

Terminology:

1) Arthralgia: joint pain

2) Myalgia: muscle pain

3) Monoarthritis: affecting only one joint

4) Oligoarthritis: affecting multiple joints (2-4)

5) Polyarthritis: affecting more than 4 joints

6) Gout is caused by monosodium urate monohydrate crystals

7) Pseudogout is caused by calcium pyrophosphate (CPP) crystals

8) Flitting (jumping) pain: a pain that (jumps) from joint to joint over days

9) Disproportionate pain to examination (The patient is in pain, but the physical examination is free of findings)

10) Hemarthrosis: articular bleeding, that is into the joint cavity

11) Weakness: a lack of muscle strength and a reduced ability to move your body (you can't intiate an action like getting up from bed in the morning)

12) Fatigue: a feeling of extreme tiredness or extreme lack of energy



Common presenting symptoms:

Pain:

-Do SOCRATES

1) Site: determine 2 things:

Which component is painful (joints, bones or muscles) + If it's local (one joint, bone or muscle) or multiple components

-This will help you in the process of differential diagnosis (for example, if only 1 joint is affected you might think of pseudogout, if multiple you might think of rheumatoid arthritis)

- Check the tables 13.1+13.2 carefully please

2) Onset:

Onset	Is seen in
Immediate onset	Traumatic patients
Quickly, often overnight	Crystal arthritis
Gradual onset that develops over 24 hours	Inflammatory causes
Gradual onset that develops over 1-2 days	Joint sepsis

3) Character:

Pain	Character
Bone pain	Penetrating, deep or boring (exacerbated at night)
Muscle pain	Stiffness and aching (exacerbated with movement)
Nerve pain	Shooting caused by peripheral nerve or nerve root
	impingement (important example is carpal tunnel
	syndrome)
Fracture pain	Sharp and stabbing (exacerbated by movement and
	relieved by rest)
Progressive pain	Degenerative disease (ex. Osteoarthritis)
Constant pain with diurnal variation	Think of fibromyalgia (chronic pain syndrome)

4) Radiation:

-General principle: Pain from nerve compression radiates to the distribution of that nerve or nerve root.

Pain	Indication of
Lower leg pain	Intervertebral disc prolapse
Hand pain	Carpal tunnel syndrome

Pain	Radiation	
neck pain	The shoulder or scalp	
Hip pain	Usually felt in the groin, but may radiate to the thigh or knee	

-Check table 13.3 please

5) Associated symptoms:

- Swelling, redness and pain suggests inflammatory arthritis

6) Timing (frequency and duration):

Timing	Indication of
Several years of pain with normal examination	Fibromyalgia
(constant pain)	
Several weeks of pain, early-morning stiffness and loss	Inflammatory arthritis
of function (each episode lasts around 30 minutes)	
"Flitting" pain starting in one joint and moving to	Rheumatic fever and gonococcal
others over a few days	arthritis
Intermittent with resolution between episodes	Palindromic rheumatism

7) Exacerbating/relieving factors:

Cause of pain	Exacerbating/relieving factors
Joints damaged by derangement or	Exacerbated by movement / relieved by rest
degeneration	
Inflammatory arthritis	Exacerbated by rest/ relieved by movement
Septic joint	Present at rest and movement

8) Severity:

Description of pain	Seen in
Severe pain	Trauma, crystals and septic arthritis
disproportionate pain to examination	Compartment syndrome (Acute)
	Complex regional pain syndrome (Chronic)

Patterns of joint involvement:

Involvement	Suggested cause
Hand and feet small joints	Inflammatory arthritis
Medium or large joint	Degenerative and seronegative arthritis
DIP and CMC joint of the thumb	Nodal arthritis

-Check Figure 13.3 for more clarification



Ask if is it:

- Restricted range of movement?
- Difficulty moving, but with a normal range?
- Painful movement?
- Localized to a particular joint or more generalized?

Stiffness type	Character
Inflammatory	Early morning stiffness for 30 minutes which wears
	off with activity
Mechanical	Stiffness after rest
Polymyalgia rheumatica	Mainly shoulder and pelvic stiffness



Timing	Indication of
Rapid over 30min	Haemarthrosis
Over few hours	Septic joint
Over hours to days	Traumatic effusion (meniscus and cartilaginous)

☆ Erythema and warmth

- Almost in all types of arthritis
- Heberden's nodes are specific for Osteoarthritis



Cause of weakness	Presentation
Joint disorder	Pain or structure disruption
Nerve disorder	entrapment (for ex, CTS)
Muscle disorder	widespread with pain and fatigue

\(\frac{1}{12} \) Locking and triggering

- True locking (incomplete range of motion): mechanical causes
- Pseudo-locking: can't do a full range of motion due to pain
- Triggering: block to extension of the finger (usually affects ring or middle fingers if acquired, but affects thumb if it was congenital)



-Check table 13.5 carefully please



- Ask about previous attacks and DM



-Check table 13.7 carefully please



- Inflammatory arthritis is more common if a first-degree relative is affected.
- Osteoarthritis, osteoporosis and gout are heritable in a Variable polygenic fashion
- Spondyloarthritis is more common in patients with HLA B27.
- A single-gene defect is found in Marfan's syndrome, Ehlers-Danlos syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease.



Ask the following:

- How does the condition affect the patient's activities of daily living, such as washing, dressing and toileting?
- Can they use the stairs and do they need walking aids? Ask about functional independence, especially cooking, shopping and housework
- Ask about current and previous occupations. Is the patient working full- or part-time, on sick leave or receiving benefits?
- Has the patient had to take time off work because of the condition and is their job at risk?
- Smoking?
- Alcohol intake?
- Certain ethnic groups (SCD, osteomalacia or TB)?

{وَأَن لَّيْسَ لِلإِنسَانِ إِلاَّ مَا سَعَى}

Done by: Jihad Abuzayed