

Evidence Discussion (MS-1)

For most patients with a musculoskeletal complaint, a diagnosis can be made based on a detailed history, physical examination and plain radiographs.¹ Advanced imaging is typically not necessary for the initial evaluation. Treatment for many musculoskeletal conditions does not rely on advanced imaging results and most patients will improve within a few weeks or months with conservative care.¹ Advanced imaging can often demonstrate abnormalities that have no relevance to the patient's symptoms. It has been reported that approximately 30 – 40 percent of middle-aged patients and an even higher percentage of older patients have asymptomatic meniscus, rotator cuff and superior labral tears.²⁻⁶ Advanced imaging incidental findings can possibly lead to overtreatment with referral to specialists and possibly unnecessary surgery.

1. Pompan DC. Appropriate use of MRI for evaluating common musculoskeletal conditions. Am Fam Physician. 2011 Apr 15;83(8):883-4.
2. Sher JS, Uribe JW, Posada A, Murphy BJ, Zlatkin MB. Abnormal findings on magnetic resonance images of asymptomatic shoulders. J Bone Joint Surg Am. 1995;77(1):10-15.
3. Yamaguchi K, Ditsios K, Middleton WD, Hildebolt CF, Galatz LM, Teefey SA. The demographic and morphological features of rotator cuff disease. A comparison of asymptomatic and symptomatic shoulders. J Bone Joint Surg Am. 2006;88(8):1699-1704.
4. Ryzewicz M, Peterson B, Siparsky PN, Bartz RL. The diagnosis of meniscus tears: the role of MRI and clinical examination. Clin Orthop Relat Res. 2007;455:123-133.
5. Englund M, Guermazi A, Gale D, et al. Incidental meniscal findings on knee MRI in middle-aged and elderly persons. N Engl J Med. 2008;359(11):1108-1115.
6. Schwartzberg R, Reuss BL, Burkhart BG, et al. High prevalence of superior labral tears diagnosed by MRI in middle-aged patients with asymptomatic shoulders. Orthop J Sports Med. 2016;4(1).