

Choosing Wisely: Nine Tests and Treatments to Question in Rheumatology

by
Canadian Rheumatology Association

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1) Don't order ANA as a screening test in patients without specific signs or symptoms of systemic lupus erythematosus (SLE) or another connective tissue disease (CTD).

ANA testing should not be used to screen subjects without specific symptoms (e.g., photosensitivity, malar rash, symmetrical polyarthritis, etc.) or without a clinical evaluation that may lead to a presumptive diagnosis of SLE or other CTD, since ANA reactivity is present in many non-rheumatic conditions and even in “healthy” control subjects (up to 20%). In a patient with low pre-test probability for ANA-associated rheumatic disease, positive ANA results can be misleading and may precipitate further unnecessary testing, erroneous diagnosis or even inappropriate therapy.

2) Don't order an HLA-B27 unless spondyloarthritis is suspected based on specific signs or symptoms.

HLA-B27 testing is not useful as a single diagnostic test in a patient with low back pain without further spondyloarthropathy (SpA) signs or symptoms (e.g., inflammatory back pain ≥ 3 months duration with age of onset < 45 years, peripheral synovitis, enthesitis, dactylitis, psoriasis or uveitis) because the diagnosis of spondyloarthropathy in these patients is of low probability. If HLA-B27 is used, at least two SpA signs or symptoms, or the presence of positive imaging findings, need to be present to classify a patient as having axial SpA. There is no clinical utility to ordering an HLA-B27 in the absence of positive imaging or the minimally required SpA signs or symptoms.

3) Don't repeat dual energy X-ray absorptiometry (DEXA) scans more often than every 2 years.

The use of repeat DEXA scans at intervals of every 2 years is appropriate in most clinical settings, and is supported by several current osteoporosis guidelines. Because of limitations in the precision of testing, a minimum of 2 years may be needed to reliably measure a change in BMD. If bone mineral densities are stable and/or individuals are at low risk of fracture, then less frequent monitoring up to an interval of 5-10 years can be considered. Shorter or longer intervals between repeat DEXA scans may be appropriate based on expected rate of change in bone mineral density and fracture risk.

4) Don't prescribe bisphosphonates for patients at low risk of fracture.

There is no convincing evidence that anti-osteoporotic therapy in patients with osteopenia alone reduces fracture risk. The 2008 Cochrane Reviews for three bisphosphonates (Alendronate, Etidronate, Risedronate) found no statistically significant reductions for primary prevention of fracture in postmenopausal women. Fracture risk is determined using either the Canadian Association of Radiologists and Osteoporosis Canada risk assessment tool (CAROC) or FRAX®, a World Health Organization fracture risk assessment tool. Both are available as online calculators of fracture risk. Given the lack of proven efficacy, widespread use of bisphosphonates in patients at low risk of fracture is not currently recommended.

5) Don't perform whole body bone scans (e.g., scintigraphy) for diagnostic screening for peripheral and axial arthritis in adults.

The diagnosis of peripheral and axial inflammatory arthritis can usually be made on the basis of an appropriate history, physical exam and basic investigations. Whole body bone scans, such as the Tc-99m MDP scintigraphy, lack specificity to diagnose inflammatory polyarthritis or

spondyloarthritis and have limited clinical utility. This approach is cost-effective and reduces radiation exposure.

6) Don't prescribe opioids for management of chronic rheumatic disease before optimizing the use of non-opioid approaches to pain management.

Opioids in chronic non-cancer pain are associated with substantial risks. Optimize non-opioid pharmacotherapy and non-pharmacologic therapy. Opioids are not superior to non-opioid medications for pain-related function over 12 months in moderate to severe hip or knee osteoarthritis, or mechanical back pain. Opioids should only be prescribed by physicians skilled in their use.

7) Don't delay or avoid palliative symptom management and advance care planning for a patient with life-limiting rheumatic disease because they are pursuing disease-directed treatment.

A palliative approach to care alongside disease-specific treatment should be part of the continuum of care for patients with advanced rheumatic disease toward the end of life. This approach aims to improve quality of life for patients with life-limiting illnesses, through the prevention and relief of suffering, the control of symptoms, and the management of physical, psychosocial and spiritual distress. Such an approach is supported by a growing body of evidence that demonstrates improved patient satisfaction with care, decreased symptom burden and, in some cases, better survival, when a palliative approach to care is integrated early in a patient's disease trajectory.

8) Do not order labs for drug toxicity monitoring (i.e., CBC, liver enzymes, creatinine) more often than every 8-12 weeks for patients on a stable dose of non-biologic disease modifying anti-rheumatic drugs (DMARDs), in patients without comorbidities or lab abnormalities.

Patients on stable doses of non-biologic DMARDs (e.g., methotrexate, sulfasalazine) without specific comorbidities (e.g., obesity, diabetes mellitus, renal disease, liver disease, alcohol use, concomitant use of hepatotoxic or myelosuppressive medications) are at a low overall risk of toxicity. More frequent blood draws pose an unnecessary burden to patients. Patients new to treatment, on escalating doses, or with abnormal baseline labs typically require more frequent monitoring.

9) Don't order Rheumatoid factor (RF) and Anti-Citrullinated Protein Antibody (ACPA) unless patients have clinically suspicious arthralgia (CSA) or arthritis on exam.

Avoid ordering these autoantibodies in patients with arthralgia (joint pain) but who do not meet the CSA criteria or have arthritis (>one swollen joint) on physical exam. EULAR defines CSA at risk for developing Rheumatoid Arthritis (RA) as having 3 or more parameters including new joint symptoms <1 year, symptoms located in metacarpophalangeal (MCP) joints, morning stiffness >60 min, most severe symptoms in the morning, 1st degree relative with RA, and difficulty making a fist and positive MCP squeeze test on physical exam. Even in CSA with positive RF and ACPA, more than 30%-60% of patients will not develop RA over the next two years. Most musculoskeletal pain causing global disability is not related to rheumatoid arthritis. Inappropriate testing of RF serology in patients with low likelihood of RA is associated with low positive predictive value (PPV) and increased cost.

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Related Resources:

Patient Pamphlet: [Bone Density Tests: When you need them and when you don't](#)

4. Sources:

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Related Resources:

Patient Pamphlet: [Treating Rheumatoid Arthritis: “Non-biologic” drugs are a better first choice](#)

Patient Decision Aid: [Mayo Clinic's Bone Health Choice Decision Aid](#)

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