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Rheumatoid and Psoriatic Arthritis

All arthritis conditions are not the same

There are more than 100 types of arthritis. The more common ones are:

- Osteoarthritis—the “wear and tear” arthritis
- Rheumatoid arthritis—inflammatory “flaring” arthritis
- Gout—the big toe, high uric acid arthritis
- Psoriatic arthritis—the psoriasis arthritis
- Lupus—the butterfly rash arthritis
- Septic arthritis—infectious arthritis
- Juvenile arthritis—any type of arthritis that affects children ≤ 16 years

In this newsletter we’ll talk about rheumatoid and psoriatic arthritis.

Rheumatoid arthritis (RA) is a systemic autoimmune disease. All parts of the body can be affected, including the heart and lungs. *Psoriatic arthritis* (PsA) is an inflammation of the skin and joints. It occurs in about 10% to 20% of people with psoriasis.¹

Common symptoms

Although symptoms vary among the different types of arthritis, these symptoms are common to all: joint pain, joint stiffness, and joint swelling. They can appear all of a sudden or develop slowly over time.

Early diagnosis and treatment are critical

Joint damage cannot be reversed, and treatment can slow or halt the progression. If inflammation is kept low, then the joints might not get deformed as quickly. This means the joints will continue to work the way they should for a longer period of time. The patient will be able to live an active, more normal life.

Ideally, diagnosis should occur within 6 months of the first sign of symptoms.²

Diagnostic strategy

Diagnosis is based on personal and family history, physical exam, and laboratory tests. Early symptoms are nonspecific and can include:

- Fatigue
- Weakness
- Muscle soreness
- Low-grade fever
- Weight loss
- General discomfort, unease, lethargy



What you can do for your patients

- Include questions about arthritis when taking a patient history.
- Discourage patients from smoking, since it’s a modifiable risk factor.
- Connect aspects of a patient’s history with RA:
 - Women who have not delivered a live baby are at lower risk.
 - RA is less common in women who breastfeed.
 - Women with polycystic ovary disease (PCOS) are at increased risk.
- Be alert to swollen, tender joints when doing a physical exam.
- Order laboratory tests on patients with signs of RA or PsA.

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Therefore, the American College of Rheumatology designed criteria aimed at identifying people with early-stage RA.³ A summary of these criteria can be found at: QuestDiagnostics.com/hcp/intguide/Immuno/CF_RheumatoidArthritis.pdf. The criteria include analysis of:

- Joint involvement
- Symptom duration
- Rheumatoid factor (RF) and cyclic citrullinated peptide (CCP) antibody test results
- C-reactive protein (CRP) and/or erythrocyte sedimentation rate (ESR) test results

Evaluation of a patient for PsA may include a personal and family history and a physical exam. Helpful laboratory tests include⁴:

- RF and CCP antibody to rule out RA
- Hemoglobin or CBC to test for anemia
- CRP and/or ESR to document inflammation
- Imaging (X-ray, MRI, etc.) to look for signs of joint damage

14-3-3 η protein—a new tool for diagnosis

This protein is released into synovial fluid and blood when there is inflammation associated with joint erosion. Some early, small studies show that levels are high in people who have RA. Levels are not high in people who have psoriasis, osteoporosis, gout, ulcerative colitis, diabetes, lupus, Crohn disease, Sjögren syndrome, scleroderma, and multiple sclerosis.^{5,6}

Here's how the 14-3-3 η protein compared with RF and CCP antibody tests in 1 study⁷:

Marker	% Positive ^a
Rheumatoid factor	48
CCP antibody	56
14-3-3 η protein	67
All 3 markers together	81

^a Percent of 37 patients with early rheumatoid arthritis.

Another small study showed that patients with RA and joint damage had higher levels of 14-3-3 η than those who had RA without joint damage.⁸ One more small study showed that the same was true for patients with PsA.⁹

A test for 14-3-3 η protein is available exclusively from Quest Diagnostics. You can find more information about this test at QuestDiagnostics.com/testcenter/TestCenterHome.action.

References

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