

Evidence Discussion (Osteoarthritis MS-12)

The diagnosis of osteoarthritis can be made based on history, physical exam and plain x-rays. [1, 2] Advanced imaging is typically not necessary for the initial evaluation. For the vast majority of patients, treatment of osteoarthritis does not rely on advanced imaging findings and many can improve with conservative care. [1, 3, 4] Advanced imaging, when not indicated, can result in incidental findings and possible overtreatment with referral to specialists and possibly unnecessary surgery. [9]

However, for patients who are poorly responding to conservative care and there is a concern for concomitant joint pathology (e.g. degenerative meniscus tear, rotator cuff tear, labral tear of the hip or shoulder), advanced imaging may be able to identify additional sources of symptoms. [5, 6] Additionally, when congenital or significant atypical post-traumatic arthritic deformities are present on plain x-ray, CT imaging would be able to provide additional bony detail for treatment planning.

Plain x-rays are typically sufficient for preoperative planning for the majority of patients undergoing joint replacement surgery. However, for those with congenital or significant atypical post-traumatic arthritic deformities, CT scan can be of value for further evaluation/planning. [7] Also, if the joint replacement surgery will use a custom implant, patient specific instrumentation or computer assisted navigation, advanced imaging will be required prior to the surgery. [8]

References:

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