure to large doses of radiation can increase the risk of cancer over your lifetime.
- If your chances of having a PE is low, a CT scan will not help you get better more quickly.

How Do Health Care Providers Know When a CT Scan is Appropriate?[1,2]

- For very low-risk patients, a list of questions called the Pulmonary Embolism Rule-out Criteria (PERC) can safely rule out a PE without additional testing.
- For low and medium-risk patients, a blood test called the D-dimer in conjunction with clinical decision rules can safely rule out a PE if the test is normal.
- For high-risk patients and/or for those with an abnormal D-dimer blood test, imaging tests such as a CT scan or VQ scan are recommended to rule out a blood clot.

Seek medical attention if you experience any of the following:[2]

- Your symptoms get worse
- You cough up blood
- You develop more shortness of breath, chest pain or fainting

There may be other tests that can be used to search for a PE—your health care provider will use a CT scan only if appropriate.[1,2]

Start the Conversation!

Talk with your care provider about appropriate medical imaging.

Learn more and find additional clinical resources at **BCPSQC.ca/imaging**.

BCPSQC.ca
604.668.8210
info@bcpsqc.ca
@BCPSQC

BC PATIENT SAFETY & QUALITY COUNCIL
Working Together, Accelerating Improvement.

BRITISH COLUMBIA
Supported by the Province of British Columbia

Choosing Wisely Canada™

[1]BC Guidelines. Appropriate Imaging for Common Situations in Primary and Emergency Care. 2020. Diagnostic Imaging. Available from: https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines/diagnostics-imaging

*A d-dimer test is a blood test that measures a substance that is released into your body when a blood clot breaks up. This test can help check for blood-clotting problems. It can also be used to check how well a treatment is working.

[2]Choosing Wisely Canada. CT scans to find a blood clot in the lungs. When you need one and when you don't. [Internet pamphlet]. Toronto Canada; 2017. [cited 2020 March 10]. Available from: https://bit.ly/34I12Yy