Psoriatic arthritis (PsA) is a type of inflammatory arthritis that occurs in some patients with psoriasis and is caused by inflammation. Inflammation can be good (e.g., in fighting infection), but it can also become a problem if it occurs more than needed or happens without a good reason. This can cause pain, swelling, and stiffness in the joints, and in some cases, it may cause damage to the joints and bones.

PsA affects an estimated 1% of the general public. People with PsA can develop tender and swollen joints and may have a higher risk of developing heart disease and other complications.

Ultrasound scans use high-frequency sound waves to build up an image of something inside the body. They can help doctors see what is happening to the joints and soft tissue in PsA patients. Compared with other ultrasound techniques, its unique features include its ability to produce detailed, color images from any angle and to detect even small changes.

Power Doppler ultrasonography (PDUS) is a specific ultrasound technique that can be used to see what is happening to the joints and soft tissue in PsA patients. It uses color images to show blood flow to and around the joints, which can help doctors understand how the disease is affecting the joints.

Using sensitive ultrasound imaging to assess changes in synovitis severity has been found to be a useful tool in clinical trials involving newer imaging techniques. This is because it can provide a detailed picture of how the disease is affecting the joints, allowing doctors to monitor the progress of the disease and the effectiveness of treatment.

What did this study find?

Using PDUS, this study investigated the effects of a treatment called secukinumab on joint inflammation, enthesitis, and dactylitis among patients with PsA. Secukinumab is a type of medication called a biologic. It helps reduce inflammation by blocking one of the molecules that activate inflammatory cells.

The study was sponsored both this study and the writing of this summary. The six key “domains” of PsA are: dactylitis, enthesitis, skin, joint function, psoriasis, and tender fingers. Secukinumab treatment also showed significant improvement in broader symptoms of PsA, including daily functioning, psoriasis, and tender fingers. Secukinumab was well-tolerated with no new or unexpected side effects.

Why was this study done?

In order to further understand how PsA affects various body parts, doctors need to use different imaging techniques to visualize inflammation inside the body. One example of how doctors can use these techniques is by using ultrasound imaging to see changes in synovitis severity. This is because it can provide a detailed picture of how the disease is affecting the joints, allowing doctors to monitor the progress of the disease and the effectiveness of treatment.

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What does this matter?

The results of this study show that secukinumab is effective in reducing joint inflammation, enthesitis, and dactylitis among patients with PsA. This is important because it can help doctors provide better care to patients with PsA and improve their quality of life. Additionally, this study also showed that secukinumab was well-tolerated with no new or unexpected side effects, which is important for patients who may be considering this treatment.

Further information

https://clinicaltrials.gov/ct2/show/NCT02662985

References