

Improving recognition of psoriatic arthritis

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FIGURE 1

Skin psoriasis and severe nail destruction from psoriasis, and dactylitis of the toes, in a patient with a six-month history of arthritis. The skin disease developed first followed by the arthritis a few weeks later



How should psoriatic arthritis be diagnosed?

What are the evidence-based treatment options?

Which patients should be referred?



PSORIATIC ARTHRITIS (PsA) IS A COMMON FORM OF INFLAMMATORY ARTHRITIS BUT IS

underdiagnosed. Psoriasis affects more than 1.5% of the UK population so a GP with an average list size is likely to care for around 40 patients with psoriasis. Around 15% of these patients will be diagnosed with PsA, but up to 40% of them may have evidence of arthritis if reviewed thoroughly.

PsA is a member of the family of spondyloarthritis which also includes ankylosing spondylitis (AS), reactive arthritis and enteropathic

arthritis (related to inflammatory bowel disease). There are shared genetic links in these disorders, in particular the HLA-B27 gene. The trigger for the onset of disease is also poorly understood although many patients report that their disease seemed to be triggered by physical or psychological stress. PsA has a similar impact on quality of life and function as rheumatoid arthritis.

DIAGNOSIS

PsA can be difficult to diagnose as patients present with a variety of different patterns of arthritis, but a high level of suspicion can help to

identify joint problems. Patients with PsA most commonly experience onset of skin psoriasis before they present with arthritis. Most patients with PsA have relatively mild skin psoriasis, but some have more significant disease. Only around 10-20% develop arthritis before their skin disease, and these cases may be labelled as undifferentiated arthritis until their skin disease becomes obvious.

In some patients it is possible to make a diagnosis of PsA because they have typical patterns of arthritis and »

SYMPOSIUM MUSCULOSKELETAL DISEASE

PSORIATIC ARTHRITIS

Box 1

The domains of psoriatic arthritis

- skin disease
- joint disease (arthritis)
- dactylitis
- enthesitis
- axial (spinal or sacro-iliac) disease

a family history of psoriasis. Many patients have mild skin psoriasis that they may be unaware of, or have never had diagnosed.

Five domains have been identified in PsA (see box 1, above).

Joint involvement is far more variable in PsA, compared with rheumatoid arthritis, and patients may present with:

- a monoarthritis (just one inflamed joint) or an oligoarthritis (four or fewer swollen joints) typically involving large joints of the lower limbs (knee and ankle)
- involvement of the distal interphalangeal (DIP) joints which can cause some confusion with Heberden's nodes seen in osteoarthritis
- a rheumatoid arthritis-like picture with multiple joints involved including the small joints in the hands. These so-called grey cases present the most difficulty in diagnosis. Blood tests may help in the differential diagnosis. Features such as dactylitis (uniform 'sausage-like' swelling of the whole digit, either finger or toe) and enthesitis (inflammation at the sites of muscle or tendon attachment to bone) may also help to make a diagnosis of PsA
- axial disease producing symptoms similar to AS; with or without peripheral joint disease

There are now classification criteria for PsA called the CASPAR criteria (see box 2, below).¹ Although these were not designed for use as a diagnostic tool, they do provide some guidance. However, it is important to bear in mind that some patients may have PsA without fulfilling all of these criteria.

HISTORY

Joints

Joint disease in PsA causes pain and swelling of the peripheral joints.

Patients often complain of stiffness and pain with symptoms worst first thing in the morning. Early morning stiffness that takes more than 30 minutes to ease is suggestive of inflammation.

Dactylitis

Swelling of the whole finger or toe also causes pain and stiffness. Movement may be significantly reduced if an entire finger is swollen and the patient may not be able to grip.

Enthesitis

Enthesitis typically causes pain and occasional swelling over tendon/muscle attachments. Common sites include the Achilles tendon and plantar fascia. Patients can also present with lateral or medial epicondylitis and may complain of costochondritis causing distressing chest pain.

Axial disease

Symptoms of axial or spinal PsA are similar to those of AS. Patients complain of chronic, low back pain which is worse in the morning with early morning stiffness lasting more

than 30 minutes. Some patients have such severe pain at rest that it wakes them in the early hours of the morning and can only be eased by stretching or moving around. Other typical features include alternating buttock pain and pain radiating down the legs.

EXAMINATION

Skin

Skin disease is present in the majority of patients although not all. Hidden areas for psoriasis include:

- behind the ears
- at the top of the natal cleft
- around the umbilicus

It is also important to look closely at the nails as some patients may just have nail disease causing pitting or onycholysis without obvious skin psoriasis.

Joints and digits

Look at the joints and palpate around the joint line to feel for swelling. Larger joints, particularly the knees, can develop very big effusions causing obvious swelling. If a digit has fusiform swelling then this is termed dactylitis.

Enthesitis

Common areas to test for enthesitis should include the Achilles tendon, plantar fascia, costochondral joints and the elbow (lateral and medial epicondylitis).

Axial disease

Often patients will have a reasonable range of movement in the spine although they may be limited by pain and stiffness. Even if examination is normal, patients with typical features of inflammatory back pain should be investigated further.

REFERRAL

Patients with suspected PsA should be referred promptly to a rheumatologist for further assessment and treatment. Even patients with milder or more atypical disease may also benefit from referral. Chronic enthesitis in the setting of psoriasis can also indicate PsA and may require further treatment.

If there is a suspicion of chronic inflammatory back pain, these patients should also be referred as possible axial PsA or AS.

If there is significant skin or nail disease (see figure 1, p15), a referral to dermatology is also recommended.

Box 2

The CASPAR criteria¹

Inflammatory articular disease (joint, spine, or enthesal) scoring three or more points

	Score
1. Evidence of psoriasis (one of a, b, c)	
(a) Current psoriasis*	2
(b) Personal history of psoriasis	1
(c) Family history of psoriasis	1
2. Psoriatic nail dystrophy	1
3. A negative test for rheumatoid factor	1
4. Dactylitis (current or history confirmed by rheumatologist)	1
5. Radiological evidence of juxta-articular new bone formation	1

* Current psoriasis scores 2 points, all other features score 1 point

Box 3**GRAPPA treatment guidelines for psoriatic arthritis by disease aspect**

	Peripheral arthritis	Skin and nail disease	Axial disease	Dactylitis	Enthesitis
First line	NSAIDs	Topicals	NSAIDs	NSAIDs	NSAIDs
Localised therapy	IA steroids	PUVA/UVB	Physiotherapy	Local steroid injection	Local steroid injection
Systemic DMARDs	methotrexate, ciclosporin, sulfasalazine, leflunomide	methotrexate, ciclosporin, acitretin	No evidence of benefit	No evidence of benefit	No evidence of benefit
Biologics	Anti-TNF α	Anti-TNF α and others	Anti-TNF α	Anti-TNF α	Anti-TNF α

INVESTIGATIONS

Diagnosis of PsA can be made on clinical grounds but blood tests and radiographs are performed routinely to aid diagnosis.

‘The key to recognition of PsA is a high index of suspicion in patients with known psoriasis and ...’

Checking inflammatory markers (CRP, ESR) can be helpful although these are only raised in approximately half of PsA patients so a normal result does not exclude the disease. Rheumatoid factor and anti-CCP antibodies should be checked to exclude rheumatoid arthritis. These can be particularly helpful where there is uncertainty about whether the diagnosis is rheumatoid arthritis or PsA.

X-rays of the hands and feet (even if the feet are asymptomatic) are helpful to look for any early signs of bony damage. Radiologists can often identify typical features on x-rays to support a diagnosis of PsA such as erosions, pencil-in-cup deformities and juxta-articular new bone formation.

Rheumatologists are now increasingly using other imaging techniques to look for joint, spine or enthesal inflammation including ultrasound and MRI. In the case of suspected spinal involvement, imaging is required to make a diagnosis. Initially an x-ray of the sacro-iliac joints (SIJs) should be performed to look for sclerosis, erosions or fusion of the joints. If this is normal but there is a high clinical

suspicion, then an MRI of the SIJs and spine should be performed.

TREATMENT

Input from the multidisciplinary healthcare team is key to provide education and advice regarding the diagnosis. This should include support from specialist rheumatology nurses, physiotherapy and occupational therapy to provide specific support and education to patients. In axial disease in particular, physiotherapy plays a key role in maintaining spinal mobility and function. A recent systematic review of treatments for psoriatic disease has been performed by an international research group² who have now published treatment guidelines based on their findings (see box 3, above).

NSAIDs

Initial therapy for PsA should include NSAIDs to ease pain and stiffness. There are a few reports of psoriasis flare with NSAIDs but the majority of patients tolerate them well. Local injections of corticosteroids are recommended for peripheral arthritis (given intra-articularly) and dactylitis (usually by injection into the flexor tendon or adjacent joints).

DMARDs

Disease-modifying anti-rheumatic drugs (DMARDs) are routinely used to treat all aspects of psoriatic disease, except spinal disease where they have no efficacy. In peripheral arthritis, DMARDs have some moderate evidence of efficacy and methotrexate, sulfasalazine, leflunomide and ciclosporin are routinely used. They are also sometimes used for the treatment of enthesitis and dactylitis although there is no data to support this. Methotrexate has additional advantages as it has also been proven to be efficacious in the treatment of skin psoriasis.

Prescribing of DMARDs and biologics should be initiated by a specialist.

Biologics

Tumour necrosis factor (TNF) α blockers have been shown to be effective in patients resistant to standard DMARDs and to have large effect sizes. They have also shown clear evidence of reduction of structural damage progression in peripheral joint disease that has not been clearly demonstrated with traditional DMARDs.

In the UK, TNF α blockers are used for peripheral arthritis following guidance from NICE which recommends these drugs for patients who have failed to respond to at least two standard DMARDs (through intolerance or inefficacy) and who have active disease with at least three tender and three swollen joints.^{3,4} Evidence from large randomised controlled trials (RCTs) for all of these drugs has shown equivalent efficacy in peripheral arthritis and therefore all three TNF α blockers (infliximab, etanercept and adalimumab) are recommended for use.

‘...thorough clinical assessment for psoriasis in those with arthralgia’

TNF α blockers also have evidence of efficacy in other aspects of psoriatic disease. They are recommended for use by NICE for resistant skin psoriasis based on the results of large RCTs. Although they have not been specifically evaluated in axial PsA, all three of the TNF α blockers have demonstrated significant efficacy in AS. The consensus of the GRAPPA »

key points

SELECTED BY

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Psoriatic arthritis (PsA) is a common form of inflammatory arthritis but is underdiagnosed. Psoriasis affects over 1.5% of the UK population so on average a GP is likely to care for around 40 patients. Around 15% of these patients will be diagnosed with PsA, but up to 40% of them may have evidence of arthritis if reviewed thoroughly. The exact cause is unknown but many common genes have been identified in psoriasis and PsA.

PsA is a member of the family of spondyloarthritides which also includes ankylosing spondylitis (AS), reactive arthritis and enteropathic arthritis. PsA can be difficult to diagnose as patients present with a variety of different patterns of arthritis. Most patients with PsA have relatively mild skin psoriasis, but some have more significant disease. Only 10-20% develop arthritis before their skin disease. Many patients have mild skin psoriasis that they are unaware of, or have not had diagnosed.

Joint involvement is far more variable in PsA, compared with rheumatoid arthritis, and patients may present with: monoarthritis; oligoarthritis; involvement of the distal interphalangeal (DIP) joints; a rheumatoid arthritis-like picture with multiple joints involved including the small joints in the hand or axial disease producing symptoms similar to AS. Features such as dactylitis (uniform sausage-like swelling of the whole digit either finger or toe) and enthesitis (inflammation at the sites of muscle or tendon attachment to bone) may also help diagnose PsA.

Skin disease is present in the majority of patients although not all. Hidden areas for psoriasis include: behind the ears; at the top of the natal cleft and around the umbilicus. Larger joints, particularly the knees, can develop very big effusions causing obvious swelling. Areas to test for enthesitis should include the Achilles tendon, plantar fascia, costochondral joints and the elbow.

Patients with suspected PsA should be referred promptly to a rheumatologist for further assessment and treatment. Even patients with milder or more atypical disease may also benefit from referral. Diagnosis of PsA can be made on clinical grounds but blood tests and radiographs are performed routinely to aid diagnosis. Checking inflammatory markers (CRP, ESR) can be helpful although these are only raised in half of PsA patients. Rheumatoid factor and anti-CCP antibodies should be checked to exclude rheumatoid arthritis. X-rays of the hands and feet are helpful to look for any early signs of bony damage. In the case of suspected spinal involvement, imaging is required to make a diagnosis.

Initial therapy for PsA should include NSAIDs to ease pain and stiffness. Local injections of corticosteroids are recommended for peripheral arthritis (given IA) and dactylitis (usually by injection into the flexor tendon or adjacent joints). DMARDs are routinely used to treat all aspects of psoriatic disease, except spinal disease, and prescribing should be initiated by a specialist.

group is that similar treatment responses are evident in axial PsA. In addition to these indications, there is evidence from the large RCTs undertaken in peripheral arthritis and from subsequent studies that the TNF α blockers are also effective at treating nail psoriasis, enthesitis and dactylitis.

CONCLUSION

PsA is an underrecognised form of inflammatory arthritis with considerable potential for joint damage, impaired function and reduced quality of life. The key to recognition is a high index of suspicion in patients with known psoriasis and thorough clinical assessment for psoriasis in those with arthralgia. The availability of traditional treatments and newer therapies in PsA should ensure a positive and improved outcome for patients with this disease.

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Useful information

The Arthritis Research Campaign provides publications and support for patients and medical practitioners, available from the website or by post.

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The Psoriasis and Psoriatic Arthritis Alliance (PAPAA) is a patient support group providing online information and a regular magazine for members.

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