# Case Studies in Rheumatology




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# Case 1. Early polyarthritis



26 year old woman
3/12 pain and EMS hands and feet
No synovitis

Do you investigate?

# Case 1. Early polyarthritis



| | | |
|---|---|---|
| CRP | 5 | (0-7) |
| ESR | declined by laboratory | |
| IgM RF | 23 | (0-15) |
| Parvovirus | IgG+ IgM- | |

Other tests?

# Case 1. Early polyarthritis



4/52 later more pain and EMS

No synovitis

| | | |
|---|---|---|
| IgM RF | 32 | (0-15) |
| Anti-CCP | >99 | (>20) |
| CRP | 11 | (0-7) |

Diagnosis?

Treatment?

# Case 2. RA and pregnancy



32 year old woman - well controlled RA on MTX/Lef/SSZ/HCQ.
Erosive disease

Now wants to get pregnant. What do we stop?

What are the risks?

# Case 2. RA and pregnancy



32 year old woman - well controlled RA on MTX/Lef/SSZ/HCQ.
Erosive disease

Now wants to get pregnant. What do we stop?

What are the risks?

How do we manage symptoms before pregnancy?

How do we manage symptoms in pregnancy?

Breast feeding?

# Case 3. Gout



45 year old man 120 kg
BMI = 37 kg/$m^2$
3 years episodes of acute arthritis feet
responds to NSAIDs.
Swollen L knee
Family history of psoriasis.

How do we establish diagnosis?

# Case 3. Gout



| | | |
|---|---|---|
| Serum urate | 0.46 | (0.25-0.45) |
| CRP | 66 | (0-7) |
| Creatinine | 104 | |

Could this be gout?

Options for acute attack?

Start allopurinol?

# Case 3. Gout



Aspirate knee - crystals confirmed.

Attack now resolved

Start allopurinol ?
target dose?
Initial dose?

# Case 4. Back pain



24 year old woman
3 year history low back pain

What are the important questions?

# Case 4. Back pain



| Mechanical | Inflammatory |
|---|---|
| OK in the morning | Worse in the morning |
| Increases over the day | Improves over the day |
| Made worse with activity | Made better with activity |
| Stiffness minimal | Stiffness major component |
| Made worse by standing | +/- |
| Sciatica | nil |
| Sensory symptoms | nil |
| No SpA features | SpA features |

# Case 4. Back pain



Not unequivocally one or the other

EMS 30 mins
Initially helped by movement
Made worse by bending/standing
Some R buttock pain but ?referred

# Case 4. Back pain



Examination normal

Do you investigate?

# Case 4. Back pain



CRP 5
HLA B27 +
Sacroiliac joints normal
ANA 1:640 speckled

Other investigations?

What is the management?

# Case 4. Back pain



3 years later

Worsening pain, can't work, poor sleep

Sacroiliitis on plain films
Numerous NSAIDs – side effects
Has had 3 months physio
Has a BASDAI of 6.1
Chest expansion 2 cm
CRP 16

Options?

# Case 4. Back pain



**INITIAL APPLICATION - ankylosing spondylitis**
Applications only from a rheumatologist. Approvals valid for 6 months.

**Prerequisites** (tick boxes where appropriate)

- ☐ Patient has a confirmed diagnosis of ankylosing spondylitis present for more than six months

**and**

- ☐ Patient has low back pain and stiffness that is relieved by exercise but not by rest

**and**

- ☐ Patient has bilateral sacroiliitis demonstrated by plain radiographs, CT or MRI scan

**and**

- ☐ Patient's ankylosing spondylitis has not responded adequately to treatment with two or more non-steroidal anti-inflammatory drugs (NSAIDs), in combination with anti-ulcer therapy if indicated, while patient was undergoing at least 3 months of an exercise regimen supervised by a physiotherapist

**and**

- ☐ Patient has limitation of motion of the lumbar spine in the sagittal and the frontal planes as determined by a score of at least 1 on each of the lumbar flexion and lumbar side flexion measurements of the Bath Ankylosing Spondylitis Metrology Index (BASMI)

**or**

- ☐ Patient has limitation of chest expansion by at least 2.5 cm below the average normal values corrected for age and gender (see Notes)

**and**

- ☐ A Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) of at least 6 on a 0-10 scale

**and**

- ☐ An elevated erythrocyte sedimentation rate (ESR) greater than 25 mm per hour

**or**

- ☐ A C-reactive protein (CRP) level greater than 15 mg per litre

Note:

The BASDAI must have been determined at the completion of the 3 month exercise trial, but prior to ceasing NSAID treatment. The BASDAI, ESR and CRP measures must be no more than 1 month old at the time of initial application.

Average normal chest expansion corrected for age and gender:

18-24 years - Male: 7.0 cm; Female: 5.5 cm
25-34 years - Male: 7.5 cm; Female: 5.5 cm
35-44 years - Male: 6.5 cm; Female: 4.5 cm
45-54 years - Male: 6.0 cm; Female: 5.0 cm
55-64 years - Male: 5.5 cm; Female: 4.0 cm
65-74 years - Male: 4.0 cm; Female: 4.0 cm
75+ years - Male: 3.0 cm; Female: 2.5 cm

# Case 4. Back pain



**1) How would you describe the overall level of fatigue/tiredness you have experienced?**

None I_____IVery severe

**2) How would you describe the overall level of AS neck, back or hip pain you have had?**

None I_____IVery severe

**3) How would you describe the overall level of pain/swelling in joints other than neck, back or hips you have had?**

None I_____IVery severe

**4) How would you describe the overall level of discomfort you have had from any areas tender to touch or pressure?**

None I_____IVery severe

******OFFICE STAFF: FOLLOWING QUESTIONS TO BE AVERAGED BEFORE ADDING TO SCORE******

**5) How would you describe the overall level of morning stiffness you have had from the time you wake up?**

None I_____IVery severe

**6) How long does your morning stiffness last from the time you wake up?**

I_____I

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0 1/2 1 hour 1 ½ 2 or more hours

# Case 4. Back pain



Any other tests needed?

# Case 4. Back pain



CXR normal
Mantoux 5 mm
Quantiferon gold normal
Urban white, no TB contact

Needs isoniazid?

# Case 4. Back pain



Humira 40 mg sc every 2/52

Within 4 weeks free of symptoms
Going to the gym
Planning her career
CRP <1

# Case 5. Psoriatic Arthritis



47 year old man
20 years in NZ ex India
15 year hx psoriatic arthritis
Swollen wrists, ankles knees
MTX 20 mg weekly, SSZ 1g bd, Lef 20 mg daily
Prednisone 20 mg daily

Treatment options?

Any precautions/reservations?

# Case 5. Psoriatic Arthritis

**INITIAL APPLICATION - psoriatic arthritis**
Applications only from a rheumatologist. Approvals valid for 6 months.

**Prerequisites** (tick boxes where appropriate)

- ☐ Patient has had severe active psoriatic arthritis for six months duration or longer

**and**

- ☐ Patient has tried and not responded to at least three months of oral or parenteral methotrexate at a dose of at least 20 mg weekly or a maximum tolerated dose

**and**

- ☐ Patient has tried and not responded to at least three months of sulphasalazine at a dose of at least 2 g per day or leflunomide at a dose of up to 20 mg daily (or maximum tolerated doses)

**and**

- ☐ Patient has persistent symptoms of poorly controlled and active disease in at least 20 active, swollen, tender joints

**or**

- ☐ Patient has persistent symptoms of poorly controlled and active disease in at least four active joints from the following: wrist, elbow, knee, ankle, and either shoulder or hip

**and**

- ☐ Patient has a C-reactive protein level greater than 15 mg/L measured no more than one month prior to the date of this application

**or**

- ☐ Patient has an elevated erythrocyte sedimentation rate (ESR) greater than 25 mm per hour

**or**

- ☐ ESR and CRP not measured as patient is currently receiving prednisone therapy at a dose of greater than 5 mg per day and has done so for more than three months

# Case 5. Psoriatic Arthritis



No known TB exposure
CXR normal
Mantoux negative

Proceed with adalimumab?

Other tests?