Countdown to Finals 2016
Rheumatology

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16/03/16
Main topics

- Great for MCQs:
  - RA
  - OA
  - CTDs (autoantibodies)
  - Vasculitis

- Great for MOSLERs:
  - RA
  - OA
  - PMR
  - Ank Spond
Never forget...

- History
- Exam
- Investigations
  - Bedside
  - Bloods
  - Imaging/Others
- Management
  - Conservative
  - Medical
  - Surgical

- MDT
  - MDT
    - MDT
      » MDT
        - MDT
          - ...
Case 1

• Mrs Dales is a 51 year-old lady who attends GP with pain in her hands. It’s worse in the morning when they are red and hot, and it affects mainly her MCPs and PIPs. She mentions she has felt tired and run down for the last few weeks. Her past medical history includes hysterectomy, asthma, and vitiligo.
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Investigations?
Case 1

- Bloods: anti-CCP +ve, RF +ve, raised ESR
- Hand X-rays
Rheumatoid Arthritis

• Systemic, inflammatory autoimmune disease affecting mainly joints

• **History**: joint pain, worse in morning (inactivity),

• **Articular features**
  – Tender, hot, swollen
  – Z-thumb, ulnar deviation, swan neck, Boutounnière’s

• **Extra-articular features**
  – Rheumatoid nodules, episcleritis, pulmonary fibrosis

• **Investigations**
  – Bedside: urine dip (?haematuria/proteinuria)
  – Bloods: Anti-CCP, RF (70%), ESR, ANA
  – Imaging: joint XR

• **Management**
  – Conservative: MDT (!!!) → physio, OT, psychologist
  – Medical: analgesia, steroids, DMARDs, biologicals
  – Surgical: synovectomy, replacement, arthrodesis
Z-thumb
Swan neck deformity
Boutonnière deformity
Rheumatoid nodule
Episcleritis
Ulnar deviation
Osteoarthritis
Osteoarthritis

X-ray appearances:
- Loss of joint space
- Osteophytes
- Subchondral cysts
- Subchondral sclerosis
<table>
<thead>
<tr>
<th>OA</th>
<th>RA</th>
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# OA vs RA

<table>
<thead>
<tr>
<th>OA</th>
<th>RA</th>
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<tbody>
<tr>
<td>Non-inflammatory</td>
<td>Inflammatory, erosive</td>
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<tr>
<td>RF –ve</td>
<td>RF +ve (70%)</td>
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<tr>
<td>Localised</td>
<td>Systemic</td>
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<tr>
<td>DIPs</td>
<td>MCPs + PIPs</td>
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<td>Worse in evening (wear/tear)</td>
<td>Worse in morning (inactivity)</td>
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<td>Mx mostly lifestyle, analgesia, some</td>
<td>Mx mostly medical (steroids, DMARDs,</td>
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<tr>
<td>surgical</td>
<td>biologicals)</td>
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Case 2

- A 23-year old man presents with a 2-month history of lower back pain, worse at night, radiating to his hips. It seems to improve with exercise.
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Ankylosing Spondylitis

- Chronic, inflammatory disease affecting mainly spine + sacroiliac joints
- **History**: young male, back pain, worse at night, radiates to hips-buttocks, improves with exercise
- **Examination**: “question mark posture”
- **Extra-articular features**
  - Iritis, osteoporosis, aortic valve disease
- **Investigations → clinical Dx**
  - Bloods: HLA-B27, ESR, CRP, Hb/MCV
  - Imaging: spine XR, MRI
- **Management**
  - Conservative: EXERCISE + MDT (!!!) → physio, OT, psychologist
  - Medical: NSAIDs, steroid injections, biologicals (anti-TNFα)
  - Surgical: joint replacement
“Question mark posture”

Syndesmophytes

Healthy spine

Ankylosing spondylitis

Body of vertebra

Disc

Inflammation of joints

Fusion of bones “Bamboo spine”
Case 3

• A 32-year old Nigerian woman presents to GP complaining of severe fatigue over the last few months, and a rash on her face which seems to get worse in the sun. She’s also noticed some pain and swelling in her hands which is worse in the morning.
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Systemic Lupus Erythematosus

- Multisystem autoimmune disease, remitting/relapsing
- **History**: young females, afro-caribbean, malaise/fatigue, photosensitive rash, arthritis, Raynaud’s phenomenon (+ most other symptoms...)
- **Examination**: butterfly rash, discoid rash, oral ulcers
- **Investigations**
  - Bedside: urine dip (proteinuria)
  - Bloods: anti-dsDNA, ANA, RF, low complement, high ESR (usually normal CRP)
- **Management**
  - Conservative: MDT (!!!) → physio, OT, psychologist
  - Medical: IV cyclophosphamide + steroids for acute flares; NSAIDs, hydroxychloroquine, DMARDs (azathioprine, methotrexate, MMF), biologicals (anti-CD20)
Malar ("butterfly") rash

Discoid rash

Oral ulcers

Facial rash

Abnormal sensitivity to sunlight of exposed skin

Cold, numb fingers turning pale, then blue, then red

Joint pains

The main symptoms of lupus
Case 4

• A 74-year old lady attends GP complaining of headache and pain when she combs her hair, as well as a recent episode when she briefly lost sight in her left eye, “like a black a curtain coming down”
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Giant (Temporal) Arteritis

• Large vessel vasculitis

• H+E: elderly, headache, scalp tenderness, jaw claudication, amaurosis fugax, sudden blindness, associated with PMR

• Investigations
  – Bloods: high ESR, CRP, platelets
  – Others: temporal artery biopsy within 3 days of steroids (beware skip lesions)

• Management
  – Medical: high dose prednisolone
Top tips

• Learn the common things well – RA/OA, gout...

• Learn the uncommon things by their characteristic features: autoantibodies, x-ray findings, skin manifestations, disease distribution, etc

• Don’t forget RA is a MULTISYSTEM disease – affects pretty much everything!

• Rheumatology is a great area to discuss MDT and conservative management – this is why they’re good MOSLER cases
Useful references

• Patient UK
• Arthritis Research UK (great videos!)
• Passmedicine/Pastest
Thanks

- Questions?