

Presenting complaint	Exploding symptom	Relevant system reviews	Differential diagnoses		Clues to differential
			Grouping	Differentials	
Lower back pain	<p><b>Pain</b></p> <p><b>Site</b></p> <p><b>Onset</b></p> <p><b>Character</b></p> <p><b>Radiation</b></p> <p><b>Associated symptoms</b></p> <p><b>Timing</b></p> <p><b>Exacerbating/relieving factors</b></p> <p><b>Severity</b></p> <p><b>Associations</b></p> <p>Sciatica, stiffness/deformity, sciatica, incontinence, neurological symptoms</p> <p><b>Red flags</b></p> <ul style="list-style-type: none"> <li>• <i>Cauda equina</i>: urinary retention/incontinence, faecal incontinence, bilateral leg pain, severe/progressive neurological deficit</li> <li>• <i>Infection or cancer</i>: age &lt;16 or &gt;55 years at onset, cancer, weight loss, fever, night sweats, injecting drugs, immunosuppression</li> <li>• <i>Fracture</i>: trauma</li> <li>• <i>Spondyloarthropathy</i>: EMS, night pain, worse with rest</li> </ul>	<p><b>General</b></p> <p>Fever, night sweats, weight loss</p> <p><b>Neuro</b></p> <ul style="list-style-type: none"> <li>• <i>Motor</i>: weakness/wasting, incontinence</li> <li>• <i>Sensory</i>: pain, numbness, tingling</li> </ul> <p><b>GI/urinary</b></p> <ul style="list-style-type: none"> <li>• Incontinence</li> </ul>	Orthopaedic	Muscular	<ul style="list-style-type: none"> <li>• Acute onset lower back pain</li> <li>• In paraspinal muscles, not central</li> </ul>
			Lumbar spondylosis and facet joint syndrome (lumbar arthritis)	<ul style="list-style-type: none"> <li>• Chronic episodic mechanical lower back pain</li> <li>• Backache related to standing/walking a lot/sitting in one place</li> <li>• Progressive stiffening</li> </ul>	
			Lumbar disc prolapse	<ul style="list-style-type: none"> <li>• Acute onset while lifting/bending</li> <li>• Severe pain</li> <li>• True sciatica</li> <li>• Neurological symptoms e.g. weakness, numbness (usually L5/S1 distribution)</li> </ul>	
			Discitis	<ul style="list-style-type: none"> <li>• Fever and systemic upset</li> <li>• Risk factors e.g. injecting drug user</li> </ul>	
			Rheumatological	Ankylosing spondylitis	<ul style="list-style-type: none"> <li>• Morning stiffness</li> <li>• Pain worse on rest</li> </ul>
			<b>Other differentials</b>	<p>Myeloma bone lesions</p> <p>Bony metastasis</p> <p>Paget's disease</p> <p>Spondylolithesis</p> <p>Osteoporotic vertebral collapse</p> <p><u>Non-orthopaedic/rheumatological</u></p> <p>Pyelonephritis</p> <p>PID</p> <p>Pancreatitis</p> <p>AAA</p>	

Joint pain/stiffness/swelling	<p><b>Pain</b></p> <p><b>Site(s)</b></p> <p><b>Onset</b></p> <p><b>Character</b></p> <p><b>Radiation</b></p> <p><b>Associated symptoms</b></p> <p><b>Timing</b></p> <p><b>Exacerbating/relieving factors</b></p> <p><b>Severity</b></p> <p><b>Stiffness/swelling</b></p> <ul style="list-style-type: none"> <li>• Worse in morning?, how long for (30mins=inflammatory, 5mins=osteoarthritis)</li> <li>• Better or worse after exercise</li> <li>• Sleep disturbance</li> <li>• Loss of function</li> </ul>	<p><b>General</b></p> <p>Fever, rashes, weight loss</p> <p><b>Rheumatological</b></p> <ul style="list-style-type: none"> <li>• <i>Joints</i>: pain, stiffness, swelling</li> <li>• <i>Work down body</i>: skin (rashes, ulcers, raynauds), hair loss, eyes (redness, dryness), mouth (dryness), chest (breathlessness, SOB), GI (IBD symptoms), GU (discharge)</li> </ul>	Rheumatological	Rheumatoid arthritis	<ul style="list-style-type: none"> <li>• Slowly progressive symmetrical polyarthritis</li> <li>• Small joints (commonly of hand)</li> <li>• Deforming</li> <li>• Early morning stiffness</li> </ul>
			Gout	<ul style="list-style-type: none"> <li>• First MTP joint most commonly affected</li> <li>• Isolated swollen, hot, painful joint</li> <li>• Hyperuricaemia risk factors e.g. diuretics, alcohol excess (esp beer), renal disease</li> </ul>	
			Psoriatic arthritis	<ul style="list-style-type: none"> <li>• Associated skin plaques and nail changes</li> <li>• Early morning stiffness</li> <li>• Many patterns of joint involvement</li> </ul>	
			SLE	<ul style="list-style-type: none"> <li>• Systemically illness with intermittent fevers</li> <li>• Photosensitive rash</li> <li>• Generalised myalgia and arthralgia</li> <li>• Other systemic Sx (e.g. psych disturbance, pleurisy, ulcers)</li> </ul>	
			Enteropathic arthritis	<ul style="list-style-type: none"> <li>• Symmetrical arthritis of lower limb joints and SI joints</li> <li>• Early morning stiffness</li> <li>• Symptoms/diagnosis of Crohn's or UC</li> </ul>	
			Orthopaedic	Osteoarthritis	<ul style="list-style-type: none"> <li>• Elderly</li> <li>• Worse on movement (rest helps) and at end of day</li> </ul>
				Septic arthritis	<ul style="list-style-type: none"> <li>• Isolated hot, red, swollen joint</li> <li>• Agonizingly painful</li> <li>• Systemically unwell with fever</li> </ul>
	<b>Other differentials</b>	<p><b>Single joint</b></p> <p>Traumatic (dislocation/fracture/ligament injury)</p> <p>Haemophilia haemarthrosis</p> <p>Pseudogout</p> <p>Joint specific problems (e.g. knee – chondromalacia patellae, Osgood-Schlatter's disease, patellar tendinitis; hip – avascular necrosis)</p> <p>Adhesive capsulitis</p> <p>Transient synovitis</p> <p>Bursitis</p> <p>Reiter's disease</p> <p><b>Multiple joints</b></p> <p>Viral polyarthritis (flu, HIV, hepatitis, rubella)</p> <p>Other connective tissue disorders e.g. systemic sclerosis, polymyositis, polyarteritis nodosa</p> <p>Other spondyloarthropathies e.g. ankylosing spondylitis, Reiter's disease, Behcet's syndrome, juvenile chronic arthritis</p> <p>Rheumatic fever</p>			