

Early Inflammatory Arthritis

Paul Byrne

Consultant Rheumatologist

Colchester

Arthritis

- Osteoarthritis – bony hard non tender swollen joints
- Inflammatory – soft puffy tender swollen joints

Osteoarthritis

- Pain, especially after activity
- Gelling
- Limitation of movement
- May have swelling
- Typically no inflammation

Osteoarthritis



Healthy knee joint

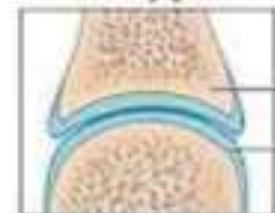


Hypertrophy and spurring of bone and erosion of cartilage

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Healthy joint



Bone

Cartilage

Osteoarthritis

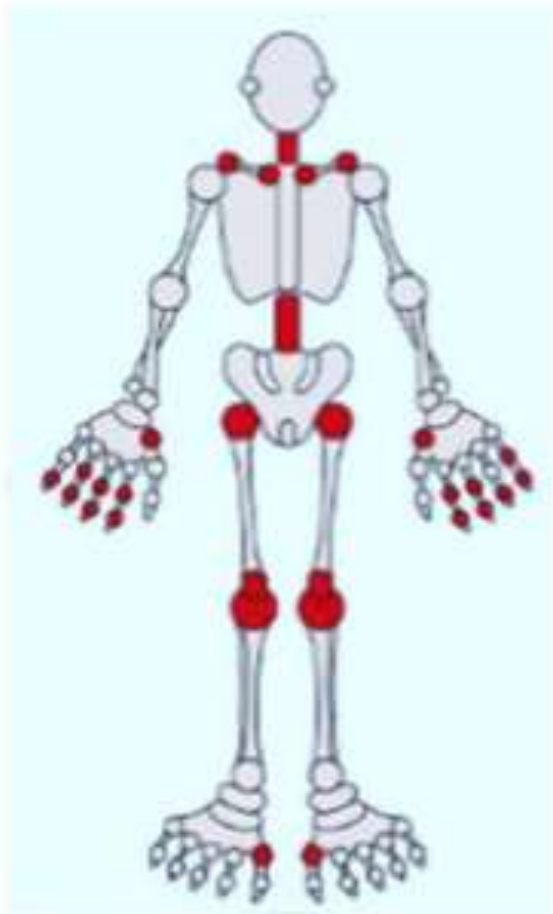


Damage to bone and cartilage

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Osteoarthritis

Distribution:

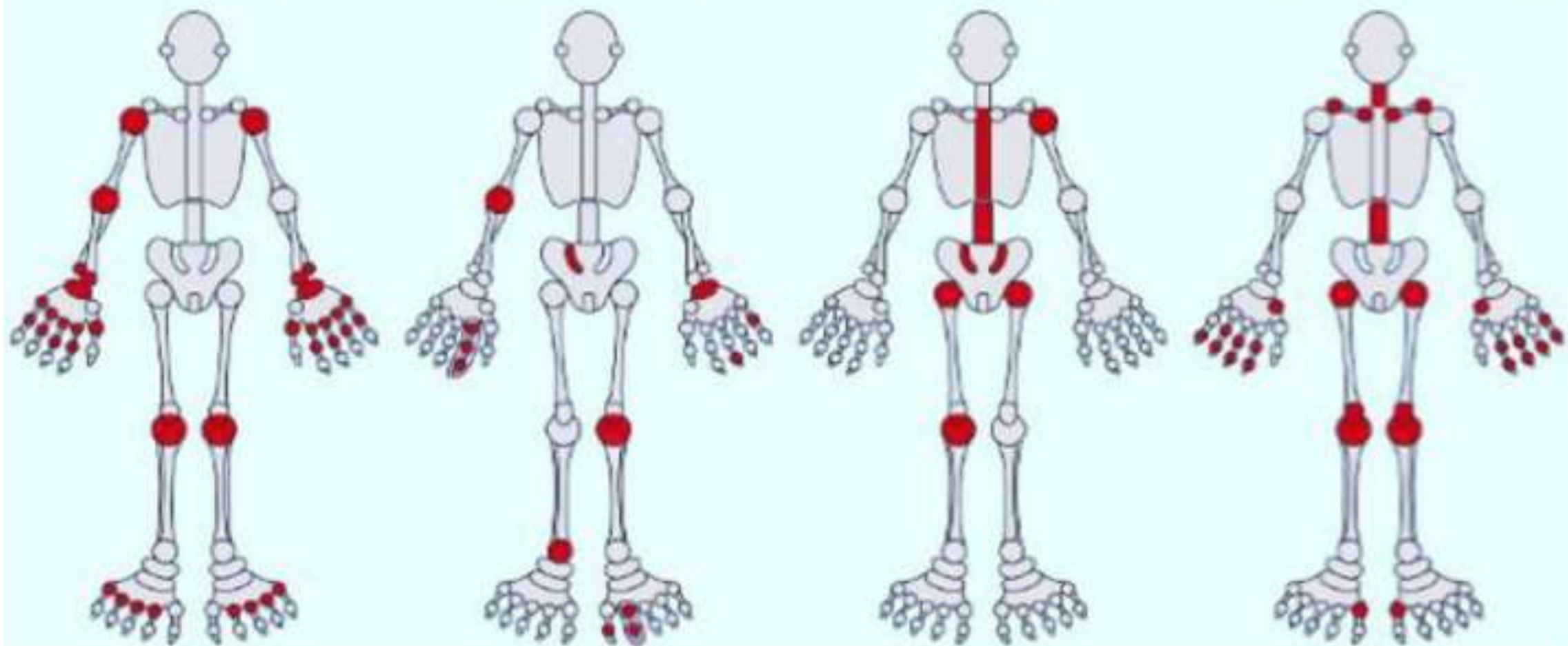


Treatment:

- Pain killers
 - Oral
 - Topical
- Exercise
- Weight loss
- Podiatry
- Physiotherapy
- Injections?
- Surgery

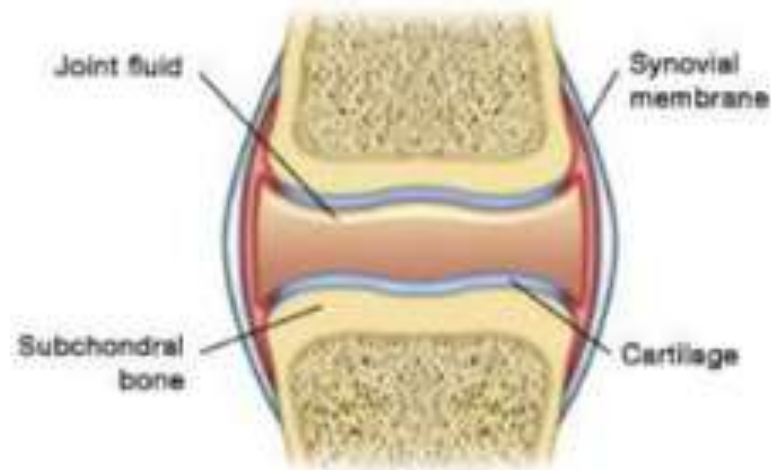
Inflammatory Arthritis

1. Rheumatoid arthritis
2. Sero negative arthritis
3. Ankylosing Spondylitis
4. (Osteoarthritis)



Joint damage in Inflammatory Arthritis

Normal Joint



Inflamed Joint

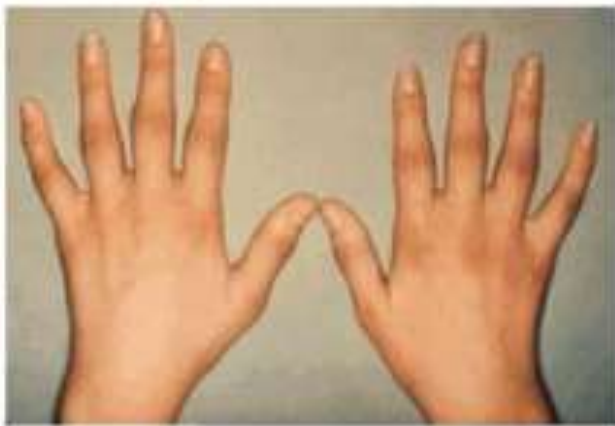


Damaged Joint



Consequences of Persistent Inflammation

Early disease



Late disease

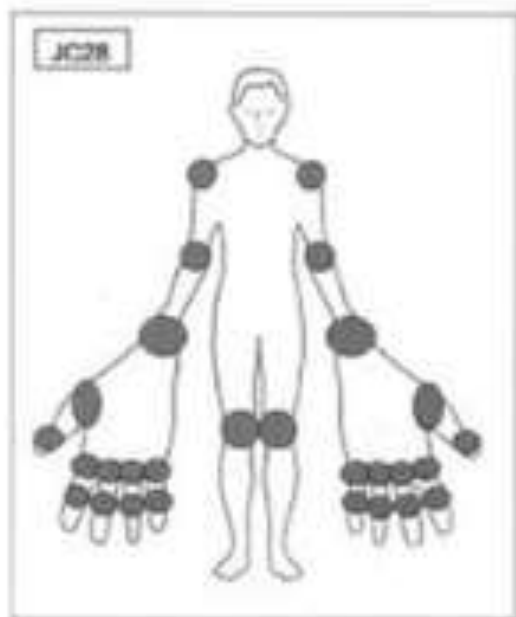


Preventing damage

- Early diagnosis and early treatment can prevent joint damage
- Remission is the ultimate goal of inflammatory arthritis treatment

Achieving Remission

- Disease activity score (DAS28) of <2.6
- Reduces disease progression
- Protects against joint damage
- Reduces pain
- Reduces limitations in mobility



How do we control inflammation?

- DMARDs

- Methotrexate
- Sulphasalazine
- Leflunomide
- Hydroxychloroquine

- Biologics

- Anti TNF
- Tocilizumab
- Rituximab
- Abatacept

- Steroids

General Features of Early Inflammatory arthritis

Persistent joint inflammation

- Swelling
- Prolonged stiffness
(>30 minutes early morning stiffness)
- Pain
- Redness

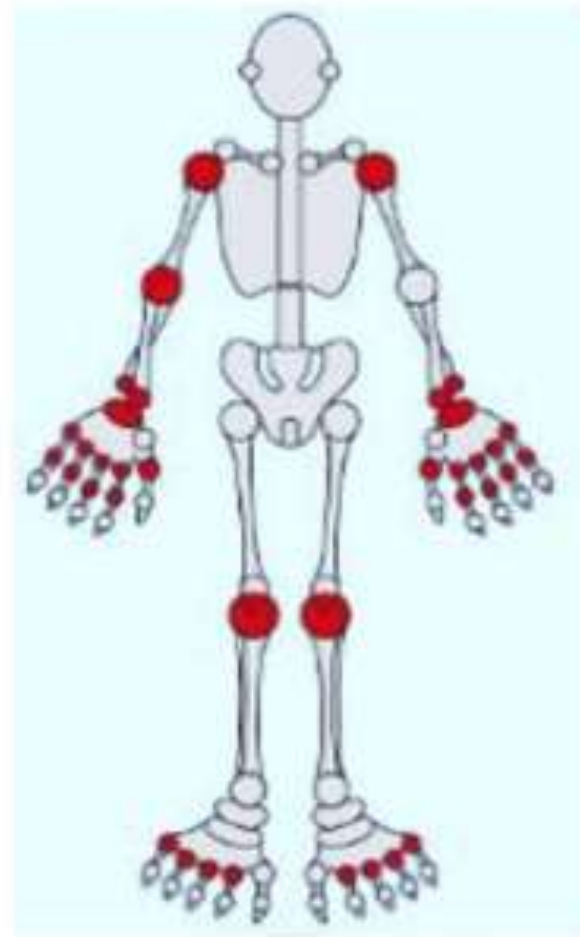
- Family History

- Systemic upset

- Extra-articular features
 - Skin
 - Nails
 - Lungs
 - Eyes

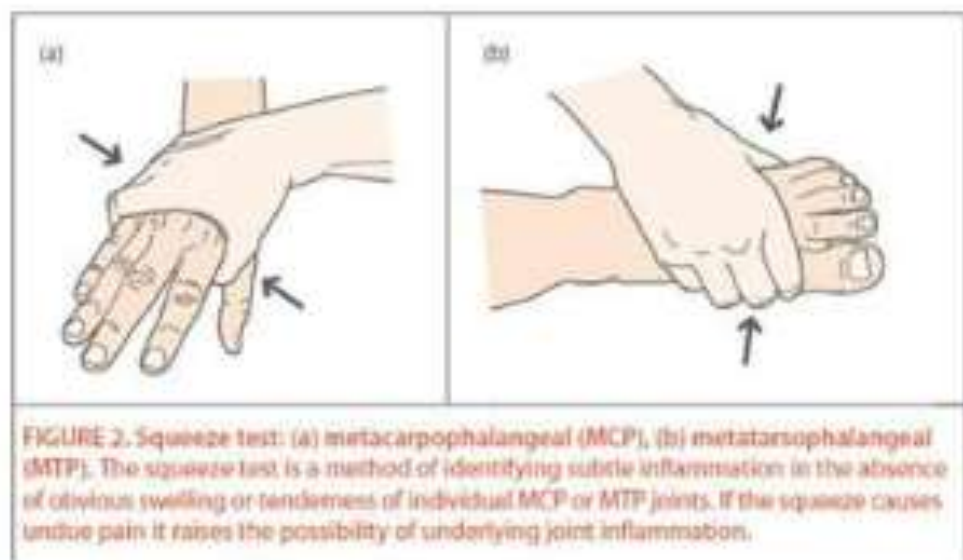
- Partial response to NSAIDs

Early Rheumatoid Arthritis



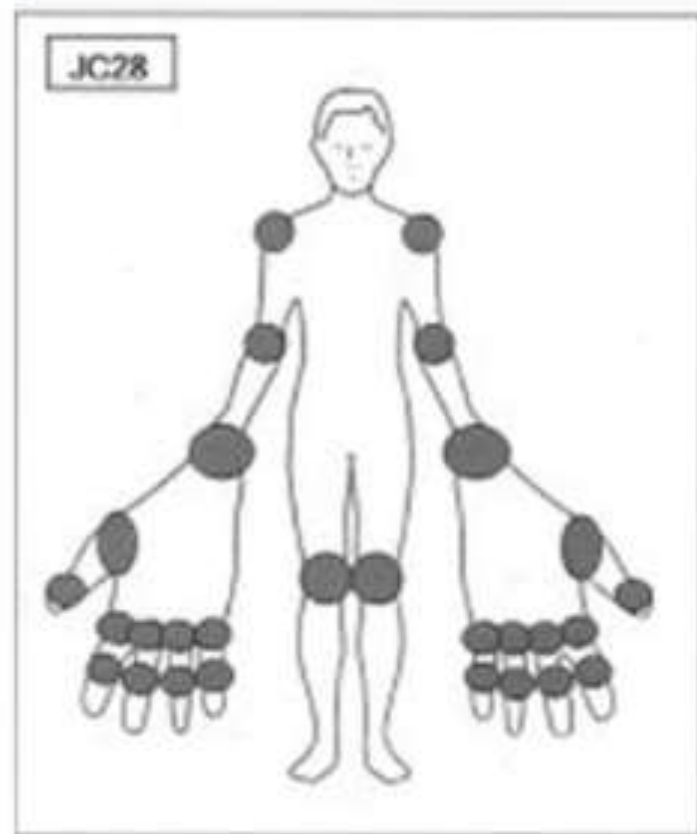
Early Rheumatoid Arthritis

- Positive MCP/MTP squeeze
- ?Rheumatoid Nodules



Disease activity in Rheumatoid Arthritis

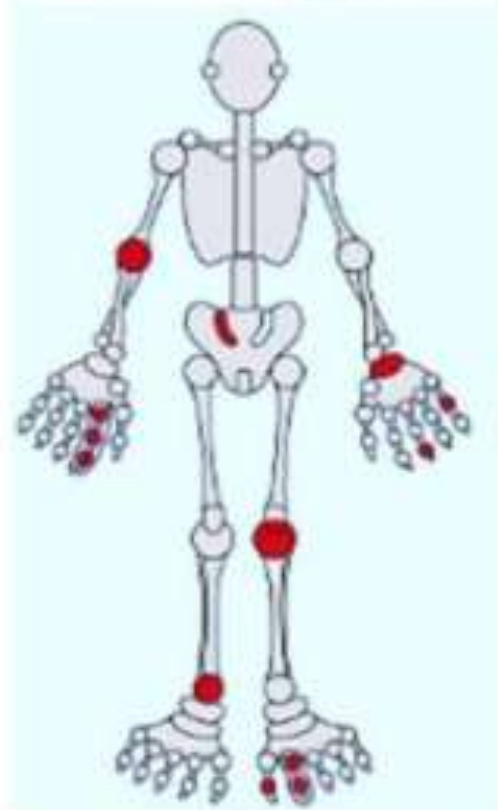
- Disease activity score (DAS28)
- Tender Joint Count
- Swollen Joint Count
- CRP or ESR
- Patient Global Score (0-100)



Seronegative Inflammatory Arthritis

- Psoriatic Arthritis
- Enteric Arthritis (IBD)
- Spondyloarthritis / Ankylosing Spondylitis
- Reactive Arthritis

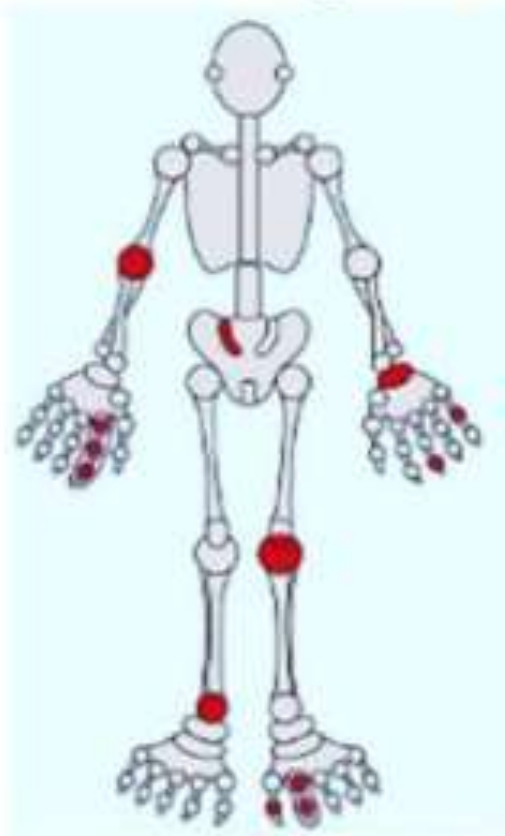
Asymmetric Oligo-arthritis



Early Sero-Negative Arthritis

- Inflammatory Arthritis
- Dactylitis
- Enthesitis
- Inflammatory tendopathies

Asymmetric Oligo-arthritis



Early Sero-Negative Arthritis

- Inflammatory Arthritis
- Dactylitis
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Dactylitis



Tendonitis





Psoriatic Arthritis

- Nail changes
Pitting, onycholysis



- Skin Psoriasis

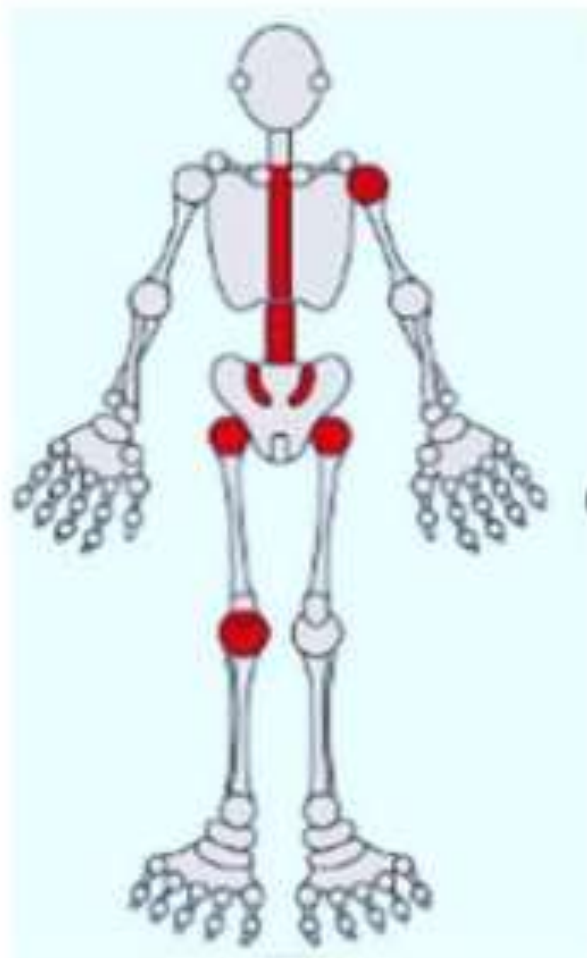


Ankylosing Spondylitis

- Peripheral musculoskeletal involvement in 30-50%
- Peripheral enthesitis is the basic pathologic process
- The following sites are commonly involved:
 - Achilles tendon insertion
 - Insertion of the plantar fascia on the calcaneus or the metatarsal heads
 - Base of the fifth metatarsal head
 - Tibial tuberosity

Identifying Ankylosing Spondylitis

- Males > females, Age < 45 years
- Morning stiffness > 30 minutes
- Improvement of back pain with exercise but not rest
- Nocturnal back pain during the second half of the night only
- Alternating buttock pain



Investigations

- Bloods
- FBC, ESR, Renal , Liver , Bone, Thyroid profiles , urate, RF/CCP antibodies,
- +/- HLA B27
- Imaging
- chest X-Ray Joint X Rays, US.

Summary

- Identifying and treating early inflammatory arthritis prevents joint damage
- Look out for inflammatory changes within the foot (joint inflammation, dactylitis, enthesitis)
- Ask about other joint involvement- particularly prolonged joint stiffness and swelling, test MCP squeeze
- Consider associated conditions and family history
- Direct patient urgently to GP or rheumatology if suspicions

