

AUTHENTIC4E

NEWSLETTER

Being able to investigate the contents of the human body through non-invasive techniques like CT and MRI was a giant step forward in healthcare. It is the best diagnostic tool we have aside from surgery and tissue samples to assess for any abnormality. Lots of abnormalities (often called incidental findings on radiology reports) are present in the population. Deciphering whether that abnormality is clinically important or not is up to the radiologist.

One important abnormality that should never be missed or dismissed by a radiologist is called a labral tear. Both the shoulder and the hip have a rim of cartilage, called a labrum, that helps stabilize the joint. When a tear occurs here it can be described as a partial or complete tear. A fellowship trained, sub-specialized radiologist has undergone extra training to be able to distinguish between different types of pathology in their area of expertise. As such, a fellowship trained musculoskeletal radiologist will be the best suited to call a partial tear from a full thickness tear. Not only do these fellowship trained radiologists have the tools to make the diagnosis, they have a secret weapon to assess accuracy: surgical and histopathological feedback.

When fellowship trained radiologists are able to compare what they saw on imaging to the results from a surgeon's report or biopsy findings, they gain valuable insight which can be applied to future cases. This results in a higher reading accuracy than that of a general radiologist who doesn't have the same opportunities.

For example, a clinical study assessed the accuracy of general vs sub-specialized musculoskeletal radiologists for hip MRIs through blinded second opinion reads and surgical report correlation. Musculoskeletal (MSK) radiologists were accurate 85% of the time in diagnosing labral lesions of the hip whereas general radiologists accuracy fell to 70% in the same category.¹ For acetabular chondrosis, fellowship trained radiologists were accurate 79% of the time and general radiologists were right only 28% of the time.¹ Accuracy in diagnosing hip impingement lesions were 82% for MSK radiologists and 59% general radiologists.¹

The numbers speak for themselves: the most accurate diagnoses come from fellowship trained radiologists. For more reasons why it's important to have a fellowship trained, sub-specialized radiologist, <u>visit our webpage</u>.

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Source:

1. McGuire, C.M., MacMahon, P., Byrne, D.P. *et al.* Diagnostic accuracy of magnetic resonance imaging and magnetic resonance arthrography of the hip is dependent on specialist training of the radiologist. *Skeletal Radiol* **41**, 659–665 (2012). https://ww2.authentic4d.com/e/756213/10-1007-s00256-011-1266-4/wtvpv/163259341?h=IL-AtWpSmS5waC9Rd1zSCFZFQV3VCNcfRNvb69qu9as

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