

Dr Angela Cadogan, PhD, NZRPS

6 red flag conditions that all physiotherapists, especially those in primary contact settings, should consider in people presenting with shoulder pain.



SEPTIC ARTHRITIS



Infection can occur in the days and weeks following surgery or injection around the shoulder area, a laceration/bite in a remote body site or other systemic bacterial infection. The glenohumeral, acromioclavicular or sternoclavicular joints may be affected by septic arthritis. Question the patient about risk factors and be alert for the symptoms and signs of infection and refer urgently for medical evaluation if infection is suspected.

Risk Factors: Young or elderly patients, recent infection, recent invasive procedure, IV drug use, immunosuppressive therapy, prosthetic joint.

Symptoms and Signs: Rapid onset of severe pain. Joint swelling, redness and heat with loss of ROM. There may be systemic features including fevers, chills, sweats and confusion.



FRACTURE

Fractures can affect the humerus, clavicle or scapula. In any patient with a history of significant trauma with pain and loss of shoulder function, a shoulder x-ray should be obtained. Fractures may occur in healthy bone, pathologic bone (low BMD or metastatic disease) and stress fractures can also occur with repetitive activity. (*Xu et al., 2015*)



DISLOCATION

Dislocations can be associated with fractures, especially in certain populations, and some unreduced glenohumeral joint dislocations can be missed. Data suggests up to 60-80% of posterior dislocations may be missed at initial examination. (*Xu* et al., 2015)

ABOUT THE AUTHOR

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Dr Angela Cadogan is a NZ registered Physiotherapy Specialist (MSK). She has a PhD in Musculoskeletal Diagnostics from AUT University, with a sub-specialty in the diagnosis & management of shoulder pain. She has published several papers from her thesis in the area of shoulder diagnostics and sports physiotherapy. Angela is based in Christchurch, New Zealand where she works as a clinical consultant in her own physiotherapy practice and in a diagnostic Orthopaedic Triage role (Shoulder) with Te Whatu Ora - Waitaha Canterbury.

Angela has an ongoing research interest in shoulder conditions and has been an invited keynote speaker at many national and international shoulder conferences.



Angela is the Director of Physio Academy and runs her own online and in-person courses to help upskill other physiotherapists in the assessment and management of the shoulder.









ACUTE ROTATOR CUFF TEAR

If the patient reports significant trauma, with an immediate loss of the ability to actively elevate the arm, they may have an acute rotator cuff tear. Any patient reporting significant trauma with loss of active movement and positive 'lag' signs for rotator cuff tear, including positive subscapularis tests: Belly Press, internal rotation lag sign, lift off test, should be referred early for x-ray and ultrasound scan to confirm the diagnosis and be referred for early orthopaedic evaluation. (*Hertel, Ballmer, Lambert, & Berber, 1996*)





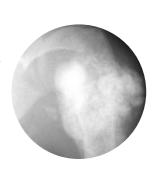
CARDIOVASCULAR COMPROMISE

Ischaemic cardiac symptoms can manifest as shoulder and arm pain on the right or the left side. The patient should be questioned about risk factors, and symptom behaviour with exercise or exertion. Women can manifest atypical symptoms and may not present with typical 'chest pain' symptoms. Also be alert for DVT or pulmonary embolism symptoms in patients with risk factors including immobilisation, long haul flights, known peripheral vascular disease and some medications (eg oral contraceptives).



OSTEOSARCOMA

The proximal humerus is the 3rd most common site of primary bone tumours (*Cleeman, Auerbach, & Springfield, 2005*) and may be affected in metastatic disease. Important risk factors include young age (<25 yrs) a personal history of cancer, with breast, lung, prostate, kidney and thyroid cancers being the cancers most likely to metastasise to bone. Be alert for pain that is not affected by movement/rest, and pain that is not improving. A plain X-Ray is an important screening tool for patients who have red flags (including previous history of cancer) and symptoms that are not improving.





WANT TO LEARN MORE?

Shoulder Screening Online Course

In this module from Dr Angela Cadogan, you will learn how to systematically work through a process of screening the patient for red flags, other causes of shoulder pain, obtaining appropriate diagnostic imaging, and then classifying shoulder pain into categories that guide management.

Cost: \$250 NZD











SAVE 50% OFF this course as part of the **Shoulder Academy Membership** subscription.





SAVE 40% OFF this course as part of the **Graduate Academy Membership** subscription.

REFERENCES

- 1. Cleeman, E., Auerbach, J. D., & Springfield, D. S. (2005). Tumors of the shoulder girdle: A review of 194 cases. Journal of Shoulder and Elbow Surgery, 14(5), 460-465.
- 2. Hertel, R., Ballmer, F. T., Lambert, S. M., & Berber, C. (1996). Lag signs in the diagnosis of rotator cuff rupture. Journal of Shoulder and Elbow Surgery, 5(4), 307-313.
- 3. Xu, W., Huang, L. X., Guo, J. J., Jiang, D. H., Zhang, Y., & Yang, H. L. (2015). Neglected posterior dislocation of the shoulder: A systematic literature review [Article]. Journal of Orthopaedic Translation, 3(2), 89-94. doi:10.1016/j.jot.2015.02.004







