

How to address labral tears of the shoulder

Shoulder injuries are among the top three worker injuries resulting in WorkSafeBC claims. As the workforce ages, shoulder injuries are likely to become even more prevalent as the rotator cuff complex is subject to inevitable degenerative changes.

One of the more challenging conditions to diagnose in shoulder injury is in the gleno-humeral joint, which can experience labral tears of the glenoid rim. These tears, especially those in the superior portion of the labrum, can be the cause of unexplained pain and limited movement in the shoulder, with consequent loss of shoulder function.

It can be assumed that labral tears in the anterior and inferior portions of the glenoid are present if the worker-patient has a recurrent history of shoulder dislocations, and an associated Hill-Sachs lesion is visible on plain X-rays of the humeral head. However, superior labral tears, whether anterior or posterior, will probably not be associated with gleno-humeral dislocations or with any changes in the humeral head on the plain X-ray, and even an experienced clinical examiner may find them hard to detect. The diagnosis may also be difficult to ascertain in worker-patients who exhibit multidirectional instability of the shoulder, or where their history may be one of shoulder subluxation, rather than true dislocation.

Shoulder joint injuries

The shoulder joint is designed to provide the greatest possible range of movement, but this comes at the expense of some stability. In particu-

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lar, the labrum, a ring of soft tissue that surrounds the glenoid and deepens the socket by about 50%, can be compromised and cause instability of the shoulder joint.

If the shoulder is injured, the labrum can become separated or torn from the glenoid. These tears are classified as those above or below the midpoint of the glenoid and may be caused by the trauma of a gleno-humeral dislocation, violent overhead reaching, or a sudden pull.

Symptoms and diagnosis of a labral tear

The symptoms of a labral tear of the shoulder include some loss of range of movement, pain, loss of strength, and a sense of instability.

The diagnosis is based on the worker-patient's history, usually one involving a sudden onset of pain following trauma, and confirmed on physical examination, where patient apprehension accompanies painful movement. In this case, plain X-ray studies are usually not helpful, and because the labrum is composed of soft tissue a diagnosis often requires an MRI arthrogram.

Prior to ordering the MRI arthrogram, it would be reasonable to consider referring the worker-patient to a shoulder specialist. The report on the MRI study may comment on a normal anatomical variant or other imaging finding. The worker-patient may then mistakenly interpret these findings as a source of his or her symptoms. The MRI report must then be correlated with the worker-patient's history of injury and the clinical examination findings.

Treatment for labral tears

Non-operative treatment consisting of analgesics, anti-inflammatory medi-

cation, and rotator cuff-strengthening exercises may be enough to control the symptoms, particularly in older worker-patients. However, if an unacceptable degree of disability persists, it may be necessary to provide a specialist referral for possible arthroscopic repair of the detached labrum.

With regard to shoulder surgery, worker-patients may require a prolonged period of recovery following surgery, so it's important to thoroughly discuss any surgical complications and outcomes with these individuals.

For assistance and further information

If you are a primary care physician seeking orthopaedic consultation for a worker-patient with a suspected labral tear of the shoulder, you may consider a couple of options. You can refer the worker-patient to a community orthopaedic surgeon, in which case, WorkSafeBC expedited rates would apply to active claims for shoulder injuries. Alternatively you can refer the worker-patient to an orthopaedic surgeon at the Visiting Specialists Clinic (VSC). In the latter instance, contact a medical advisor in your nearest WorkSafeBC office, or indicate your wish for VSC referral on your Form 8/11.

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