This document highlights the recommendations relevant to GPs from NICE NG65 – Spondyloarthritis in over 16s: diagnosis and management. It has been developed to raise awareness and support implementation of the NICE guideline in primary care. This resource is not RCGP guidance; it is an implementation tool and should be used alongside the published NICE guidance.

GPs are expected to take NICE recommendations fully into account when exercising their clinical judgement. However, in no circumstances does guidance override their responsibility to make decisions appropriate to the circumstances of each individual, in consultation with the individual and/or their guardian or carer. Clinical guidelines are based on the best available evidence and are there to help healthcare professionals in their work, but they do not replace their knowledge and skills.

Axial SpA at a Glance

- Axial Spondyloarthritis describes inflammatory disease affecting the spine or pelvis; Ankylosing Spondylitis (or the more modern term radiographic axial spondyloarthritis) describes disease which has progressed to cause damage seen on X-ray;
- Peripheral Spondyloarthritis describes the family of diseases which predominantly cause inflammation of the joints and entheses outside of the spinal column;
- There are some hallmark symptoms and signs which can help differentiate inflammatory pain due to spondyloarthritis from mechanical causes;
- Early diagnosis & management of SpA improves patient outcomes;
- Flares of symptoms are common and can be well managed in primary care
- The BMJ Visual Summary of the NICE guidance

10 questions a GP should ask themselves (and their team)

1. **What is Spondyloarthritis?**

   Disease labels in inflammatory disease have changed significantly over the last decade which often leads to confusion. Spondyloarthritis is the term for the family of diseases which affect both the joints and entheses; the enthesis is the site where tendons and ligaments join to bone. Spondyloarthritis can predominantly affect the back and pelvis, which is known as Axial Spondyloarthritis (Ax-SpA), or can mainly affect peripheral joints (peripheral SpA); psoriatic arthritis
and reactive arthritis are forms of peripheral SpA. People with axial disease can have peripheral symptoms, and vice versa.

Spondyloarthritis can often cause inflammation outside of the joints or ligaments, known as extra-articular manifestations. The commonest of these are anterior uveitis, inflammatory bowel disease and psoriasis.

What is Axial Spondyloarthritis (Ax-SpA)? Is this the same thing as Ankylosing Spondylitis?

Spondyloarthritis most commonly affects the spine and pelvis; inflammation at the insertion of the junction between spinal ligaments & vertebrae (the enthesis), or within the joints of the pelvis, causes pain and stiffness. Inflammatory disease which primarily affects the spine or pelvis, and has not caused any change that can be seen on X-ray, is known as non-radiographic axial spondyloarthritis

- The terms Ankylosing Spondylitis and radiographic axial spondyloarthritis are used interchangeably to describe spondyloarthritis which has caused damage or calcification of the ligaments (ankylosis) that can be seen on X-ray. As X-ray changes can take 5-10 years to develop, X-ray changes are often not useful in diagnosis or early disease.

To summarise: the term Axial Spondyloarthritis describes inflammatory disease affecting the spine or pelvis; Ankylosing Spondylitis (or the more modern term radiographic axial spondyloarthritis) describes disease which has progressed to cause damage seen on X-ray.

What is Peripheral Spondyloarthritis?

Peripheral Spondyloarthritis describes the family of diseases which predominantly cause inflammation of the joints and entheses outside of the spinal column. Conditions in this family include psoriatic arthritis, reactive arthritis following infection, and enteropathic spondyloarthritis (arthritis which occurs in association with inflammatory bowel disease such as Crohn’s or Ulcerative Colitis).

Peripheral spondyloarthritis can present with joint pain and swelling, persistent pain affecting tendon insertions (enthesitis), or swelling of a whole digit (dactylitis).

2. Who is at risk of Spondyloarthritis?

Patients of any sex, age or gender are at risk of developing spondyloarthritis. However, certain groups of patients are at higher risk. These include patients with a personal or family history of:

- Psoriasis, or psoriatic nail disease
- Inflammatory Bowel Disease
• Iritis

Patients with a family history of spondyloarthritis are also at increased risk, as are those who have recently suffered bowel or genital tract infections.

Axial spondyloarthritis usually starts early in life; it’s rare to develop new spinal inflammation after the age of 40. Peripheral spondyloarthritis can develop at any age.

3. What should make me suspect a Spondyloarthritis?

Spondyloarthritis can be difficult to identify as it can present with a diverse range of symptoms; we know that this can lead to delayed or missed diagnosis. There are some hallmark symptoms and signs which can help differentiate inflammatory pain due to spondyloarthritis from mechanical causes:

• Pain which is insidious in onset, without a clear injury or trigger;
• Pain which eases with exercise, or worsens with rest;
• Early morning stiffness of the joints or spine which last longer than 30 minutes;
• Nocturnal pain;
• Persistent pain affecting tendon or ligament insertions, such as plantar fasciitis, lateral epicondylitis, or Achilles tendonitis;
• Atraumatic joint swelling, or swelling of a whole digit.

Remember that certain groups of patients are at increased risk of suffering with a spondyloarthritis; the presence of joint or spinal symptoms in those with established co-morbidities in the SpA family such as psoriasis, inflammatory bowel disease or iritis, or those recently suffering with an infection (especially bowel or genitourinary infections) should raise your index of suspicion.

4. I am concerned that a patient may be suffering with a Spondyloarthritis. What investigations should I request?

The key features of a spondyloarthritis are clinical; a history of inflammatory pain as described above, atraumatic swelling of one or more joints or digits, or persistent musculoskeletal pain in a patient with extra-articular comorbidities.

Investigations in patients suffering with spondyloarthritis are often normal; inflammatory back or joint disease can often occur despite a normal CRP, and X-rays early in disease are frequently normal. You should not therefore exclude spondyloarthritis based on a normal or negative investigation result.
5. **Who should I refer?**

**Axial Spondyloarthritis**

If a person has low back pain that started before the age of 45 years and has lasted for longer than 3 months, refer the person to a rheumatologist for a spondyloarthritis assessment if 4 or more of the following additional criteria are also present:

- low back pain that started before the age of 35 years
- waking during the second half of the night because of symptoms
- buttock pain
- improvement with movement
- improvement within 48 hours of taking non-steroidal anti-inflammatory drugs (NSAIDs)
- a first-degree relative with spondyloarthritis current or past arthritis, current or past enthesitis, or current or past psoriasis.

If exactly 3 of the additional criteria are present, perform an HLA-B27 test. If the test is positive, refer the person to a rheumatologist for a spondyloarthritis assessment.

**Peripheral Spondyloarthritis**

Urgently refer people with suspected new-onset inflammatory arthritis to a rheumatologist for assessment; this should include patients with dactylitis

Refer people with enthesitis without apparent mechanical cause to a rheumatologist for a spondyloarthritis assessment if:

- it is persistent or
- it is in multiple sites or if any of the following are also present:
  - back pain without apparent mechanical cause
  - current or past uveitis
  - current or past psoriasis, gastrointestinal or genitourinary infection, inflammatory bowel disease (Crohn's disease or ulcerative colitis)
  - a first-degree relative with spondyloarthritis or psoriasis.

6. **How is Spondyloarthritis managed in primary care?**

**Shared with secondary care**

Management of spondyloarthritis should be shared with colleagues in secondary care. Secondary care should make recommendations about treatment and can offer support from Allied Health Professionals such as specialist nurses, physiotherapists and occupational therapists. General Practitioners have a key role in co-ordinating holistic care.
Management of Axial SpA

Non-steroidal anti-inflammatory drugs (NSAIDs) are the cornerstone of drug treatment in Axial SpA. NSAIDs are well-tolerated and effective in reducing pain and stiffness affecting both the spine and peripheral joints; there is some evidence they may reduce the possibility of spinal ankylosis.

Disease modifying anti-rheumatic drugs (DMARDs) are not effective in treating spinal pain or reducing damage in spinal disease.

Management of Peripheral SpA

As with Axial SpA, NSAIDs can be effective in reducing pain from peripheral arthritis and enthesitis. In contrast to axial disease, DMARDs are often very effective in reducing joint pain and swelling. They also reduce the risk of joint damage and deformity. DMARDs should only be prescribed on a shared-care basis with secondary care.

As with axial disease, NSAIDs can be very effective in helping manage inflammatory pain caused by a spondyloarthritis.

7. What other drugs might secondary care prescribe?

Several classes of biologic drugs are effective in treating both axial and peripheral spondyloarthritis; these are used if NSAIDs (for axial disease) or DMARDs (for peripheral disease) fail to control symptoms.

Currently licensed classes of biologic drugs in the UK include TNF-alpha inhibitors (adalimumab, certolizumab, etanercept, golimumab, & infliximab), IL17 inhibitors (secukinumab), and IL12/23 inhibitors (ustekinumab). Biologic drugs are prescribed by secondary care, though GPs should be aware that these drugs can increase rates of infection; local advice should be sought if there are concerns about infection in patients prescribed biologic drugs. GP surgeries may also be asked to provide influenza and pneumococcal vaccination prior to commencing biologic drugs, and annual influenza vaccination maintenance.

8. What about non-pharmacological management?

All patients with axial disease should be referred to a specialised rheumatology physiotherapy service; exercise helps in the maintenance of flexibility and good posture and also assists with pain management and well-being. Patients with peripheral disease may also benefit from involvement from physio or occupational therapists.

There is no evidence to support complementary therapy in spondyloarthritis; however, some patients report benefit. Patients with evidence of spinal ankylosis (bony fusion of joints within the
spine) should avoid spinal manipulation due to the potential risk of fracture.

Holistic care should include advice about appropriate weight loss, exercise and smoking cessation advice. Depression & anxiety in spondyloarthritis are common, and associated with increased levels of pain, fatigue and worsened outcomes; patients should be screened opportunistically.

Patient support groups can be invaluable in providing patients with information and advice about their diagnosis. The National Ankylosing Spondylitis Society (NASS) and the Psoriasis and Psoriatic Arthritis Alliance (PAPAA) can offer information and support to patients.

9. My patient with SpA is suffering with a flare. How can I help?

Flares are common in spondyloarthritis. Whilst flares can be distressing for patients, symptoms can be managed effectively in primary care. The commonest symptoms of flare are pain, stiffness and fatigue.

Flares of inflammatory pain can be managed effectively with increased doses of NSAIDs and analgesia. Patients should be encouraged to take an effective dose of NSAIDs and analgesics as soon as a flare begins. Gentle stretches, heat or TENS machines can help manage pain. Steroids are of no use in a flare of axial disease; short courses of corticosteroids be helpful in treating a peripheral arthritis.

Increased stiffness is a common component of a flare. Patients should be encouraged that gentle stretching and exercise will not cause soft tissue damage and can help limit symptoms. Inflammation, pain & poor sleep can all contribute to increased fatigue; patients should be reassured this will settle. Rest, pacing techniques and NSAIDs can all help manage fatigue. Pre-empting flares with a personalised management plan can increase patients’ confidence in managing flares.

10. I’m keen to improve how my practice manages SpA. How can I implement change?

How high is the level of awareness about spondyloarthritis within your practice, both colleagues and patients? Could the recent NICE guidelines be discussed at a practice education meeting? Could your practice newsletter include information about the symptoms or signs of spondyloarthritis?

Does your practice have a lead clinician for musculoskeletal disease? A designated lead can help to disseminate information, develop pathways for care and act as a point of contact with local rheumatologists & physiotherapists.

Identifying patients with spondyloarthritis is difficult. Could your practice develop or use a template for assessment of patients with joint or back pain, which includes a reminder of the referral criteria?

August 2017, Dr Daniel Murphy, Clinical Champion for Inflammatory Arthritis