Take 3 – Practical Practice Pointers© March 9, 2020 Edition

Hip DJD Dx, Osteoarthritis 2020, Hepatitis C Screening

From the Rational Clinical Examination Series in JAMA

1) Does this Patient have Hip Osteoarthritis?

Hip osteoarthritis (OA) is a common ailment among older adults, with a prevalence of 6% in adults ≥ 60. It is more common in women, and there is probably a genetic determinant. Of course, obesity, previous trauma and misalignment affect arthritis in all the lower extremity joints and play a role in the hip also. Pain is the primary symptom of hip OA and can lead to referred pain and tenderness in remote areas. Accurate physical diagnosis is important because there are multiple lower extremity, spinal and muscular ailments that cause pain in nearby areas. In addition, though x-rays can be helpful, the correlation of x-ray findings and symptoms is low.

The authors of this systematic review looked for all the published literature on the diagnosis of hip OA using physical examination and x-ray and selected the best quality studies. They separate the final diagnoses of "any OA" and "severe OA" (joint space ≤ 1.5 mm) where they could. They then calculated sensitivity, specificity and likelihood ratios for the different tests they found. Likelihood ratios (LR) are calculations using sensitivity and specificity but are more clinically useful because they can increase or decrease your "pre-test probability" (the likelihood the condition is present before you test). Note that authors suggest that a clinically useful likelihood ratio (LR) for a positive test is > 2 and clinically useful LR for a negative test is < 0.5, which is reasonable.

If there are several history and physical findings that support OA and relatively few that indicate an alternative diagnosis, then OA is likely. If the OA is severe, then x-rays are indicated, with referral as needed after that if the x-rays are positive.

Supporting OA:

- Family history of OA (LR+ 2.1)
- History of knee OA (LR+ 2.1)
- Pain on walking up stairs or down slopes (LR+ 2.1)
- Squat causing posterior pain (LR+ 6.1)
- Groin pain on hip abduction/adduction (LR+ 5.7)
- Abductor weakness (LR+ 4.5)
- Restricted movement in three planes (LR+ 4.4)
- Decrease hip joint movement (abduction, internal rotation, external rotation, extension) – LR+s for each 2.1-4.2.
- Positive scour test (LR+ 2.4)
    - The examiner then applies a downward force along the shaft of the femur while passively adducting and externally rotating the hip. (https://www.pthaven.com/page/show/162468-scour-test)
- (inguinal ligament tenderness shows up only in one study – the authors urge caution until confirmed by other studies)

The factors that indicate an alternative diagnosis are: the “negatives” of the above tests (LR- 0.25 to 0.59), age < 60 y (LR- 0.11), absence of pain walking (LR- 0.25 to 0.58) and absence of a limp (LR- 0.35).

John’s Comments:
Even though they are not as familiar as sensitivity and specificity, likelihood ratios are the best way to compare tests in these reviews. They are useful in the way “predictive values” are useful to clinicians – i.e., in answering the question, will this test change my diagnosis? Note that some experts suggest more stringent thresholds for likelihood rations (LR+ >5 and LR- <0.2). I will probably add the squat test and the scour test to my physical examination for this condition, and reserve x-rays until the symptoms are more severe. I look forward to each new addition to the Rational Clinical Examination Series. Go to this Link for more.

Reference:
Metcalfe D et al. Does This Patient Have Hip Osteoarthritis?: The Rational Clinical Examination Systematic Review. *JAMA*. 2019;322(23):2323-2333. Abstract

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From the American College of Rheumatology and Arthritis Foundation

2) Managing Osteoarthritis (OA) of the Hand, Hip, and Knee 2020

The American College of Rheumatology (ACR) and the Arthritis Foundation (AF) recently released guidelines on management of osteoarthritis (OA) of the hand, hip, and knee, updating their 2012 guideline. Based on the available evidence, either strong or conditional recommendations were made for or against the approaches evaluated.

Physical, Psychosocial, and Mind-Body Approaches:

Strong Recommendation:
- Exercise, weight loss in patients with knee and/or hip OA who are overweight or obese, self-efficacy and self-management programs, tai chi, cane use, hand orthoses for first carpometacarpal (CMC) joint OA, tibiofemoral bracing for tibiofemoral knee OA,

Conditional Recommendation:
- Yoga (knee), Cognitive behavioral therapy (CBT), patellofemoral braces (knee), kinesiotaping (knee and 1st carpometacarpal/CMC, hand orthoses for non 1st CMC joints, acupuncture, thermal interventions (locally applied heat or cold), paraffin (hand)

Conditional Recommended Against:
- Modified shoes, lateral and medial wedged insoles, radiofrequency ablation (RFA), massage therapy, manual therapy with exercise (over exercise alone), iontophoresis, pulsed vibration therapy (knee)

Strongly Recommended Against:
- Transcutaneous electrical stimulation (TENS)

Pharmacologic Management

Strong Recommendation:

- Topical nonsteroidal anti-inflammatory drugs (NSAIDs), oral NSAIDs, and intraarticular glucocorticoid injections (knee/hip – NOTE ultrasound guidance strongly recommended for hip joint injections)

Conditional Recommendation

- Topical NSAIDs and intraarticular steroid injections (hand), chondroitin sulfate (hand), topical capsaicin (knee), acetaminophen, duloxetine, and tramadol.

Conditional Recommendation Against:

- Topical capsaicin (hand), opioids (other than tramadol – may be considered when other options exhausted), colchicine, fish oil, vitamin D, intra-articular hyaluronic acid injections (knee, 1st CMC), intra-articular botulinum toxin injections, prolotherapy,

Strongly Recommended Against:

- Bisphosphonates, glucosamine, chondroitin sulfate (knee, hip), chondroitin/glucosamine combination products, hydroxychloroquine, methotrexate, intra-articular hyaluronic acid injections (hip), platelet-rich plasma (PRP), stem cell injections, tumor necrosis factor (TNF) inhibitors, interleukin (IL)-1 receptor antagonists

Mark's Comments:
OA continues to be a therapeutic challenge, particularly considering it high prevalence. Effective non-pharmacologic interventions are likely under-utilized, the most important being weight loss for those with symptomatic hip and knee OA. I have been amazed at the symptom relief some of my patients have experienced with weight loss despite x-rays that are impressive for significant joint space narrowing and osteophyte formation.

Note that the according to the clinical data reported in the prescribing information of diclofenac sodium 1% (Voltaren) gel, the average systemic exposure is 6% of that of the oral counterpart.

Reference:
Kolasinski SL et al. 2019 ACR/AF Guideline for the Management of Osteoarthritis of the Hand, Hip, and Knee. *Arthritis Rheumatol.* 2020 Jan 6. Guideline

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From the USPSTF

3) Screening for Hepatitis C

Hepatitis C virus (HCV) is the most common chronic blood-borne pathogen and a leading cause of complications from chronic liver disease. Hepatitis C virus infection is associated with more deaths than the top 60 other reportable infectious diseases combined, including HIV. The most important risk factor for HCV infection is past or current injection drug use. In the US, an estimated 4.1 million persons have past or current HCV infection (ie, they test positive for the anti-HCV antibody). Of these persons who test positive for the anti-HCV antibody, approximately 2.4 million have current infections based on testing with molecular assays for HCV RNA. Cases of

acute HCV infection have increased approximately 4-fold over the last decade because of increasing injection drug use and improved surveillance. The most rapid increase in acute HCV incidence has been in young adults aged 20 – 39 who inject drugs.

The USPSTF recently updated its 2013 recommendation regarding hepatitis C screening in adults. The new recommendation includes:

- One-time screen of those aged 18 – 79 with anti–HCV antibody testing followed by confirmatory polymerase chain reaction testing. (**B**)
- Consider screening those younger than 18 and older than 79 who are at high risk for infection (eg, those with past or current injection drug use).
- Periodic screening is encouraged for those with continuing risk.

Important considerations include:

- Communicating that screening is voluntary and undertaken only with the patient's knowledge
- Informing patients about HCV infection, how it can (and cannot) be acquired, the meaning of positive and negative test results, and the benefits and harms of treatment
- Providing patients the opportunity to ask questions and to decline screening

Mark's Comment:
Underscreening/underdiagnosis of hepatitis C continues to be a public health challenge. Rapid testing with a swab or finger stick can mean results are quickly available. The newer direct-acting antiviral (DAA) regimens result in cure rates above 95% for adults ages 18-79 years and are usually tolerated quite well. The duration of treatment has decreased substantially since the previous recommendations while access to these medications has increased. There is a movement to have this treatment move into the primary care arena, and many colleagues are already doing so (see 2nd reference).

The B level is important because the Affordable Care Act requires that private insurers and Medicaid cover preventive services recommended at an A or B level by the USPSTF with no deductibles or copayments.

References:

- USPSTF Hepatitis C Virus Screening – March 2020: Link
- Andrews R. Family Physicians can Manage Patients with Hepatitis C. Am Fam Physician. 2018 Oct 1;98(7):413-416. Editorial

Feel free to forward Take 3 to your colleagues. Glad to add them to the distribution list.

Mark and John

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