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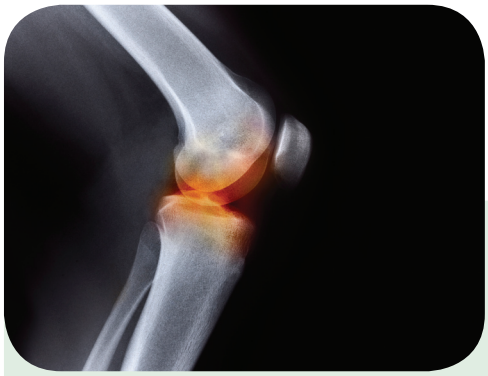
Rheumatoid and Psoriatic Arthritis



Arthritis facts[1,2]

- Affects 50 million people in the United States
  - >36 million white people
  - >4.6 million African Americans
  - 2.9 million Hispanics
- Two-thirds are under 65 years of age
- Leading cause of disability in the U.S.—difficulty walking, stooping, bending, kneeling, climbing stairs
- Cost Americans $128 billion in 2003 (arthritis and other rheumatic conditions)

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 just 2 of them: *rheumatoid arthritis* (RA) and *psoriatic arthritis* (PsA). RA is a systemic autoimmune disease. This means all parts of the body can be affected, including the heart and lungs. PsA is an inflammation of the skin and joints. It occurs in about 10% to 20% of people with psoriasis.[3]

Common symptoms

Although symptoms vary among the different types of arthritis, these symptoms are common to all:

- Joint pain
- Joint stiffness
- Joint swelling

They can appear all of a sudden or develop slowly over time.

Rheumatoid arthritis facts[1,4]

- Affects 1.5 million people in the United States
- Affects more women than men (3:1 ratio)
- 1% to 3% of women will get it
- Begins to affect people when they are 30 to 60 years of age

Psoriatic arthritis facts[1,3,4]

- Affects about 0.2% of the people in the United States
- Affects about 10% to 20% of people with psoriasis
- Usually develops about 10 years after the psoriasis starts
- Usually diagnosed when the person is 15 to 50 years of age

Rheumatoid and Psoriatic Arthritis

Facts

Early diagnosis and treatment are critical

This is because 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.[5]

Laboratory testing for arthritis

There is no one test that can be used to diagnose arthritis or find out which type it is. But there are tests that can help. Rheumatoid factor (RF) and anti-CCP are standard tests for RA. A new test called 14-3-3 eta looks like it will be helpful too. So far, it looks like more people who have RA can be diagnosed when these 3 tests are used together.[6]

RF:

- Generally 60% to 90% of people with RA test positive.
- Fewer people test positive in early stages of RA.
- RF positivity in early RA means the patient is likely to have more severe RA.
- Higher amounts of RF mean the patient is likely to have more severe RA.
- People with other autoimmune diseases, certain infections, or cancer can also have RF.

Anti-CCP

- 55% to 85% of people with RA test positive.[7-9]
- Almost all people who test positive have RA.
- A positive result in early RA predicts more severe RA in 3 to 10 years.

14-3-3 eta

- 60% to 82% of people with RA test positive.[5]
- It does not appear to be positive in people with related conditions (except PsA).
- The level is higher in RA and PsA patients who have joint damage.

Doctors sometimes use the HLA-B27 test to help diagnose psoriatic arthritis. Over 50% of those with an inflamed spine are positive.[10]

There are 2 tests that can be used to measure the amount of inflammation. They are called the ESR (erythrocyte sedimentation rate) test and the CRP (C-reactive protein) test. Doctors use these tests to see how a patient is doing on the therapy.

References

1. Arthritis Foundation. Learn about arthritis http://www.arthritis.org/conditions-treatments/. Accessed March 19, 2014.
2. Centers for Disease Control and Prevention. Fact sheet about arthritis. http://www.cdc.gov/arthritis/press/factsheet.htm. Accessed March 19, 2014.
3. Mease P. Update on treatment of psoriatic arthritis. *Bull NYU Hosp Jt Dis.* 2012;70:167-171.
4. WebMD® Rheumatoid Arthritis Health Center. webmd.com/rheumatoid-arthritis/guide/default.htm. Accessed March 19, 2014.
5. Centers for Disease Control and Prevention. Rheumatoid arthritis. http://www.cdc.gov/arthritis/basics/rheumatoid.htm. Accessed March 19, 2014.
6. Marotta A, Bykerk V, Siminovitch KA, et al. Extracellular 14-3-3: an early rheumatoid arthritis pathogenic factor. [abstract]. *Arthritis Rheum.* 2011;63(suppl 10):378.
7. Bizzaro N, Mazzanti G, Tonutti E, et al. Diagnostic accuracy of the anti-citrulline antibody assay for rheumatoid arthritis. *Clin Chem.* 2001;47:1089-1093. Erratum in: *Clin Chem.* 2001;47:1748.
8. Sauerland U, Becker H, Seidel M, et al. Clinical utility of the anti-CCP assay: experiences with 700 patients. *Ann N Y Acad Sci.* 2005;1050:314-318.
9. Lee DM, Schur PH. Clinical utility of the anti-CCP assay in patients with rheumatic diseases. *Ann Rheum Dis.* 2003;62:870-874.
10. MedicineNet.com Psoriatic arthritis. http://www.medicinenet.com/psoriatic_arthritis/page2.htm. Accessed March 19, 2014.