

# The Newly Diagnosed AS Patient

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## The Newly Diagnosed Patient 1

- 24 year old male, working in a heavy mechanical job, referred to Rheumatology in 2010 – previously under orthopaedics for a bone lesion in right clavicle but lost to FU. Now complaining of pain right foot, knee and shoulder.
- His GP had done a number of investigations;
- Blood tests showed raised inflammatory markers and slight anaemia (PVisc 2.3, Hb 11.8).
- X-ray of the right foot revealed a possible fracture despite no known trauma.
- MRI of the right shoulder showed an effusion with adjacent marrow oedema in the sternum and distal clavicle and, over several levels, symmetrical oedema within the costovertebral joints - the radiologist commented on a possible inflammatory cause.

## Clinic assessment March 2011

- Now complaining of increasing back and neck pain (better with exercise, worse with rest) and worsening of symptoms in the left foot.
- Also suffering from early morning stiffness and disturbed by pain at night.
- Xray – fused SIJs.
- MRI – Corner inflammatory lesions T12/L1 and fused SIJs but no evidence of active sacroiliitis.
- Bloods – PVisc 2.1, CRP 55, Hb 11.3, Vit B12 167ng/l. HLAB27 +ve.
- Diagnosed with inflammatory spondyloarthritis with peripheral involvement.
- Had previously tried Naproxen without success, so now advised to try Arcoxia, discussed SSZ and referred to physiotherapy.

# Pelvis X-ray 1



# Physiotherapy assessment May 2011

EUS - few minutes on new NSAID.

Sleep - much better on NSAID - not woken much now.

**Front View:**

- P<sub>3</sub>** ← Pain in overhead mlt. Stiffness along clavicle. P & N = numbness.
- P<sub>1</sub>** Intermittent Sharp. 9/10 → 4/10. Agg bending - eg sprattling & walking upstairs.
- Ease "re-set posture"
- o P & N
- o numbness.
- o giving way.
- o locking.

**Back View:**

- ← Some stiffness
- P<sub>2</sub>** Pain along the bottom of the foot under the toes + medial arch 6/10.
- Leg length P + N?
- Numbness?
- Pain if squeeze foot.
- Agg better on NSAID
- Foot too long.
- Worst in the evenings.
- Ease

**Other Notes:**

- P<sub>3</sub>** Fatigue → variable but largely due to work.
- Back pain well controlled on Arcoxia.

On assessment – Reduced Lsp flexion and side flexion, ‘stiff’ throughout Tsp and Csp. Stands with increased Tsp kyphosis and ‘chin poking’, shoulders depressed and protracted. Poor left foot position in standing with reduced media arch and little hallux extension in weight-bearing. Full, pain-free knee ROM left and right with good strength. Good shoulder ROM but boggy swelling over SCJ and creps over ACJ.

BASMI – 3.0

BASFI – 4.6

BASDAI – 5.1

Back Pain – 4/10

Given advice on posture, and stretches for neck, Tsp and Lsp. Advice on footwear (tricky in his heavy, steel-toe-capped work boots, but luckily work have agreed to lighter duties) and referral to podiatry. Requested referral to AS Course.

July 2011

- Seen in clinic for FU.
- Pain improved ++ on Arcoxia but CRP remains elevated at 20.
- Started SSZ
- Referred to AS course.

## Programme Format

- 12 days of active treatment – 8-10 people per course.
- Three levels (*fast - fast/moderate - moderate*).
  - *Fast* –  $0 > \text{BASMI} < 3.1$
  - *Fast/Moderate* -  $3.1 > \text{BASMI} < 5.1$
  - *Moderate* -  $5.1 > \text{but} < 7$
- Customised individual exercises.
- Self-management strategies.
- Classes using variety of modalities, including hydrotherapy.
- Lead by the physiotherapists, with input from the OTs, Podiatrist, Pharmacist and Specialist Counsellor.
- Weekly ward round lead by the Consultant Rheumatologist.

# AS course October 2011

**HPC**  
 Pain in shoulders +  
 lower spine.  
 R knee - stairs difficult.  
 Pain in both feet,  
 mainly L.

Onset signs & symptoms:  
 Date of diagnosis: Sept 2010.  
 Δ Feb 2011.

HLA B27+ve  yes/no:  re

Posture: good, room  
 for improvement.  
 Early Morning Stiffness:  
 Sleep: 20 mins,  
 good.  
 Fatigue: By midday,  
 not on days off.  
 Gait Pattern and walking aids:  
 good / No

Parasthesia: } No.  
 Anaesthesia: }  
 See Red Flags: } → .

## Pre- and post-course measures

### **Pre-course**

- BASMI – 2.2
- BASDAI -6.2
- BASFI – 3.8
- Back Pain -

### **Post-course**

- BASMI – 1.0
- BASDAI – 2.0
- BASFI – 1.0
- Back Pain -

## What happened next...

- Patient 1 had a positive outcome to the course with much improved measures throughout.
- He paid close attention to all the advice and exercises and was making positive changes to his life. Work continue to be supportive, offering light duties and specialised work footwear.

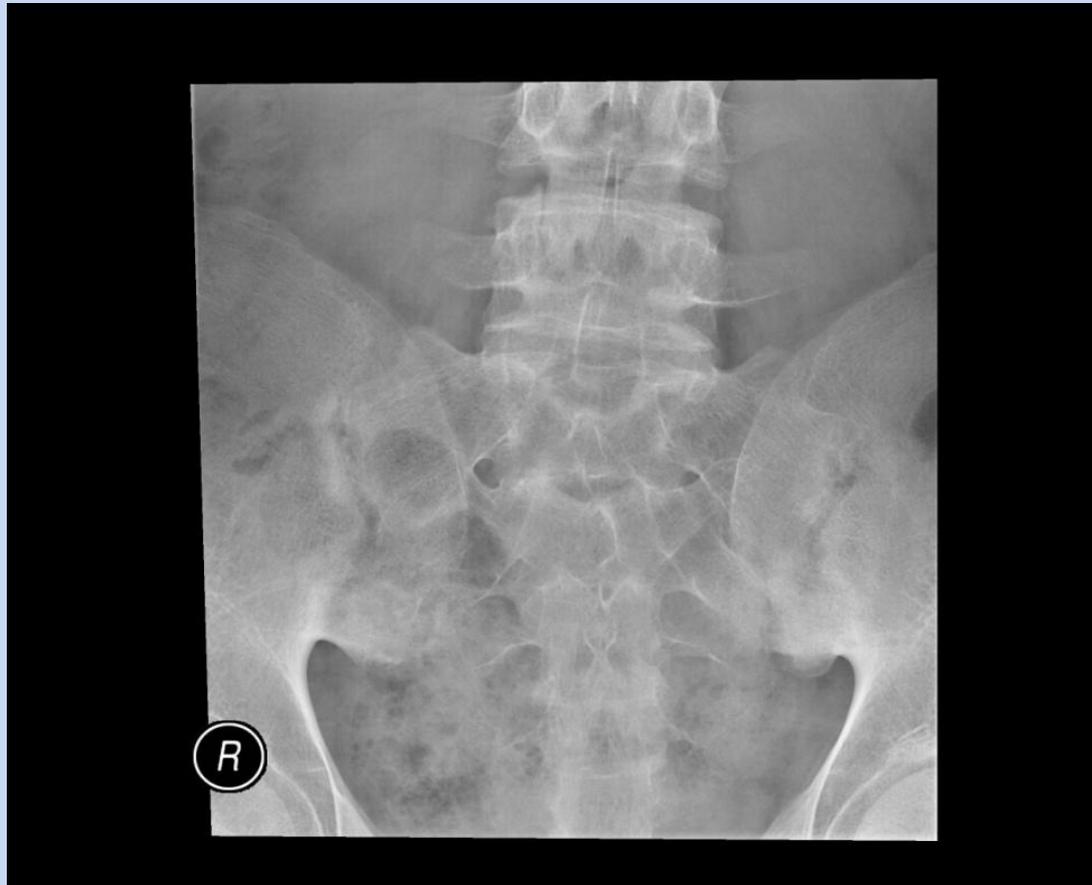
## The Newly Diagnosed Patient 2

- 17 year old male, working in a static job, referred to Rheumatology in 2009 – as a teenager was under the paediatric Rheumatology service for persistent problems with his left ankle, and at the time diagnosed with inflammatory arthritis (Rh-ve).
- Initially given NSAIDs and physiotherapy, but had ongoing joint problems requiring steroids and was eventually started on SSZ with a good response.
- He had a number of ankle injection under US guidance, but independently discontinued his SSZ and had to be encouraged to restart in 2008.

## Clinic assessment 2009

- Now complaining of neck stiffness, low back and groin pain and early morning stiffness.
- Blood tests showed raised inflammatory markers (Jan 2009 CRP 27, Oct 2009 CRP 55). HLAB27+ve.
- X-ray pelvis showed bilateral sacroiliitis and erosive disease.
- X-ray left ankle showed reduced joint space and degenerative changes.
- Diagnosed as probable Spondyloarthritis.

## Pelvis X-ray Patient 2



2010

- Remains in pain and with increased stiffness. Diagnosis now AS.
- Increased SSZ to maximum dose and replaced ibuprofen with indomethacin.
- Referred to the AS course.
- BASMI – 2.8

# AS course 2010

Variable pain + stiffness levels :- Pt cont. see any pattern Medication helps

- Help with your movement :-
- Help reduce stiffness :-
- Help reduce your pain :-



PB  
 inhibition  
 VAS Sport 6/10  
 Now 2/10  
 Sport: high impact activities  
 Heat Medication assists :-



Pt reports hip pain directly related to LBP.

HPC :- On-going Ache Pain + Stiffening Moved to neck's back hips :- On-going Problems Cont. Sulfasalazine helps

Onset signs & symptoms: Problems from 17 yrs of age.  
 Date of diagnosis: Δ 2007  
 HLA B27+ve (yes/no):

Posture: Slight flat footosis.

Early Morning Stiffness: Medication helping. Stiffness now PM.  
 Sleep: Variable.

Fatigue: Variable :-  
 Gait Pattern and walking aids: Feels stiff : just Combs

Parasthesia:  
 Anaesthesia: NAD.  
 See Red Flags:

## Pre- and post-course measures 2010

### **Pre-course**

- BASMI – 2.8
- BASDAI – 4.8
- BASFI – 2.8
- Back Pain – 3/10

### **Post-course**

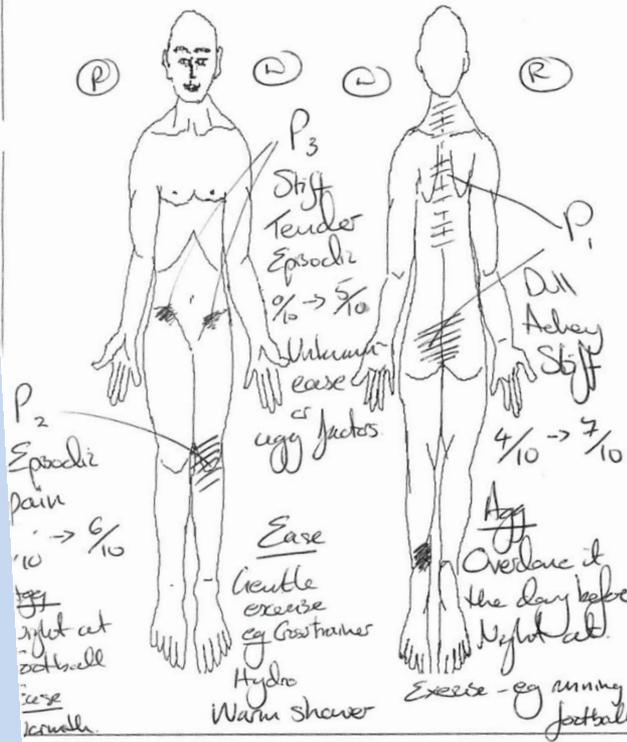
- BASMI – 0.8
- BASDAI – 5.0
- BASFI – 2.3
- Back Pain – 4/10

## Clinic assessments 2011

- Despite improvements in BASMI on the course, measures remain high and BASMI slowly increasing again. BASDAI 5.9, BASFI 5.0 and back pain 5/10.
- Inflammatory markers remain elevated with slight anaemia (CRP 38, Hb 11.6)
- Now having knee pain and X-ray shows patella tendon esenthopathy. Increasing ankle problems.
- Admits to non-compliance with his SSZ and binge drinking at weekends. Given IM depo-medrone and discussed possible switch to Naproxen and/or MTX, but concerns raised due to his heavy drinking. Declined MTX.
- Going to the gym to do weights but struggling with stretches. Re-referred to the AS course.

# AS course 2012

SMS - worst am.



HPC  
 Δ Spandforltho 2008  
 Symptoms in ankle since 13yo old.  
 Currently stiff esp hips, knee + back.  
 Onset signs & symptoms:  
 Date of diagnosis: 2008.  
 HLA B27+ve  yes/no:

Posture: NAP.  
 Early Morning Stiffness: 2 1/2 hrs  
 Sleep: Wakes, sometimes woken early hours by back pain.  
 Fatigue: Does get tired  
 Gait Pattern and walking aids:  
 NAP

Parasthesia: none.  
 Anaesthesia:  
 See Red Flags:

## Pre- and post-course measures

### **Pre-course**

- BASMI – 3.4
- BASDAI – 5.6
- BASFI – 4.9
- Back Pain- 6/10

### **Post-course**

- BASMI – 2.4
- BASDAI – 3.8
- BASFI – 3.6
- Back Pain – 5/10

## What happened next...

- Naproxen proved ineffective, as had indomethacin. Had just started celecoxib and omeprazole.
- Managed well on the course but BASMI and BASDAI remained high. Physio staff are not convinced about his understanding of his exercise programme and he continues to work in a very static position.
- Concerns remain about his level of drinking at weekends.
- Patient 2 is interested in anti-TNF drugs but has not yet been referred for assessment.

# Lumbar Spine

**P1**



**P2**



# C-spine

**P1**



**P2**

