Psoriatic Arthritis

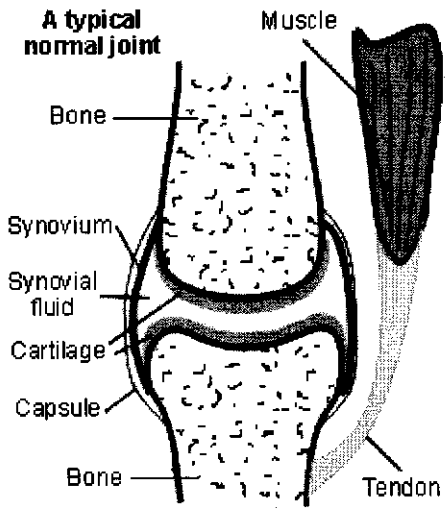
Psoriatic arthritis causes inflammation, pain, and swelling of joints in some people who have psoriasis. Other parts of the body may also be affected. For example, inflammation may also affect tendons and ligaments. The severity can vary from mild to severe. In some cases affected joints become damaged which can cause disability. Treatments include medication to ease pain, and medication to slow down the progression of the disease. Surgery is sometimes needed if a joint or tendon becomes badly damaged.

What is psoriatic arthritis?

Arthritis means inflammation of the joints. Psoriasis is a common skin condition which typically causes patches ('plaques') of red, scaly skin to develop. Psoriatic arthritis is a particular type of arthritis that develops in some people who also have psoriasis.

Understanding joints

A joint is where two bones meet. Joints allow movement and flexibility of various parts of the body. The movement of the bones is caused by muscles which pull on tendons that are attached to bone.



Cartilage covers the end of bones. Between the cartilage of two bones which form a joint there is a small amount of thick fluid called synovial fluid. This fluid 'lubricates' the joint, which allows smooth movement between the bones.

The synovial fluid is made by the synovium. This is the tissue that surrounds the joint. The outer part of the synovium is called the capsule. This is tough, gives the joint stability, and stops the bones from moving 'out of joint'. Surrounding ligaments and muscles also help to give support and stability to joints.

Who gets psoriatic arthritis?

About 1 in 10 people with psoriasis develop psoriatic arthritis. (About 2 in 100 people develop psoriasis at some stage in their life. See separate leaflet called *'Psoriasis'* for more details of psoriasis.)

In most cases, the arthritis develops after the psoriasis - most commonly within 10 years after the psoriasis first develops. However, in some cases the arthritis develops much later. In a small number of cases the arthritis develops first, sometimes months or even years before the psoriasis develops. Men and women are equally affected.

Psoriasis most commonly first occurs between the ages of 15 and 25, and psoriatic arthritis most commonly develops between the ages of 25 and 50. However, both psoriasis and psoriatic arthritis can occur at any age, including in childhood.

Note: people with psoriasis also have the same chance as everyone else of developing other types of arthritis such as rheumatoid arthritis and osteoarthritis. Psoriatic arthritis is different, and is a particular type of arthritis that occurs only in some people with psoriasis.

What causes psoriatic arthritis?

The exact cause is not known. Inflammation develops in the synovium of affected joints (the tissue that surrounds each joint) and sometimes in other parts of the body such as tendons and ligaments. It is not clear what triggers the inflammation. It seems that the immune system is affected in some way which leads to inflammation. Genetic factors seem to be important as psoriatic arthritis occurs more commonly in

relatives of affected people. However, it is not a straightforward hereditary condition. It is thought that a virus or other factor in the environment may trigger the immune system to cause the inflammation in people who are genetically prone to it.

Which joints are affected in psoriatic arthritis?

Any joint can be affected. However, there are five main patterns of this disease. Affected people tend to fall into one of these patterns although many people overlap between two or more patterns. The patterns are:

Asymmetrical oligoarticular arthritis

This is a common pattern and tends to be the least severe. 'Oligo' means 'a few'. In this pattern usually fewer than five joints are affected at any time. A common situation is for one large joint to be affected (for example a knee) plus a few small joints in the fingers or toes.

Symmetrical polyarthritis

This pattern is also quite common. Symmetrical means that if a joint is affected on the right side of the body (such as a right elbow) the same joint on the left side is also often affected. Polyarthritis means that several joints become inflamed, usually including several of the smaller joints in the wrists and fingers.

Spondylitis with or without sacroiliitis

This pattern occurs in about 1 in 20 cases. Spondylitis means inflammation of the joints and discs of the spine. Sacroiliitis means inflammation of the joint between the lower spine (sacrum) and the pelvis. Back pain is the main symptom.

Distal interphalangeal joint predominant

This is a rare pattern where the small joints closest to the nails (distal interphalangeal joints) in the fingers and toes are mainly affected.

Arthritis mutilans

This is a rare pattern where a severe arthritis causes marked deformity to the fingers and toes.

What are the symptoms of psoriatic arthritis?

Joint symptoms

The common main symptoms are pain and stiffness of affected joints. The stiffness is usually worse first thing in the morning, or after you have been resting. The inflammation causes swelling and redness around the affected joints. Over time, in some cases, the inflammation can damage the joint. The extent of joint damage can vary from case to case. On average, the joint damage tends not to be as bad or as disabling as occurs with rheumatoid arthritis. However, joint damage can cause significant deformity and disability in some cases.

Inflammation around tendons

This is quite common. It probably occurs because the tissue which covers tendons is similar to the synovium around the joints. A common site is inflammation of the tendons of the fingers. Affected fingers may become swollen and 'sausage-shaped' if there is inflammation in the finger joints and overlying tendons at the same time. The Achilles tendon is another common site, especially where the tendon attaches to the bone. Various other tendons around the body are sometimes affected.

The skin rash of psoriasis

See separate leaflet called *'Psoriasis'* for details.

Other symptoms that may occur include:

- Inflammation of ligaments.
- Pitting of the nails (tiny depressions in the nail), and separation of the nail from the nailbed.
- Anaemia and tiredness.
- Inflammation in other parts of the body. Inflammation of the front of the eyes (conjunctivitis) and/or of the iris around the pupil (iritis) are the most common examples. Rarely, inflammation can develop in other places such as the aorta (a main blood vessel) or lungs.

How is psoriatic arthritis diagnosed?

There is no test which clearly diagnoses early psoriatic arthritis. When you first develop symptoms of arthritis it can be difficult for a doctor definitely to confirm that you have psoriatic arthritis. This is because there are many other causes of arthritis. However, if you have developed psoriasis within the past few years, and then an arthritis develops, there is a good chance that the diagnosis is psoriatic arthritis.

In time, the pattern and course of the disease tends to become typical and a doctor may then be able to give a firm diagnosis.

Some tests may be done such as blood tests and X-rays. These can help to rule out other types of arthritis. For example, most people with rheumatoid arthritis have an antibody in their blood called rheumatoid factor. This does not usually occur in psoriatic arthritis. (This is why psoriatic arthritis is described in medical textbooks as a 'seronegative' type of arthritis - that is 'antibody-negative'.) Also, the X-ray appearance of joints affected by psoriatic arthritis tends to be different to that seen in rheumatoid arthritis and osteoarthritis.

How does psoriatic arthritis progress?

Once the disease is triggered, psoriatic arthritis is usually a chronic relapsing condition. Chronic means that it is persistent. Relapsing means that at times the disease flares up (relapses), and at other times it settles down. There is usually no apparent reason why the inflammation may flare up for a while, and then settle down.

The amount of joint damage that may eventually develop can range from mild to severe. At the outset of the disease it is difficult to predict for an individual how badly the disease will progress. However, modern drugs that are commonly used these days aim to suppress the inflammation in the joints and prevent joint damage.

What are the treatments for psoriatic arthritis?

The main aims of treatment are:

1. To reduce pain and stiffness in affected joints and tendons as much as possible.
2. To prevent joint damage and deformity as much as possible.
3. To minimise any disability caused by pain or joint damage.

Treatment aim 1 - to reduce pain and stiffness

During a flare-up of inflammation, if you rest the affected joint(s) it helps to ease pain. Special wrist splints, footwear, gentle massage, or applying heat may also help. Medication is also helpful. Medicines which may be advised by your doctor to ease pain and stiffness include the following:

Non-steroidal anti-inflammatory painkillers (NSAIDs)

These are sometimes just called 'anti-inflammatories' and are good at easing pain and stiffness. There are many types and brands. Each is slightly different to the others, and side-effects may vary between brands. To decide on the right brand to use, a doctor has to balance how powerful the effect is against possible side-effects and other factors. Usually one can be found to suit. However, it is not unusual to try two or more brands before finding one that suits you best.

The leaflet that comes with the tablets gives a full list of possible side-effects. The most common side-effect is stomach pain (dyspepsia). An uncommon but serious side-effect is bleeding from the stomach. Your doctor may prescribe another medicine to 'protect the stomach' from these possible problems. If you develop abdominal (stomach) pains, pass blood or black stools, or vomit blood whilst taking anti-inflammatories, stop taking the tablets and see a doctor urgently.

Note: it is thought that some anti-inflammatories may make the rash of psoriasis worse in some people. Tell your doctor if you think that your psoriasis has become worse since starting an anti-inflammatory drug. An alternative anti-inflammatory drug or a different type of painkiller may be an option.

Painkillers

Paracetamol often helps. This does not have any anti-inflammatory action but is useful for pain relief in

addition to, or instead of, an anti-inflammatory drug. Codeine is another painkiller that is sometimes used.

Steroids

An injection of steroid directly into a joint or inflamed tendon is sometimes used to treat a bad flare-up in one particular joint or tendon. Steroids are good at reducing inflammation.

Note: non-steroidal anti-inflammatory painkillers, ordinary painkillers, and steroids ease the symptoms. However, they do not alter the progression of the disease or prevent joint damage. You do not need to take them if symptoms settle between flare-ups.

Treatment aim 2 - to prevent joint damage as much as possible

Disease-modifying drugs

Disease-modifying antirheumatic drugs (DMARDs) are commonly used as early as possible after a diagnosis of psoriatic arthritis is made. They aim to suppress inflammation and reduce the damaging effect of the disease on the joints. They work by blocking the effects of chemicals involved in causing joint inflammation. Sulfasalazine and methotrexate are the most commonly used DMARDs for psoriatic arthritis, but there are others.

DMARDs have no immediate effect on pains or inflammation. It can take up to 4-6 months before you notice any effect. Therefore, it is important to keep taking a DMARD as prescribed, even if it does not seem to be working at first. After starting a DMARD, many people continue to take an anti-inflammatory drug for several weeks until the DMARD starts to work. Once a DMARD is found to help, the dose of the anti-inflammatory drug can be reduced or even stopped. It is then usual to take a DMARD indefinitely.

Each DMARD has different possible side-effects. If one does not suit, a different one may be fine. Some people try two or three DMARDs before one is found to suit. (Some side-effects can be serious. These are rare and include damage to the liver and blood-producing cells. Therefore, it is usual to have regular tests - usually blood tests - whilst you take a DMARD. The tests look for some possible side-effects before they become serious.)

Some DMARDs also have a beneficial effect on reducing the psoriasis rash. For example, methotrexate is an established treatment for psoriasis even in the absence of arthritis.

Newer disease-modifying drugs

A new class of drugs which have recently been developed are drugs that modify the effect of TNF-alpha. The chemical TNF-alpha plays an important role in causing inflammation in joints and skin. Blocking the effect of TNF-alpha has been shown to reduce damage to joints, and to reduce symptoms. Drugs which modify or block the effect of TNF-alpha include: etanercept, infliximab, adalimumab, and anakinra. They show promise but their long-term benefits are still being evaluated. One problem with these drugs is that they need to be given by injection. They are also expensive. Recent guidelines state that one may be tried if there has been little success when using standard DMARDs.

Treatment aim 3 - to minimise disability as much as possible

- As far as possible, try to keep active. The muscles around the joints will become weak if they are not used. Regular exercise may also help to reduce pain and improve joint function. Swimming is a good way to exercise many muscles without straining joints too much. A physiotherapist can advise on exercises to keep muscles around joints as mobile and strong as possible. They may also advise on splints to help rest a joint if needed.
- If such things as your grip or mobility become poor, an occupational therapist may advise on adaptations to the home to make daily tasks easier.
- If severe damage occurs to a joint, operations such as joint replacements are an option.
- Sometimes an operation is needed to fix a damaged tendon.

Other treatments

See the leaflet on psoriasis for details of treatments for the skin rash of psoriasis.

Some people try complementary therapies such as special diets, bracelets, acupuncture, etc, to help ease

arthritis. There is little research evidence to say how effective such treatments are for psoriatic arthritis. In particular, beware of paying a lot of money to people who make extravagant claims of success. For advice on the value of any treatment it is best to consult a doctor, or contact one of the groups below.

What is the outlook (prognosis) for people with psoriatic arthritis?

In many people with psoriatic arthritis the severity is mild to moderate, the joint damage is not too bad, and there is no major disability. In some people - perhaps up to 4-6 in 10 of untreated cases - the disease can cause more marked symptoms with joint damage developing over time and leading to disability.

However, the figures quoted for prognosis are a bit confusing as treatment has improved in recent years. Symptoms can often be well controlled with medication. Because of the newer and better drugs, in particular the newer disease-modifying drugs, the outlook for a person who is diagnosed with psoriatic arthritis these days is likely to be much better than it used to be. Follow-up studies of people being treated with the newer drugs should give a clearer idea of prognosis over the next few years.

Further information and help

The Psoriasis and Psoriatic Arthritis Alliance (PAPAA)
PO Box 111, St Albans, Hertfordshire, AL2 3JQ
Tel: 0870 770 3212 Web: www.papaa.org

Arthritis Research UK
Copeman House, St Mary's Court, St Mary's Gate, Chesterfield, Derbyshire, S41 7TD.
Tel: 01246 558033 Web: www.arthritisresearchuk.org

Arthritis Care
18 Stephenson Way, London, NW1 2HD
Helpline: 0808 800 4050
Web: www.arthritiscare.org.uk

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