

Making a diagnosis of rheumatoid arthritis (RA)

History

- Thorough medical history The presence, intensity, location, and duration of joint pain, swelling, and stiffness, with particular attention to the time of day when symptoms occur or worsen.
- RA symptoms in diurnally active persons are typically worse in the morning and improve over the course of the day. Primary care physicians (PCPs) should also gauge how the symptoms affect the patient's quality of life (QOL), particularly in the morning.
- Pain most often starts in small joints of hands metacarpal phalangeal (MCP) and proximal interphalangeal (PIP) joints, wrists and small joints of feet; knees and ankles may also be involved.

Physical exam

Physical examination - of the small joints of hands and feet as well as other involved
joints to assess for synovitis (presence and pattern of swollen or tender joints and limited
range of motion). Joint swelling suggests an inflammatory arthritis.



The 2-finger assessment for synovitis; Image from rheumatologynetwork.com



The 4-finger assessment for synovitis; Image from J Rheumatology 2018



Squeeze test of MCP joints; Image from RAPID monograph



Squeeze test of MTP joints; Image from RAPID monograph

Common labs tests used to diagnose RA

- Rheumatoid factor (RF) A low titer test is non-specific and can be due to age, family history, hepatitis, cancers or lab error. RF is positive in about 80% of patients with RA.
- Anti-cyclic citrullinated protein antibodies (anti-CCP) Much more specific for RA especially when at high titers and often seen early. Has a specificity of 90%.
- **Elevated acute phase reactants** Sedimentation rate and C-reactive protein are non-specific inflammatory markers that may be elevated in active RA.
- **CBC** Patients with RA may have normochromic, normocytic anemia.

Imaging studies used to diagnose RA

- Radiographs Images of hands, wrists and feet may help with the diagnosis and are
 often repeated to monitor disease damage. X-ray findings in RA include peri-articular
 osteopenia, loss of joint space, bone erosions and joint damage.
- Ultrasound and Magnetic Resonance Imaging (MRI) can be helpful in identifying early features of joint inflammation (synovitis, tendonitis, osteitis) and joint damage.

Making the referral for RA

- Consider making a referral to rheumatology when
 - o There are ≥3 swollen joints (1 or more small joints of 2 or more large joints)
 - o There is a positive squeeze test, indicating MCP/MTP involvement, and
 - There is morning stiffness of ≥60 minutes.

if symptoms are present for more than 6 weeks

- When making a referral to rheumatology, providing relevant diagnostic information will help the specialist triage patient to provide sooner appointment.
- PCPs often encounter patients presenting with multiple comorbidities within a 15-minute office visit. If joint symptoms are not the purpose for a medical appointment, it is important to reschedule the patient to assess him/her within a short time frame.

Co managing the patient with RA

- A team based approach is a prudent way to manage RA and includes a rheumatologist and a PCP to manage RA, with regular communication.
- Models of telemedicine may improve access to healthcare and enable specialists to comanage patients with complex diseases.

