What is Psoriatic Arthritis?

papaa®

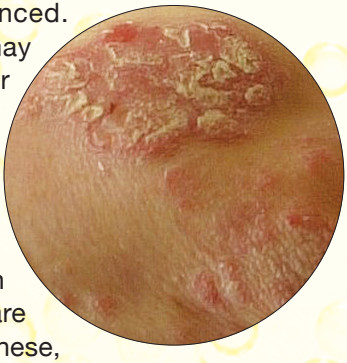
A positive approach to psoriasis and psoriatic arthritis

What are the aims of this leaflet?

This leaflet has been written to help you understand psoriatic arthritis, the ways in which it is different from other forms of arthritis, and the treatments available.

What is psoriasis?

Psoriasis (sor-I'ah-sis) is a long-term (chronic) condition that affects the skin. It causes red, raised, and scaly patches called plaques, most commonly on the elbows, knees, and scalp. In people with skin of colour, the redness is less pronounced. The plaques therefore may appear darker, brown, or purple patches with grey scales. While psoriasis can sometimes be itchy, it is usually not painful. Around 1 in 50 people in the UK approximately 1.3 million or 2% of the population are affected by psoriasis. Of these, about 1 in 4 (325,000 people, or 0.5% of the UK population) will go on to develop psoriatic arthritis, a related condition affecting the joints. Nail changes, such as pitting or ridging, are very common in people with psoriatic arthritis, affecting 80–90% of those diagnosed. For people with psoriasis alone, nail changes are seen in around 40% of cases.



What happens in psoriasis?

Normally, skin cells take 21 to 28 days to mature. During this time, they travel to the surface of the skin, where they are lost in a constant invisible shedding of dead cells. In patches of psoriasis the turnover of skin cells is much faster, around 4 to 7 days, and this means that even live cells can reach the surface and accumulate with dead cells. The extent of psoriasis and how it affects an individual varies from person to person. Some individuals might have a small, hidden patch on an elbow that doesn't bother them, while others may have large visible areas of skin involved that significantly affect daily life and relationships. This process is the same wherever it occurs on the body. Psoriasis is not contagious. For more

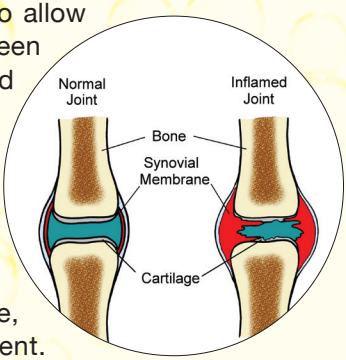
detailed information on psoriasis see our leaflet ***What is Psoriasis?*** or visit our website.

What happens in psoriatic arthritis?

- Psoriatic arthritis is a form of arthritis affecting individuals with psoriasis.
- Joints become inflamed, which causes pain, swelling and stiffness.
- Tendons may also become inflamed and cause pain (often around the heel or in the elbow).
- Joints are typically stiff after resting, particularly early in the morning or in the evening.
- Around 1 in 4 (25%) of those with psoriasis may develop some form of arthritis.
- In around 8 out of 10 (80%) the arthritis develops after the appearance of psoriasis.
- Some people may develop a condition of the eye (uveitis) which may cause redness and inflammation. If you are concerned about this, seek medical advice.
- People with psoriatic arthritis often report feeling fatigued or exhausted.
- There is some evidence that people with psoriasis and/or psoriatic arthritis might have a slightly increased cardiovascular risk (heart disease). Although it is not clear what are the direct risks associated with psoriatic arthritis, with research ongoing. See our ***Psoriasis and the Heart*** leaflet.

How do joints and tendons become inflamed?

The function of a joint is to allow movement to occur between bones. In the joint, the end of the bone is covered with cartilage, around which is a capsule lined by a membrane called synovium. This membrane makes the fluid that lubricates the joint space, enabling smooth movement.



In arthritis the synovial membrane becomes inflamed and releases substances that cause inflammation. The inflamed synovium releases more fluid than normal and so the joint becomes tender and swollen. Persistent inflammation may lead to damage to the cartilage and erosion of the underlying bone. The synovial membrane also lines and lubricates tendons, so overproduction of synovial fluid can also cause tendon inflammation.

What is different about psoriatic arthritis?

There are several features that distinguish psoriatic arthritis from other forms of arthritis.

- The pattern of joints that may be involved is different.
- Psoriatic arthritis may just affect a small number of joints (oligoarthritis) or many joints (polyarthritis).
- Most commonly the psoriatic arthritis is asymmetric in pattern (unlike rheumatoid arthritis, which is symmetrical).
- Psoriatic arthritis may affect the end joints of fingers, often corresponding with the fingers that have psoriatic nail involvement. See our ***Nail Psoriasis*** leaflet.
- When psoriatic arthritis affects the joints of the spine and sacroiliac joints it is called spondyloarthritis (similar to axial spondyloarthritis), this can result in stiffness and pain of the back or neck.
- An entire toe or finger can become swollen or inflamed so called 'sausage finger' (dactylitis).
- Some people have involvement of the jaw (temporomandibular joint – TMJ), where pain occurs on one or both sides of the face near the ear.
- It can affect the joints of the rib cage, particularly where they meet the sternum or breastbone.
- Psoriatic arthritis may affect where the tendons connect to the bone (enthesitis), common areas to be affected include the heel and ankle.
- Psoriatic arthritis may cause joints to become stiff and limit their range of movement, in some severe cases the joint may fuse, with the result that it cannot be moved.
- Importantly, the absence of rheumatoid factor in the blood helps distinguish psoriatic arthritis from rheumatoid arthritis.

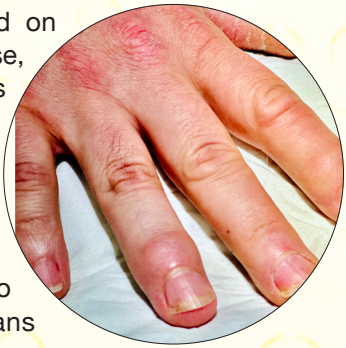
Distinguishing features are not always present and the individual may have swelling of a few or many joints similar to other types of arthritis, making diagnosis difficult.

At what age and who does psoriatic arthritis affect?

- It may come on at any age.
- It is uncommon in children.
- Usually, the psoriatic arthritis comes on after the psoriasis.
- Men and women are equally affected.
- 3 out of 5 (60%) of men will develop arthritis of the spine as opposed to 2 out of 5 (40%) of women.

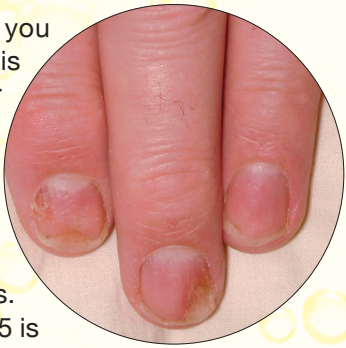
What is the outlook in psoriatic arthritis?

- Although psoriatic arthritis cannot be cured at present, many effective treatments exist.
- Treatments will depend on the severity of the disease, with some individuals having minimal arthritis, whilst others are more severely affected.



- Psoriatic arthritis is a chronic condition that can flare up and go into remission, which means symptoms can worsen, improve, and then worsen again over time.
- Early diagnosis is essential in order to identify those who may develop more severe psoriatic arthritis and begin treatment that can prevent damage occurring to the joints.
- If you or a first-degree relative have psoriasis and you have the symptoms described in this leaflet (such as joint pain, stiffness, swelling or dactylitis), you should seek medical advice.
- Only a small minority of individuals will go on to develop severe and widespread joint damage.
- Joints that are initially involved in psoriatic arthritis are usually the ones that continue to cause the problems at a later stage, though this is not always the case.

- Genetic markers to identify individuals with potentially more severe arthritis are now becoming practical and will help in identifying the most suitable type of treatment.



If you are concerned you may have psoriatic arthritis something you could do for yourself is to complete the Psoriasis Epidemiology Screening Tool (PEST) questionnaire. To learn more about the PEST tool go to www.papaa.org/tools. A score of 3 or more out of 5 is positive and indicates a referral to rheumatology should be considered; your GP will be able to help with this.

Management of psoriatic arthritis?

Although psoriatic arthritis is a chronic condition with no cure, there are many effective treatments to manage and control it. Some treatments for psoriatic arthritis may also help psoriasis of the skin. Your psoriatic arthritis is likely to be managed by several healthcare professionals, which may include:

- your general practitioner (GP)
- a rheumatologist (joint specialist)
- a dermatologist (skin specialist)
- a specialist nurse
- a physiotherapist
- an occupational therapist
- a podiatrist (foot care)
- an ophthalmologist (eye specialist)
- a surgeon (joint replacement).

You may also be referred for specialist tests and imaging.

These may include, when appropriate, x-rays, magnetic resonance imaging (MRI), ultrasound etc. It needs to be noted that treatments for psoriatic arthritis follow a pathway, which generally starts with the mildest intervention in a 'ladder' approach (sequencing).

Each step on the ladder usually will need to be tried in turn before moving on to the next step.

Typical order of treatment pathway

- Topical analgesic creams for the treatment of mild to moderate pain caused by arthritis.
- Topical medications for skin psoriasis such as vitamin D derivatives, although they may help the skin, have not been shown to benefit joints.
- NSAIDs (non-steroidal anti-inflammatory drugs) work by blocking the production of some of the body's chemicals that cause inflammation and pain.
- Corticosteroids as joint injections can be very effective, although these do not work equally well in all individuals, safe when used in moderation and with precision.
- csDMARDs (conventional synthetic disease-modifying anti-rheumatic drugs) are often prescribed in addition to NSAIDs to help slow down the biological processes that cause the persistent inflammation.
- Targeted synthetic drugs or tsDMARDs (such as the PDE4 inhibitors and Janus Kinase [Jak] inhibitors), and biologics or bDMARDs (such as anti-TNF, interleukin inhibitors) have been developed in recent years and may be offered if you do not respond effectively to other csDMARDs. They work by mimicking the effects of substances that are naturally produced by the body's immune system to help reduce inflammation and manage symptoms.

Remember: all treatments may have unwanted side effects or require special precautions (e.g. during pregnancy). Always make sure you have all the information before embarking on any course of therapy; this includes reading the patient information leaflets (PIL) provided with your medicines.

Can exercise help psoriatic arthritis?

- A severely inflamed joint should be treated with a period of rest followed by exercise (under medical supervision). Physiotherapy of joints and muscles which have stiffened can help prevent loss of movement. See our ***Physiotherapy & Exercise: Psoriatic Arthritis*** leaflet.

Does diet make a difference?

- Diet can play an important role in managing psoriatic arthritis, though it does not replace medical treatment. While no single diet cures psoriatic arthritis, certain dietary patterns can help reduce inflammation, improve symptoms and support overall well-being.
- The Mediterranean diet emphasises fruits, vegetables, whole grains, fish, olive oil, nuts, and seeds. It is rich in anti-inflammatory nutrients and omega-3 fatty acids, which can help reduce inflammation and improve joint health. Some studies suggest that following a Mediterranean diet may help manage symptoms of psoriatic arthritis by lowering inflammation levels in the body.
- The ketogenic (keto) diet is a high-fat, low-carbohydrate diet that shifts the body into a state of ketosis, where it burns fat for energy. While evidence is still emerging, some studies indicate that the keto diet may reduce inflammation, which could be beneficial for psoriatic arthritis. However, long-term safety and effectiveness for this condition remain unclear, and this diet may not suit everyone. It is important to consult with a healthcare professional before making significant dietary changes.
- Dietary supplements such as evening primrose oil and certain fish oils (rich in omega-3 fatty acids) may have variable effects. While they are generally safe and offer other health benefits, their specific benefits for psoriatic arthritis have not been conclusively proven in research.
- Following guidelines about healthy lifestyle, keeping weight down and moderating alcohol intake are all generally accepted as beneficial regardless of having psoriasis or psoriatic arthritis. For people who are overweight or obese, losing weight can make a significant difference in psoriatic arthritis symptoms. Excess weight puts additional strain on the joints and can increase inflammation in the body. Research has shown that weight loss can improve joint pain, mobility, and even the effectiveness of certain psoriatic arthritis treatments, such as biologics. For more information see our ***Psoriatic Lifestyle and Nutrition*** leaflet.

Remember: many so-called cures for arthritis are not proven by clinical trials to be of use and may be driven by profit to those advocating them.

Does climate make a difference?

- Ultraviolet light helps psoriasis in some cases, otherwise climatic conditions such as the weather have a minor role to play; those whose skin and joints wax and wane together are usually better in summer than winter.

Does the severity of skin psoriasis matter?

- There is no correlation between the severity of the skin psoriasis and psoriatic arthritis.

What part do nails play in psoriatic arthritis?

- Nail changes are present in around 4 out of 5 individuals with psoriatic arthritis, compared to only about 2 out of 5 in those with psoriasis alone.
- Nail changes can be seen in both fingers and toes, leading to pain that make using the hands difficult or impact walking.
- Common nail changes include pitting and discolouration of the nail, caused by abnormalities in the growth of tissue in the nailbed.
- The risk of developing psoriatic arthritis is greater in individuals with severe psoriasis, yet severe psoriatic arthritis may occur with minimal skin disease.

Do we know what causes psoriatic arthritis?

- It is generally believed that psoriatic arthritis results from a combination of genetic, immunological, and environmental factors.
- You cannot catch psoriatic arthritis or psoriasis from someone else. Therefore, they are not contagious.
- 2 out of 5 (40%) of people with psoriasis or psoriatic arthritis have a first-degree relative with the condition. This means you have a higher chance of developing

psoriasis or psoriatic arthritis if you have a relative who has the condition. The genetic make-up of an individual is likely to determine the risk of developing these conditions and probably influences the severity.

- Psoriatic arthritis is considered an autoimmune condition, where the immune system mistakenly attacks healthy tissues, causing inflammation in the joints and skin.
- Some experts believe infections such as streptococcal infections may provoke the onset of psoriatic arthritis, though this is not proven.
- Current research is exploring the role of the microbiome (bacteria in the gut) in the development of psoriatic arthritis, with promising findings suggesting it may influence the disease.
- Stress and physical trauma may be contributing factors, although this is not proven.
- Being overweight (obesity) is now understood to be linked to developing psoriatic arthritis and is the subject of ongoing research.
- Specific genetic markers associated with the immune system are now being used to predict the severity of psoriatic arthritis. Much more is known about the mechanisms that lead to inflammation in other conditions and it is likely advances in science will lead to much more effective treatments with fewer side effects.
- Although significant progress has been made, the cause of psoriatic arthritis is still the subject of ongoing research.

Useful contacts

For information about health matters in general and how to access services in the UK, the following websites provide national and local information.

- NHS UK: www.nhs.uk
- NHS England: www.england.nhs.uk
- NHS Scotland: www.scot.nhs.uk
- Health in Wales: www.wales.nhs.uk
- HSCNI Services (Northern Ireland): http://online.hscni.net

These sites are the official sites for the National Health Service and provide links and signposting services to recognised organisations and charities.

For other information of how to access Government services and information such as benefits go to: www.gov.uk

About this information

This material was produced by PAPAA. Please be aware that research and development of treatments is ongoing.

For the latest information or any amendments to this material, please contact us or visit our website: www.papaa.org. The site contains information on treatments and includes patient experiences and case histories.

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Quality and accuracy

To learn more about how this material was developed and produced and the criteria we use to deliver quality support and information, go to our website and read the PAPAA Pledge: www.papaa.org/pledge

If you have any views or comments about this information or any of the material PAPAA produces you can contact us via the details on the back page or online at www.papaa.org/user-feedback

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The charity for people with psoriasis and psoriatic arthritis

PAPAA is independently funded and is a principal source of information and educational material for people with psoriasis and psoriatic arthritis in the UK.

PAPAA supports both patients and professionals by providing material that can be trusted (evidence-based), which has been approved and contains no bias or agendas.

PAPAA provides positive advice that enables people to be involved, as they move through their healthcare journey, in an informed way which is appropriate for their needs and any changing circumstances.

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