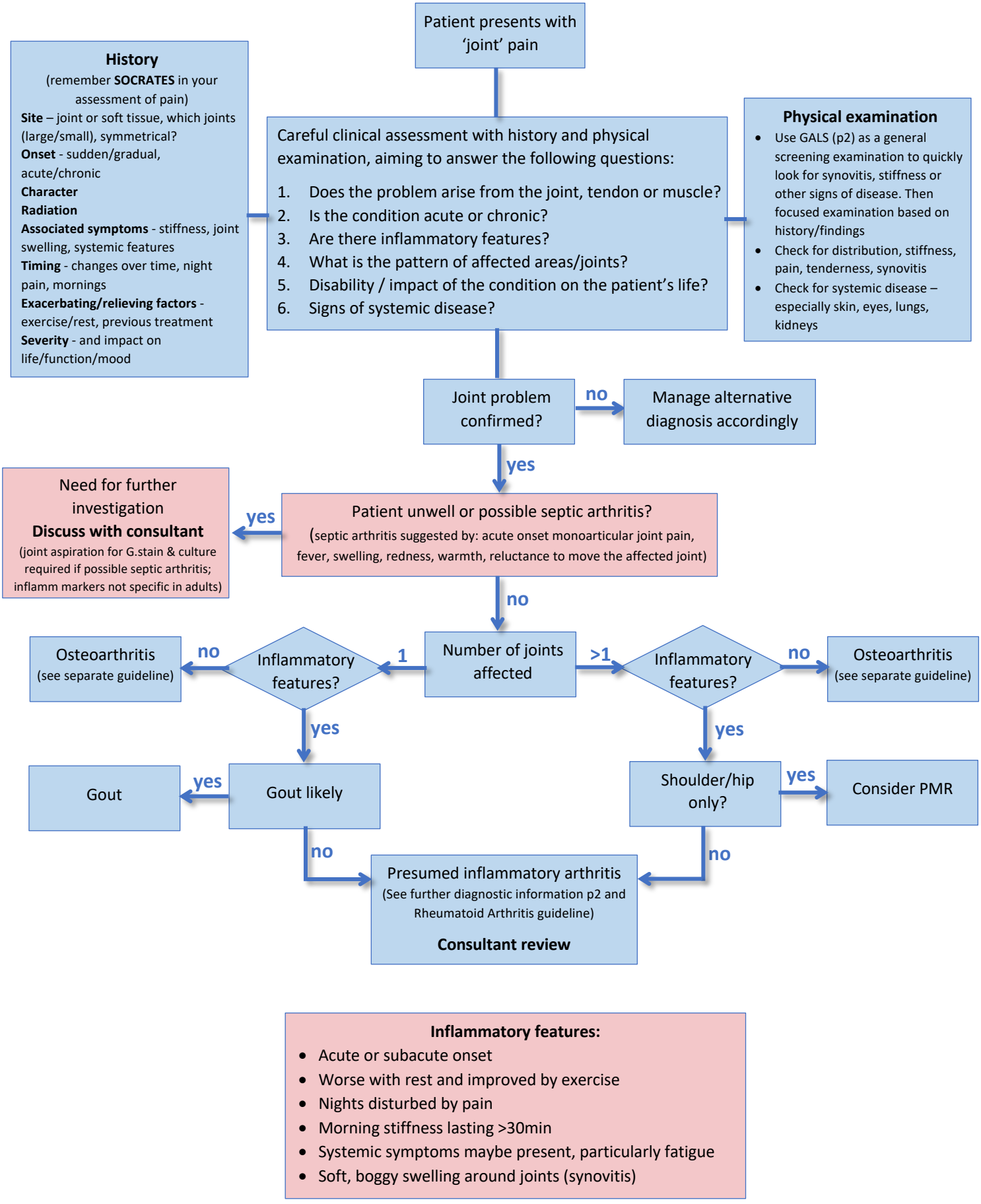
Joint Pain in adults



Inflammatory features:

- Acute or subacute onset
- Worse with rest and improved by exercise
- Nights disturbed by pain
- Morning stiffness lasting >30min
- Systemic symptoms maybe present, particularly fatigue
- Soft, boggy swelling around joints (synovitis)

Table 1: Musculoskeletal screening examination

GALS screening examination (to quickly check all joints, looking for synovitis, stiffness, other signs of msk disease - further examination of particular joint if problem identified or according to history)	
Gait	• Watch the patient walk, turn and walk back. • Observe from the front, back and side, looking for asymmetry of posture and muscle bulk.
Arms	• Ask the patient to raise arms and place hands behind the head – this is a quick test for shoulder function and elbow flexion. • Ask the patient to hold out arms – inspect the hands on both sides for swelling and loss of muscle bulk. • Ask the patient to make a fist, then squeeze your fingers to assess grip strength. • Bring each finger to meet the thumb, assessing fine precision pinch. • Do the squeeze test across the MCP joint (this is specific but not sensitive for inflammatory joint pain).
Legs	• Lie the patient on the couch. • Fully flex the knees – feel for restriction of movement and crepitus. • With knees and hips at 90 degrees, check internal and external rotation (reduced internal rotation is often the first sign of hip problems). • Check for a patellar tap (sensitive for effusion). • Inspect the feet for asymmetry, deformity and callouses (which may indicate asymmetric pressure). • Do the squeeze test across the MTP joints.
Spine	• Inspect the spine with the patient standing, looking for scoliosis and abnormalities of lordosis or kyphosis. • Ask the patient to touch their toes. Check the spine is flexing by placing three fingers on the spine – they should move apart on flexion (patients with a stiff spine can sometimes achieve this action by flexing their hips). • Assess neck movements by asking the patient to touch chin to chest, and then each ear to the shoulder on the same side (loss of lateral flexion is an early sign of neck problems).

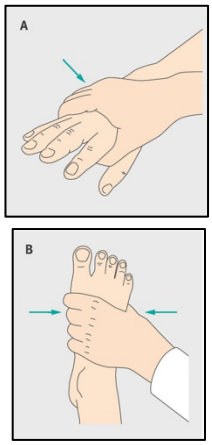


Fig 1 **Squeeze test** of (A) MCP and (B) MTP joints

Table 2: Typical features of some common musculoskeletal conditions:

	Common inflammatory conditions				Common non-inflammatory conditions	
	Rheumatoid arthritis (RA)	**Seronegative arthritides (e.g. psoriatic and reactive arthritis)**	**Gout**	**Polymyalgia rheumatica (PMR)**	**Osteoarthritis (OA)**	**Fibromyalgia**
Onset	Usually acute or subacute	Acute/subacute Or chronic	Usually acute	Usually acute or subacute	Chronic	Chronic
Typical age and gender	F>M (3:1) Any age	Any age	F<M (1:3) Very rare in pre-menopausal women	F>M (2:1) Mostly >65y	Hand OA more common in females Usually age ≥45	F>M (7:1) Age 30-50
Pattern of joint involvement	Usually symmetrical hands and feet (not DIPJ)	Monoarthritis or asymmetrical polyarthritis or spine	Monoarthritis most commonly MTP, ankle, kness	Usually shoulder and pelvic girdle	Normally polyarticular hands, knees, hip and feet most common	Widespread pain
Other clues	Raynaud's syndrome Dry eyes and mouth Systemic upset	Tendon insertion pain Psoriasis IBD	Risk factors: obesity, alcohol, diuretics	Severe stiffness May have overlap with temporal arteritis	Heberden's or Bouchard's nodes (bony growths at DIPJs and PIPJs) Crepitus	Poor quality sleep Tender soft tissue 'trigger points' on examination

References:

www.versusarthritis.org; 'Musculoskeletal examination' and 'Inflammatory arthritis: early diagnosis' articles - msk and chronic pain handbook, Red Whale.co.uk 1/24; BMJ 2016;352:i387; Management of septic arthritis: a systematic review: https://doi.org/10.1136/ard.2006.0589097