

# MSS summary

## Crystal arthritis (Gout , pseudogout) :

- causes acute, severe pain that develops quickly, often overnight and on early morning
- Severe pain

## Gout :

- red, hot, tender first metatarsophalangeal joint
- Tophi, signs of renal failure or alcoholic liver disease
- Gouty tophi are firm, irregular subcutaneous crystal collections (monosodium urate monohydrate). Common sites are the olecranon bursa, helix of the ear and extensor aspects of the fingers, hands, knees and toes. If superficial, they may appear white, and may ulcerate, discharge crystals and become secondarily infected.
- heritable in a variable polygenic fashion

## Mechanical arthritis (Non-inflammatory) :

- causes stiffness after rest that eases rapidly on movement.

## Inflammatory arthritis :

- swelling and redness of several joints
- can develop over 24 hours, or more insidiously
- history of several weeks of pain, early-morning stiffness that takes at least 30 minutes to wear off with activity and loss of function
- Pain worsens with rest
- Predominant involvement of the small joints of the hands and feet
- Mild erythema can be present
- Can cause triggering
- more common if a first-degree relative is affected
- Weight loss, muscle loss, fever and lymphadenopathy

## Rheumatoid arthritis :

- symmetrical, small and large joints, upper and lower limbs
- Rheumatoid nodules, palmar erythema, episcleritis, dry eyes, interstitial lung disease, pleural  $\pm$  pericardial effusion, small-vessel vasculitis, Raynaud's phenomenon, low-grade fever, weight loss, lymphadenopathy, splenomegaly, leg ulcers
- Scleritis and episcleritis
- sclerae are blue in the scleromalacia of longstanding rheumatoid arthritis.
- Small, dark-red spots due to capillary infarcts
- The firm, non-tender, subcutaneous nodules of rheumatoid arthritis most commonly occur on the extensor surface of the forearm, sites of pressure or friction such as the sacrum or Achilles tendon, or in the lungs.
- Multiple small nodules can occur in the hands
- Rheumatoid nodules are strongly associated with a positive anti-cyclic citrullinated peptide (anti-CCP) antibody or rheumatoid factor.

### Seronegative arthritis (Psoriatic arthritis) :

- asymmetrical, large > small joints, swelling of a whole digit
- Erythema associated with DIP joint swelling
- Psoriasis, nail pitting, onycholysis, enthesitis, dactylitis
- Scleritis and episcleritis

### Degenerative arthritis (Osteoarthritis) :

- symmetrical, small and large joints, base of thumb, distal interphalangeal joints
- Bony nodules in osteoarthritis affect the lateral aspects of the DIP joints (Heberden's nodes) or the proximal interphalangeal (PIP) joints (Bouchard's nodes), They are smaller and harder than rheumatoid nodules.
- heritable in a variable polygenic fashion

### Reactive arthritis :

- Urethritis, mouth and/or genital ulcers, circinate balanitis (painless superficial ulcers on the prepuce and glans), conjunctivitis, iritis, enthesitis (inflammation of tendon or ligament attachments), e.g. Achilles enthesitis/plantar fasciitis, rash (keratoderma blenorrhagica)
- Can't see (conjunctivitis), can't pee (urethritis), can't climb a tree (arthritis)

### Nodal osteoarthritis :

- Involve DIP and CMC joint of the thumb

### Axial spondyloarthritis :

- spine and sacroiliac joints, asymmetrical peripheral arthritis, large > small joints
- Inflammatory bowel disease, psoriasis, enthesitis, iritis, aortic regurgitation, apical interstitial fibrosis
- acutely painful, very red eye due to iritis

### Traumatic injury :

- usually immediate and exacerbated by movement or haemarthrosis (bleeding into the joint)
- Severe pain

### Joint sepsis :

- causes pain that develops over 1-2 days
- Pain is present both at rest and with movement
- Severe pain

### Septic arthritis :

- develops over a few hours with pain, marked swelling, tenderness, redness and extreme reluctance to move the joint actively or passively
- Fever, malaise, source of sepsis, e.g. skin, throat, gut

### Fibromyalgia (chronic pain syndrome) :

- Constant pain with diurnal variation (several years of pain with a normal examination)
- The pain moves around and involves the back, neck, shoulders, elbows, hands and knees
- All joints are described as swollen, particularly her hands, which swell 'all over'

- Examination shows no skin or joint abnormality but there is widespread tenderness, particularly across her shoulders, in her neck and down her back

#### Rheumatic fever and gonococcal arthritis :

- Flitting pain starting in one joint and moving to others over a period of days

#### Palindromic rheumatism :

- intermittent, with resolution between episodes

#### Compartment syndrome :

- Disproportionately severe pain seen acutely

#### Complex regional pain syndrome :

- Disproportionately severe pain seen chronically

#### Polymyalgia rheumatica :

- stiffness commonly affects the shoulder and pelvic areas.

#### Haemarthrosis :

- Rapid (<30 minutes), severe swelling
- worse in the presence of anticoagulants or bleeding disorders.

#### Traumatic effusion (meniscal tear , articular cartilage abrasion) :

- Swelling over hours or days

#### Sjögren's syndrome :

- 'Dry eyes' (keratoconjunctivitis sicca), xerostomia (reduced or absent saliva production), salivary gland enlargement, Raynaud's phenomenon, neuropathy

#### Systemic lupus erythematosus :

- Photosensitive rash especially on face (found across the cheeks and bridge of nose), mucocutaneous ulcers, alopecia, fever, pleural  $\pm$  pericardial effusion, diaphragmatic paralysis, pulmonary fibrosis (rare), Raynaud's phenomenon, lymphopenia
- Small, dark-red spots due to capillary infarcts

#### Systemic sclerosis :

- Skin tightening (scleroderma), telangiectasia, Raynaud's phenomenon, calcific deposits in fingers, dilated nail-fold capillaries, pulmonary fibrosis
- the thickened, tight skin produces a characteristic facial appearance (mouse face)
- The telangiectasias of systemic sclerosis are purplish, blanch with pressure and are most common on the hands and face

#### Adult-onset Still's disease :

- Rash, fever, hepatomegaly, splenomegaly

### Spondyloarthritis :

- more common in patients with human leucocyte antigen B27

### Psoriasis :

- Rashes , The skin changes may be hidden in the umbilicus, natal cleft or scalp
- Nail pitting and onycholysis

### Osteogenesis imperfecta :

- blue sclera