Clinical Case:
RHEUMATOID ARTHRITIS
Between one and three percent of women will develop RA during their lifetime, and although RA may occur at any age, it usually begins after age 40.

RA is characterized by inflammation of the synovium, often leading to bone erosion and joint deformity. The underlying cause of the autoimmune disease is NOT known.

In addition to pain and swelling, RA may cause stiffness and limited range of motion in affected joints. Inflammation may also affect organs, such as lungs or eyes. Other signs and symptoms of RA include: fatigue, low-grade fevers, loss of appetite, and firm lumps, called rheumatoid nodules, which grow beneath the skin in places such as the elbow and hands.

RA related joint pain, swelling or decreased range of motion can impede normal self-care, recreational and social activities. Complications related to RA can be severe and life-threatening. RA increases the risk of: coronary artery disease, stroke, cardiovascular disease in general, inflammation including pericarditis, and scarring and inflammation of lung tissue.

Keith’s edema and fatigue may be attributable to his CHF and his loss of appetite may be related to his recent use of Digoxin, but these symptoms in combination with his pain and swelling make you even more concerned.
Making a Rheumatoid Arthritis Diagnosis

Early symptoms of RA may mimic several other diseases and progress slowly, making it difficult to diagnose. Early signs and symptoms of RA, in addition to those listed above, may include: 

- Tender, warm, swollen joints
- Stiffness in joints lasting for hours, which is especially worse in the morning
- Osteoarthritis most often does not cause prolonged morning stiffness
- Dry eyes and mouth from a related health problem, Sjogren’s syndrome
- Muscle soreness

When symptoms begin, they typically affect smaller joints, such as the metacarpophalangeal joints (MCPs) and metatarsophalangeal joints (MTPs). As the disease progresses, joints affected may include ankles, wrists, knees, elbows or hips. Pain and swelling may flare and fade or event remit. Over time, RA can cause joint deformities.

Diagnosing RA depends on physical findings, medical history and the exclusion of other diagnoses. There is no single blood test to diagnose RA but some may help confirm the diagnosis. Some tests for RA include:

- Anemia (a low red blood cell count)
- Rheumatoid factor (an antibody found in as few as 30 percent of patients at the onset of RA but as much as 80 percent of patients with RA for some time)
- Antibodies to cyclic citrullinated peptides, or anti-CCP for short (found in 60–70% of patients with RA)
- Elevated erythrocyte sedimentation rate and/or C-reactive protein (blood tests which can suggest systemic inflammation)

Radiographs may help rule out trauma or other pathology and also may be used to track the progression of RA over time.

Once diagnosed, treatment should begin immediately. There is no cure for RA, but current treatments offer most patients relief of symptoms and allow for close-to-normal or normal functioning. Some patients may even achieve “remission” from the right medications, where no symptoms of active disease are present. The overall goal of treatment is to lessen symptoms, prevent joint damage, and maintain or improve functionality. No single treatment works for all patients and many people with RA will change their treatment plan at least once in their lifetime.

RA By The Numbers

- More than 1 million Americans suffer from RA
- About 75 percent of those affected with RA are women
- One to three percent of women will develop RA in their lifetime
- RA typically involves more than one joint; if one knee or hand has RA, the other one usually does too

Early detection and treatment of RA, within the first 12 weeks of symptom onset, is critical to help your patients avoid long-term complications.
**Referring to a Rheumatologist**

Keith’s case is anything but definitive: his prior medical history may explain all of his symptoms, but his wife’s insistence he has had prior episodes of pain in his hands concerns you.

After sharing your suspicion with Keith and his wife, you explain you would like to order some additional tests and refer him to a rheumatologist to help confirm, or rule out, a diagnosis of RA. You counsel him on the risks associated with RA, particularly for someone with heart and respiratory diseases. Keith’s wife asks why you think it could be RA since she thought only women got the disease. You explain RA is indeed more common among women, but men do get the disease as well, and although there is no single test to confirm RA, Keith’s symptoms warrant further exploration.

You counsel Keith to try to remain as active as he can, symptoms permitting. You explain patients with RA often get some relief with low-impact exercise, such as swimming, walking and cycling. Benefits from low-impact exercise can be evident in four-six weeks, but you stress to Keith he needs to listen to his body and reduce his activity should he experience any dyspnea or lightheadedness.

When you are referring your patient to, or consulting with, a rheumatologist for the suspicion or treatment of RA, there are critical steps you can take to provide the best possible patient care, while avoiding the duplication of tests and procedures.

*Your role is essential to the long-term health of your patients and maintaining their quality of life.*

**RA Referral Checklist**

- Complete blood count
- C Reactive Protein (CRP) blood test
- Anti-cyclic citrullined peptide (CCP) blood test
- Comprehensive Metabolic Panel
- Digoxin level
- Rheumatoid factor
- Erythrocyte sedimentation rate
- Document of pain and swelling onset
  - Note timing and medications taken
- Most recent echocardiogram
- Document timing of labs
  - With a note of medications taken at time of labs

**Reminders**

- Discuss complications associated with RA, particularly related to heart and lung disease
- While waiting for patient to see a rheumatologist, acute treatment is possible with NSAIDs to reduce pain
- Continue taking medications as prescribed

---

**Citations**

