

MBChB Year 2 Clinical Contact in GP – Joint Pain

16th April 2026

Overview of the joint pain session in GP Clinical Contact

The Intended Learning Outcomes for this session are:

Undertake a clinical consultation & gather information relevant to the patient presentation
Describe & perform a clinical examination relevant to the patient presentation including vital signs
Practise formulating a differential diagnosis
Practise presenting the patient and be able to discuss the differential diagnosis and management options

The aims for this session are:

- To discuss the assessment of joint pain and associated symptoms in Primary care.
- Practise consulting and examination (preferably joint pain).
- Link university learning to Primary Care and share your clinical experience.

For the purposes of this resource, we have differentiated between joint pain and back pain, please see separate document on back pain.

Common to all sessions:

- Refer to the [Year 2 GP handbook](#), which covers the information common to all sessions.
- Please see [Session plans for Clinical contact in GP year 2 \(2025-26\)](#) also attached to this email to help you structure time with your group.

Allow time for:

- Identifying one or two learning points/things to look-up for next time.
- If possible, allow some time to reflect on the sessions so far. How are the students finding the sessions? Anything they would like to do differently?

(Expert) patients

Suitable patients for the block are someone who has:

- Musculoskeletal problem(s) that affect their mobility or activities of daily living, who are willing to speak to and be examined by medical students. This might be osteoarthritis of one or more joints, and/or rheumatoid arthritis
- Patients with a previous episode of musculoskeletal problem(s)
- Any patient suitable for a joint examination

Context for the session

Students will have covered the following in the two-week joint pain block:

In **Case-Based Learning** they will have discussed a 24-year-old, male, self-employed brick layer presenting to his GP with acute lower back pain. Four years later he presents to the Emergency Department, with reduced perianal sensation, urinary hesitancy, and neurological signs (cauda equina diagnosed on MRI).

In **lectures, workshops and practical** they will have learnt about:

- The synovial joint
- Rational imaging of the painful knee
- Back pain
- Rational imaging of lower back pain
- Fragile bones and crush fractures in older people
- The painful joint
- Joint pain with systemic illness
- Pain pathways and analgesia
- Preserving bone mass in ageing people

In their **Effective Consulting labs** students will:

- Describe the features of serious causes of back pain (red flags)
- Discuss shared decision making and recognise the challenges of managing patient expectations
- Explore two cases, both patients presenting with knee pain – one in their 70s, one in their 20s
- Practise history taking including using the [STarT Back tool](#)

Brainstorm for joint pain symptoms in GP clinical contact – see mind map on next page

- What do students know about joint pain and its causes?
- How do patients with joint pain pathology present?
- Are there any links to their previous cases?
- How do you systematically consult with and examine a patient with joint pain?
- What are serious features that you look out for in a patient presenting with joint pains?



Student information

Symptoms of musculoskeletal conditions are common and may include:

- pain
- stiffness
- joint swelling

Causes of joint pains:

Inflammatory causes:

Rheumatoid arthritis (RA): A chronic autoimmune inflammatory arthritis. Characterised by symmetrical joint pain, swelling and stiffness, especially affecting the small joints of the hands and feet (MCPs, PIPs). Morning stiffness lasts >1 hour. Patients may have systemic features such as fatigue, weight loss and low-grade fever. Untreated disease can lead to joint deformity.

Seronegative arthritides (e.g. reactive, psoriatic, ankylosing spondylitis): Often associated with inflammatory back pain, asymmetrical large-joint arthritis and enthesitis. Symptoms are worse in the morning and improve with exercise. Extra-articular features may include uveitis, psoriasis or preceding infection.

- **Ankylosing spondylitis:**
A chronic inflammatory condition primarily affecting the spine and sacroiliac joints. Presents with gradual onset lower back and buttock pain, morning stiffness and reduced spinal mobility in young adults. Pain improves with exercise rather than rest.
- **Psoriatic arthritis:**
Occurs in patients with psoriasis. Joint involvement is variable and may be asymmetric. Can involve DIP joints, cause dactylitis ("sausage digits") and nail changes such as pitting or onycholysis.
- **Reactive arthritis:**
Develops following a gastrointestinal or genitourinary infection. Typically presents with asymmetric oligoarthritis of the lower limbs, often associated with conjunctivitis and urethritis. Patients may have a history of recent diarrhoea or STI.

Gout: A crystal arthropathy caused by deposition of monosodium urate crystals. Classically presents as sudden onset, severe pain, redness and swelling of a single joint, most commonly the first metatarsophalangeal joint (podagra). Attacks may be precipitated by alcohol, dehydration or illness.

Pseudogout: Caused by calcium pyrophosphate crystal deposition. Presents similarly to gout with acute joint pain and swelling, but commonly affects the knee or wrist. More common in older adults. Chondrocalcinosis may be seen on X-ray.

Polymyalgia rheumatica (PMR): An inflammatory condition in older adults (>50 years). Causes bilateral pain and stiffness affecting the shoulders and hips, particularly in the morning. Systemic symptoms such as fatigue, weight loss and low-grade fever are common. Strongly associated with giant cell arteritis (red flag).

Septic arthritis (medical emergency): Infection within a joint space, most commonly caused by *Staphylococcus aureus*. Presents with an acutely painful, swollen, hot joint with markedly reduced movement. Patients are often systemically unwell with fever. It is a medical emergency as delayed treatment can result in permanent joint damage.

Inflammatory bowel disease-associated arthritis: An inflammatory arthritis occurring in patients with Crohn's disease or ulcerative colitis. It commonly presents with painful, swollen joints and morning stiffness lasting >30 minutes. The arthritis may be peripheral, affecting large joints such as the knees and ankles (often correlating with bowel disease activity), or axial, affecting the spine and sacroiliac joints (which may occur independently of gut symptoms). Patients may also have other extra-intestinal manifestations such as uveitis, erythema nodosum or pyoderma gangrenosum.

Non-inflammatory causes

Mechanical back pain: A common cause of back and sometimes referred joint pain, resulting from degenerative or mechanical processes affecting the spine (e.g. muscle strain, disc degeneration, facet joint disease). Pain is typically localised to the lower back and may radiate to the buttocks or thighs. It is usually worse with movement, lifting or prolonged activity and relieved by rest. Morning stiffness is brief (<30 minutes). Neurological symptoms and systemic features are absent, and examination may show reduced range of movement and paraspinal muscle tenderness.

Osteoarthritis (OA): A degenerative joint disease causing chronic joint pain, stiffness and reduced function. Pain is typically worse with activity and relieved by rest. Commonly affects weight-bearing joints (knees, hips), hands (DIP, PIP, first CMC) and spine. Morning stiffness is brief (<30 minutes). Crepitus, reduced range of movement and bony enlargement may be present.

Fibromyalgia: A chronic pain syndrome characterised by widespread musculoskeletal pain affecting multiple joints and soft tissues. The pain is typically diffuse, aching and persistent, and is often associated with fatigue, poor sleep, cognitive difficulties, headaches and low mood. There is no true joint inflammation, and examination reveals generalised tenderness without swelling, warmth or reduced range of movement. Symptoms may be exacerbated by stress, poor sleep or illness.


Trauma (fractures, ligament or meniscal injury): Joint pain following injury, often with a clear history of trauma. The pain is usually acute in onset and may be associated with swelling, bruising, deformity or inability to weight-bear. Causes include fractures, ligament sprains, meniscal tears and hemarthroses. Movement typically worsens the pain, and examination may reveal joint instability, reduced range of movement or focal tenderness.

Bursitis: Inflammation of a bursa causing localised pain and swelling near a joint. Pain is usually worse with movement or direct pressure and may limit function. Commonly affected sites include the shoulder (subacromial), elbow (olecranon) and knee (prepatellar). The joint itself is usually not significantly stiff, and passive movement is often preserved. Bursitis may be caused by overuse, trauma, inflammatory conditions or infection

Referred pain (e.g. hip pathology presenting as knee pain): Pain perceived in a joint but originating from pathology elsewhere. The affected joint is usually normal on examination, with no swelling, warmth or restriction of movement. Common examples include hip disease presenting as knee pain,

or cervical spine pathology causing shoulder pain. Pain may be poorly localised and not reproduced by examining the joint itself, and assessment of adjacent joints and the spine is essential.

Summary of the joint pain history

	<p>Introduction</p> <p>Joint pain has a broad differential diagnosis, ranging from mild, self-limiting conditions (e.g. ankle sprain) to serious and potentially life-changing causes (e.g. septic arthritis). When taking a history from a patient with joint pain, it is essential to identify features that may indicate a serious underlying pathology requiring urgent investigation and treatment.</p>
<p>You can use SOCRATES to assess joint pain</p>	
<p>Possible screening questions for musculoskeletal problems:</p> <ul style="list-style-type: none"> • Do you have any pain, swelling or stiffness in your muscles, joints or back? • Can you dress yourself completely without any difficulty? • Can you walk up and down stairs without any difficulty? <p>The main symptoms of musculoskeletal conditions are:</p> <ul style="list-style-type: none"> • pain • stiffness, and • joint swelling <p>As with all pain, it is important to record the site, character, radiation, and aggravating and relieving factors.</p> <p>SITE: Try and work out which structure is causing pain e.g. the joint, muscles or ligaments?</p> <p>ONSET:</p> <ul style="list-style-type: none"> • Is the condition acute or chronic? When did the symptoms start and how have they evolved? Was the onset sudden or gradual? Was the onset associated with a particular event – for example, trauma or infection? What treatments, if any, have been tried and did they make any difference? • Injury usually causes immediate pain +/- swelling (if swelling is within 30 mins think haemarthrosis), arthritis is often more insidious; gout and sepsis can come on over 12-24 hours. <p>CHARACTER: “How would you describe the pain? Does it come and go or is it constant?” Bone pain is often deep/boring pain and worse at night</p> <p>RADIATION: “Does the pain spread anywhere else?” Pressure on a nerve radiates to the distribution of the nerve</p> <p>ASSOCIATED SYMPTOMS: Swelling and redness indicate inflammation</p> <p>TIMING: Frequency, duration, periodicity</p>	

EXACERBATING/RELIEVING FACTORS: “Does anything make the pain better? Does anything make the pain worse or bring the pain on?” “What were you doing when the pain started?”

Osteoarthritis is often exacerbated by movement, inflammatory arthritis is usually worse with rest

SEVERITY: Ask about pain scale of 0-10 “On a scale of **0 to 10**, where 0 is no pain and 10 is the worst pain you can imagine, **how would you rate your pain right now?**” Gout and septic arthritis are often very painful

For chronic or acute on chronic pain you can ask about average pain: “Over the last week, what number best describes your average pain?” **Worst pain:** “What number does it reach at its worst?”

Best pain: “What’s the lowest it gets?”

Try to broadly categorise the symptoms and signs (from the history and examination) by answering the following key questions:

- **Are the symptoms from the joint itself or the soft tissues (tendons/muscles)?** It is important to identify when pain may appear to arise from the joint but is in fact referred pain
- **Is the condition inflammatory or non-inflammatory?** Inflammatory joint conditions, such as rheumatoid arthritis, are associated with prolonged early morning stiffness that eases with activity. Non-inflammatory conditions, such as osteoarthritis are associated with pain more than stiffness, and the symptoms are usually exacerbated by activity.
- **What is the pattern of affected areas/joints?** How many joints are affected? Are they small or large joints? And is the pattern symmetrical or asymmetrical?
Common patterns of joint involvement include:
 - Monoarticular – only one joint affected (e.g. septic arthritis)
 - Pauciarticular (or oligoarticular) – only a few joints affected (e.g. psoriatic arthritis)
 - Polyarticular – many joints affected (e.g. rheumatoid arthritis)
 - Axial – the spine is predominantly affected (e.g. ankylosing spondylitis)
- **What is the impact of the condition on the patient’s life?** Understanding the impact of the disease on the patient is crucial to negotiating a suitable management plan. It may be easiest to get the patient to describe a typical day, from getting out of bed to washing, dressing, toileting etc. Potentially sensitive areas, such as hygiene or sexual activity, mood, depression and anxiety, should be approached with simple, direct, open questions.
- **Are other systems involved?** Inflammatory arthritis often involves other systems including the skin, eyes, lungs and kidneys. In addition, patients with inflammatory disease often suffer from general symptoms such as malaise, weight loss, mild fevers and night sweats.

What is normal and what has changed?

- What is the patient’s baseline?

Associated symptoms

Other symptoms

- RA - Raynaud’s syndrome, dry eyes and mouth, systemic upset

- Seronegative arthritides – tendon insertion pain (enthesitis), psoriasis, inflammatory bowel disease, uveitis
- Gout – risk factors: obesity, alcohol, diuretic treatment
- PMR – severe stiffness, may have overlap with temporal arteritis
- OA – Heberden’s or Bouchard’s nodes, crepitus
- Fibromyalgia – poor quality of sleep, tender soft tissue ‘trigger points’ on examination, multiple symptoms

SYSTEMS REVIEW – A brief overview (not exhaustive). What you ask depends on the presenting problem and situation and what you have already covered

Systemic: Fever, weight loss, pain.

Cardiovascular & Respiratory: Chest pain, breathlessness (including PND & orthopnoea) palpitations, ankle swelling, cough, wheeze, exercise tolerance normally and any recent change.

Gastrointestinal: Appetite, weight, abdominal pain, swallowing, nausea, changes in bowel habit, jaundice, stool appearance/blood.

Genitourinary: Urinary symptoms (hesitancy, terminal dribbling, dysuria, haematuria, nocturia, incontinence, discharge), menstrual history, pregnancy.

Neurological: Memory, vision, hearing, headaches, fits, faints, funny turns, mood changes, unsteadiness, weakness.

Musculoskeletal: Injuries, joint pain/swelling, muscle pain.

Dermatological: Rash, skin lesions, ulcers

Area e.g. past medical and surgical history

- Previous joint problems or surgeries
- **Associated conditions:**
 - Psoriasis, autoimmune conditions, inflammatory bowel disease

Medication history – please see specific medication history

The patient may have tried medications to help with the pain already.

Family history

Social, lifestyle and wellbeing – please see specific social and lifestyle history & the “Lifeline”

- Occupation/ hobbies
- Housing/ living situation
- Connectedness: Social support/ family/ relationships and network
- Health: How do you look after your general health? (listen, then explore specific areas)
- **Exercise:**
 - Do you get a chance to be physically active during the week?
 - What kinds of movement or exercise do you enjoy, if any?
 - Are there any barriers that make it hard to stay active?
- **Nutrition**
 - Can you tell me about your usual eating habits or meals? Do you follow a specific diet?

- Do you ever find it hard to access or afford healthy food?
- **Sleep**
 - How have you been sleeping lately?
 - Do you feel rested when you wake up?
 - Are there any issues like trouble falling asleep, waking during the night, or feeling tired during the day?
 - Is there anything affecting your sleep, like stress, noise, or caring responsibilities?
- **Stressors**
 - Have you been feeling under pressure or stressed lately?
 - Are there particular things in your life that are causing you worry or anxiety?
 - How do you usually cope when things feel overwhelming?
- **Alcohol**
 - Do you drink alcohol? If so, how often and how much?
 - Have you ever felt your drinking was affecting your health or daily life?
 - Are there times when you've felt you should cut down?
- **Smoking**
 - Do you currently smoke or use any tobacco products?
 - Have you ever tried to stop smoking? What helped or made it difficult?
 - Would you be open to talking about support for cutting down or quitting?
- **Recreational drugs**
 - Do you use any recreational drugs, including cannabis?
 - Have you ever felt your use of substances affected your health or relationships?
 - Is there anything you'd like to share about how you manage or feel about your use?

PATIENT PERSPECTIVE (IDEAS, CONCERNS, EXPECTATIONS, IMPACT & EMOTIONS)

Ideas: What do they think is going on? Possible causes? What have they tried already? Sources of info e.g. What does your partner/ family think?

Concerns: What are they worried is going on or will happen?

Expectations: What are they hoping for?

Impact: How is the problem affecting them?

Emotions: What are the predominant emotions around the problem? Psychological impact.

The answers to these questions should enable you to produce a succinct summary of the patient's condition and would lead you to a narrower differential diagnosis. An example of a patient summary produced using this method might be:

"This patient has a chronic symmetrical inflammatory polyarthritis, mainly affecting the small joints of the hands and feet, which is causing pain, difficulty with dressing and hygiene, and is limiting their mobility."