Clinical Case: PSORIATIC ARTHRITIS
Psoriatic Arthritis

Case Study
Kim is a 38 year old White woman you have treated in your practice for five years. Kim has a three year history of mild scalp psoriasis but is an otherwise healthy mother of two who works as an attorney. At the end of her most recent annual physical, she mentions she has been experiencing intermittent low back and right sided hip pain with difficulty bending over when picking up her kids or cleaning around the house. Kim notes the pain began about six months ago without injury and comes and goes without any obvious trigger, although the pain seems to be worse when she gets up in the morning. Kim states she thinks it is normal “wear and tear” from years of running and standing long periods in court, but would like to know if there are any at-home or OTC remedies she can take when the pain begins. She denies fever, swelling and pain in other joints or worsening of her scalp psoriasis.

Kim at a Glance
Vitals upon exam:
- Temp: 97.9°F
- HR: 56 bpm
- BP: 115/70
- Resp: 13

Is It Psoriatic Arthritis?
Based on Kim’s history of psoriasis and complaint of intermittent low back and hip pain, you suspect she may be exhibiting symptoms of psoriatic arthritis.

Psoriatic arthritis is an inflammatory arthritis occurring in 10-20% of people with psoriasis, an autoimmune condition characterized by red patches of skin topped with silvery scales. According to the National Psoriasis Foundation, psoriasis is the most prevalent autoimmune disease in the United States, affecting as many as 7.5 million Americans.

Psoriasis occurs when the body’s immune system attacks the skin, and psoriatic arthritis occurs when the immune system attacks joints as well. Psoriatic arthritis may flare and remit over time, affecting any joint in the body, including just one or multiple joints. Affected toes or fingers may swell and resemble sausages, a condition referred to as dactylitis. In addition to affecting joints, psoriatic arthritis may affect ligaments and tendons causing pain in the back of the heel, sole of the foot or elbows. This is referred to as enthesitis, a characteristic feature of psoriatic arthritis.

Complications and broader health implications depend on the joints affected but fatigue and anemia are common among patients with psoriatic arthritis. Also, patients with both psoriasis and psoriatic arthritis are more likely to develop high blood pressure, high cholesterol, obesity or diabetes. Maintaining a healthy weight is important both in preventing these conditions, but may also help alleviate stiff joints and muscle weakness.

While the exact cause of psoriatic arthritis is unknown, it is estimated 40% of individuals with psoriatic arthritis have a family history of the disease. Psoriatic arthritis may also result from a bacterial or viral infection that activate the immune system and may trigger the disease in people with a genetic tendency. While anyone can develop psoriatic arthritis, including children and adolescents, it is most commonly seen in adults aged 30 to 50.

Kim’s complaint of low back pain and difficulty bending over leads you to suspect spondylitis, inflammation of the joints between vertebrae, or sacroiliitis.
Making a Psoriatic Arthritis Diagnosis

The disease can be difficult to distinguish from other rheumatic diseases. The disease typically affects larger joints, especially those in the lower extremities, but it is important to rule out other diseases. The table below outlines different tests rheumatologists often use to eliminate other causes of joint pain, such as rheumatoid arthritis or gout.4

<table>
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<tr>
<th>Imaging</th>
<th>Laboratory</th>
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<td><strong>X-Rays:</strong></td>
<td>Rheumatoid Factor (RF): RF is an antibody often</td>
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<td>Pinpoint changes in the affected joints</td>
<td>present in patients with rheumatoid arthritis but not usually psoriatic arthritis</td>
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<td><strong>CT or MRI:</strong></td>
<td>Synovial fluid: Aspiration and examination of synovial fluid of an affected joint revealing uric acid crystals may indicate gout, not psoriatic arthritis</td>
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<tr>
<td>Identify changes in tendons or ligaments or otherwise more detailed examinations of joints</td>
<td><strong>Laboratory</strong></td>
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**THERE IS NO SINGLE TEST TO CONFIRM A PSORIATIC ARTHRITIS DIAGNOSIS**

Working with a rheumatologist to diagnose psoriatic arthritis is critical because of its ambiguity. Patients may exhibit several different symptoms in varying combinations; one or more of the following symptoms is generally present:

- generalized fatigue
- tenderness, pain and swelling over tendons
- swollen fingers and toes
- stiffness, pain, throbbing, swelling and tenderness in one or more joints
- A reduced range of motion
- Morning stiffness and tiredness
- Nail changes - for example, the nail separated from the nail bed and/or becomes pitted and mimics fungal infections
- Redness and pain of the eye, such as conjunctivitis

Once diagnosed, treatment options depend on the level of pain. NSAIDs may be used as initial treatment, but if the pain persists, rheumatologists may prescribe one or a combination of anti-rheumatic medications, such as methotrexate or a tumor necrosis factor inhibitor, especially when there is evidence of damage to the joints.3

In addition to pharmacotherapies, it is important patients with psoriatic arthritis get adequate exercise to maintain joint flexibility and overall health. Walking, aquatic aerobics and yoga, or other stretching exercises, can help increase quality of life and reduce pain for patients with psoriatic arthritis.1

You note Kim is an avid runner and advise her so long as she feels comfortable, she can continue to exercise normally.

Psoriatic Arthritis
By The Numbers

- **7.5 million** Americans are affected by psoriasis3
- Occurs in at least **10-20% of the population with psoriasis**2
- **40% of individuals** with psoriatic arthritis have family history1
- Psoriasis prevalence in Blacks is 1.3% compared to 2.5% of Whites3

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Lumbar spine showing swelling of the vertebrae

Telescoping and contractures of the fingers
Referring to a Rheumatologist

After listening to Kim’s account of her intermittent low back and hip pain, you share your suspicion of a psoriatic arthritis flare.

You explain her history of psoriasis puts her at risk for developing psoriatic arthritis. Kim states she already knows, but she’s not experiencing any swelling or worsening skin rash. You explain psoriatic arthritis may present as spondylitis, and can be difficult to diagnose, but it is too soon to confirm.

You state you would like to get an X-ray of her lower back and hip to more closely examine the affected areas and consult with a rheumatologist. In the meantime, you counsel her it is okay to continue exercising as tolerated and to try ibuprofen as needed for pain.

When you are referring your patient to, or consulting with, a rheumatologist for the suspicion or treatment of psoriatic arthritis, 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.

As Kim’s primary care provider, your role is essential to her long-term care and ensuring she stays informed and observant of any symptoms indicative of an autoimmune disease.

Psoriatic Arthritis Referral Checklist

☐ Complete blood count
☐ Comprehensive Metabolic Panel
☐ Erythrocyte sedimentation rate (ESR) or C-reactive protein (CRP)
☐ Rheumatoid Factor (RF) antibody to rule out rheumatoid arthritis
☐ Note of any skin changes
   » including when patient noted they occurred
☐ Note of any nail changes
   » including timing of occurrence
☐ X-ray or any other imaging of affected areas
☐ If patient presents with affected joint(s)
   » Aspirate and examine synovial fluid to rule out gout
☐ Document timing of flares
☐ Timeline of any medications
   » What did the patient try at home and how effective was it?
   » When did the patient take medication?

Reminders

• Discuss lifestyle risk factors with patient

Citations