Psoriasis and Seronegative Arthritis
Dr. Peter Hendler

Dr. Hendler: Hello. This is Peter Hendler, and welcome to my podcast on psoriatic and other seronegative arthritides. There are five related kinds of arthritis that collectively are known as the seronegative arthritides. The seronegative word refers to the fact that these five kinds of arthritis are not associated with a positive rheumatoid factor which is the traditional blood test for rheumatoid arthritis. These five types of arthritis often share signs and symptoms, and one can blend into the other. Since we do not fully understand the cause of these types of arthritis, we cannot be certain whether they are all different versions of one kind of arthritis, if they are five separate kinds of arthritis, or if the truth is something in between. It’s useful to classify them together in the same chapter because the treatments are similar. The first form of seronegative arthritis I’ll discuss is ankylosing spondylitis. This is a form of arthritis that affects primarily the spine. It most commonly starts in the late teens or early 20s. If affects men more frequently and more severely than woman, but there are always exceptions to the rule. The characteristics of inflammatory as opposed to mechanical back pain is that the pain and the stiffness are worse in the morning and better as the day goes on. That’s the opposite that you would find for mechanical back pain. Also, inflammatory back pain usually affects all of the spine from the neck all the way down to the tailbone, unlike mechanical back pain which is more common in the lower back or whiplash injury which is in the neck. The diagnosis of this disease is supported by a special blood test that looks for a genetic marker called HLA-B27. This gene is found in 10-25% of the normal population, but it is found in over 90% of patients with ankylosing spondylitis. Another thing that helps in the diagnosis is x-rays of the sacroiliac joints. These are the joints right where the pelvis and the lower part of the spine join. Anatomically they are just about where the dimples would be in the buttocks. In almost all cases of ankylosing spondylitis that has been present for a year or more, you can see sclerosis or x-ray abnormalities at this joint. A second type of seronegative arthritis is inflammatory bowel disease such as Crohn’s disease or ulcerative colitis. People with inflammatory bowel disease may also have inflammatory back pain just like ankylosing spondylitis, and this is the second type of seronegative arthritis. It is said that some people with ankylosing spondylitis have inflammation of the bowel even without diarrhea or symptoms. So it is far from certain that ankylosing spondylitis and inflammatory bowel disease are really two different things. But since some people seem to have mainly ankylosing spondylitis and others have mainly inflammatory bowel disease, it is clinically useful to make the distinction. There is some evidence that both forms of arthritis are caused when bacterial antigens or particles that get through the inflamed gut into the blood start the immune system and arthritogenic reaction. The third and fourth form of seronegative arthritis are now thought to be exactly the same. We used to distinguish between Reiter’s syndrome which consisted of any combination of conjunctivitis (meaning inflamed red eyes), urethritis which means burning on urination, sores in the mouth, heel pain (especially Achilles tendon pain), psoriatic-like skin lesions on the penis or the palms and/or genital ulcers, and what used to be called reactive arthritis which is similar to Reiter’s disease in almost
every way but was preceded by a known venereal or enteric diarrheal infection, now it is thought that they’re all probably reactive arthritis and in the case of what used to be called Reiter’s, we just didn’t happen to catch the preceding infection. Similarly to the other seronegative arthritides so far discussed, it is felt that the arthritis itself is an autoimmune response to bacterial antigens or particles introduced to the immune system during the preceding venereal or enteric infection. Once the arthritis is already there it is debatable whether antibiotics have any roll at all. The data is nonconclusive, and some of the antibiotics have been shown to have some beneficial effects like tetracyclines, but these medications also have some antiinflammatory effects of their own that have nothing to do with killing germs. Once the arthritis has started, there are probably no longer any of the guilty germs still alive in the joints. All of these forms of seronegative arthritis can affect spine and large joints such as knees, hips, and elbows, and all of them may have skin lesions that include thick scaly lesions. The last seronegative arthritis that I’ll cover in this podcast is psoriatic arthritis. Of course psoriasis is a serious skin disease which can cause a significant portion of the skin to be covered in either red raised plaques or white scaly plaques. Some people with psoriatic skin disease also have arthritis that resembles the other seronegative types of arthritis, but there is a special type of psoriatic arthritis that bears mentioning. There is a form of psoriatic arthritis that can destroy the finger joints. It is very aggressive and destructive and is perhaps the only form of arthritis that is as destructive or worse than rheumatoid arthritis. This form of arthritis likes to attack the DIP joints which are the finger joints on the ends of your fingers nearest to the fingernails. In severe cases the fingernails themselves are deformed or what we call dystrophic. They may look as if they have severe fungal infections, but the presence of psoriatic skin lesions or the severe DIP arthritis that accompanies them is the clue that the problem is not at all a fungal infection of the nails but is in fact psoriatic arthritis. Sometimes there is a special x-ray finding in these joints called pencil in cup deformity. You can see this just by going to Google and typing in psoriasis pencil in cup. Some patients have psoriatic arthritis without any skin or nail changes. Of course we can’t diagnose them without the skin or fingernail changes, but we know that this happens because we’ve all seen patients who have a similar form of arthritis for many years and then eventually develop skin or nail changes that proves that all along it was psoriatic arthritis. The seronegative types of arthritis in general don’t respond as well to steroids or to common nonsteroidal antiinflammatory drugs such as Motrin or Naprosyn as other types of arthritis do. Sometimes Indocin is effective, but it is also harder to tolerate because of stomach pain or headaches. In the case of inflammatory bowel disease, a sulfa drug called Azulfidine or sulfasalazine can help both the bowels and the joints. It is a long-acting medication and takes weeks or months to start working. Most of these forms of arthritis do respond to methotrexate which is discussed in another podcast. Finally, there is joint damage and destruction that is not being helped with methotrexate. Then we can use the TNF inhibitors such as Enbrel, Humira, or Remicade which are also discussed in a separate podcast. I hope this explains what you need to know about these five types of arthritis that we call the seronegative arthritides - ankylosing spondylitis, inflammatory bowel disease, Reiter’s, reactive arthritis, and psoriatic arthritis. Thanks for listening to this podcast, and be sure to check out my other rheumatology podcast at www.kphealthcast.org/hendler.