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Breakfast Session

Dr Sarah Jordan

Rheumatology
Clinical Lecturer
Dunedin

Ankylosing Spondylitis, Psoriatic Arthritis and the other Spondyloarthropathies: What to look for, how to treat and when to refer - AbbVie Breakfast

Saturday, 17 August 2013 Start 7:30am Duration: 30mins Plenary

Ankylosing spondylitis, Psoriatic Arthritis ... And the others

The Spondyloarthropathies (SpA)

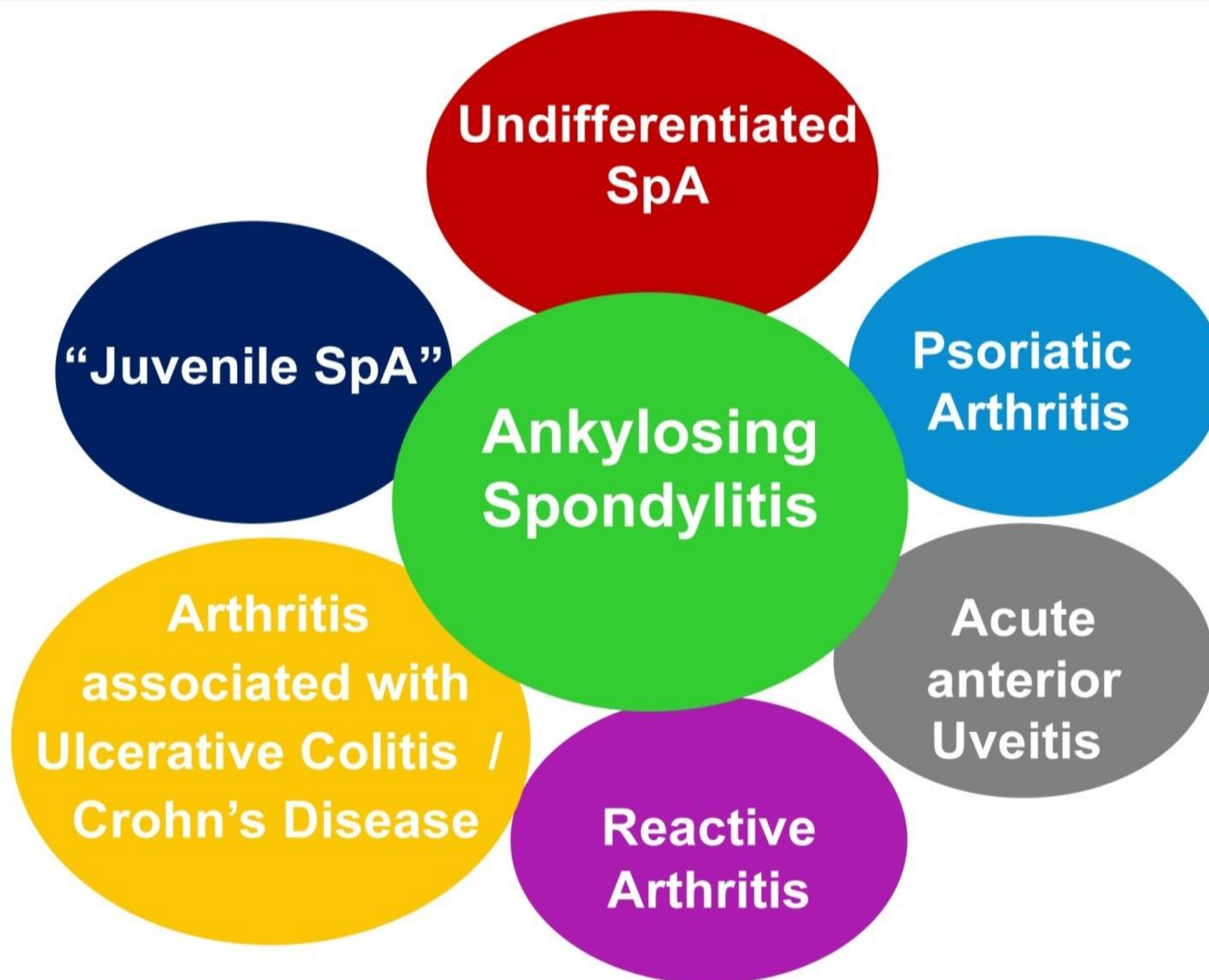
Sarah Jordan

Rheumatologist

Spondyloarthropathies

- Ankylosing spondylitis
- Psoriatic arthritis
- Reactive arthritis
- Arthritis associated with IBD
- Undifferentiated spondyloarthritis

Concept of Spondyloarthritis (SpA)



Characteristics of Patients with Spondyloarthritis

- Axial (spinal) disease
- Peripheral arthritis
  - Most commonly 2–4 joints (oligoarthritis)
  - Generally asymmetrical presentation
- Enthesitis
  - Inflammation at the sites where tendons or ligaments insert into bone
- Dactylitis
  - Sausage-like finger or toe
- Extra-articular features
  - Acute anterior uveitis
  - Psoriasis
  - Inflammatory bowel disease

Axial (spinal) disease → IBP

- Age at onset <40
- Insidious onset
- Improvement with exercise
- No improvement with rest
- Night pain (with improvement upon getting up)

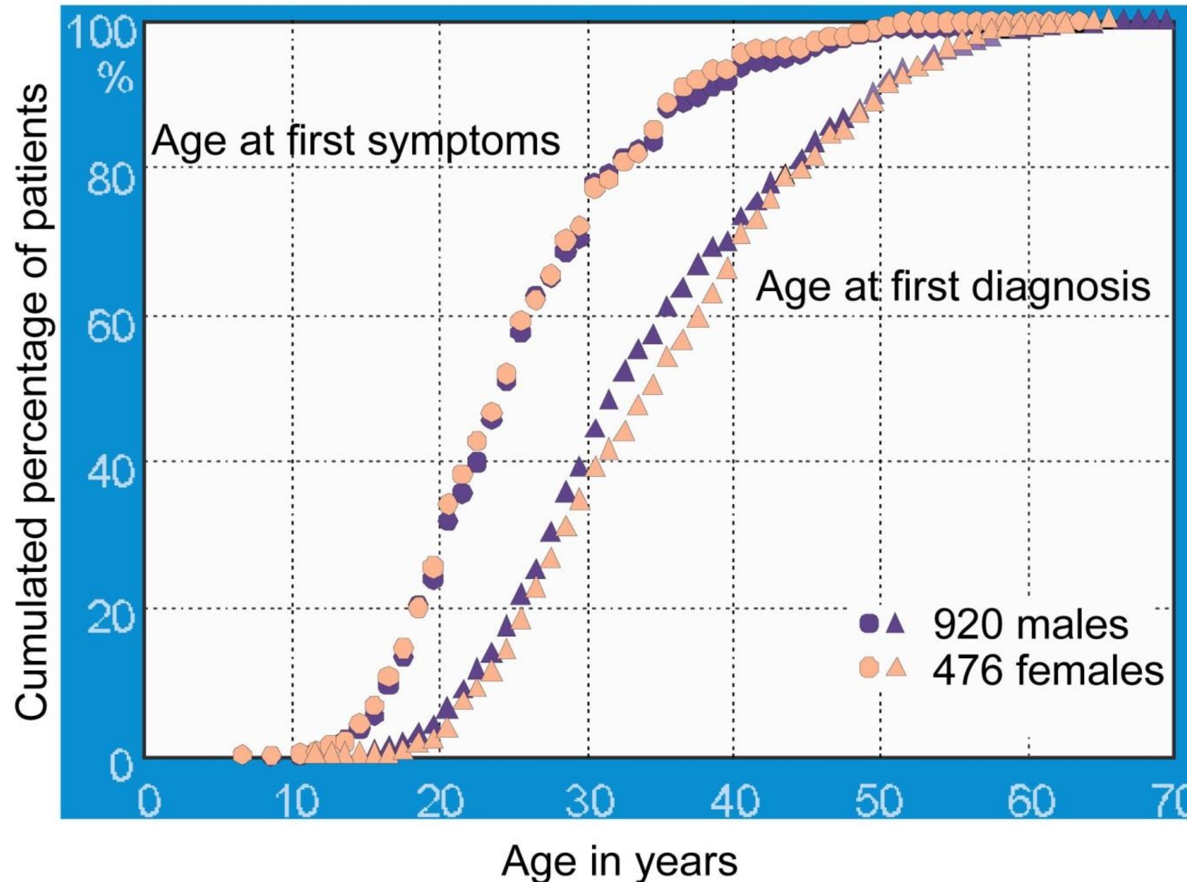
Association with HLA-B27

Disease	Prevalence of HLA-B27 (%)
Ankylosing spondylitis	90
Psoriatic arthritis	25 - 35
Reactive arthritis	40-80
Arthritis associated with IBD	35-75
Undifferentiated spondyloarthropathy	70

Ankylosing Spondylitis

- Prevalence 0.2-1.4%
- M:F 2:1
- 90-95% HLA-B27 positive
- Onset 2nd to 3rd decade
- Back pain, arthritis, enthesitis, extra-articular features – uveitis in up to 40%
- Mean delays in diagnosis 9 yrs

Age at First Symptoms and at First Diagnosis in Ankylosing Spondylitis Patients



Average delay in diagnosis: 9 years

Feldtkeller E et al. Curr Opin Rheumatol 2000;12:239-247 (with permission)

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Severe Disease Outcome

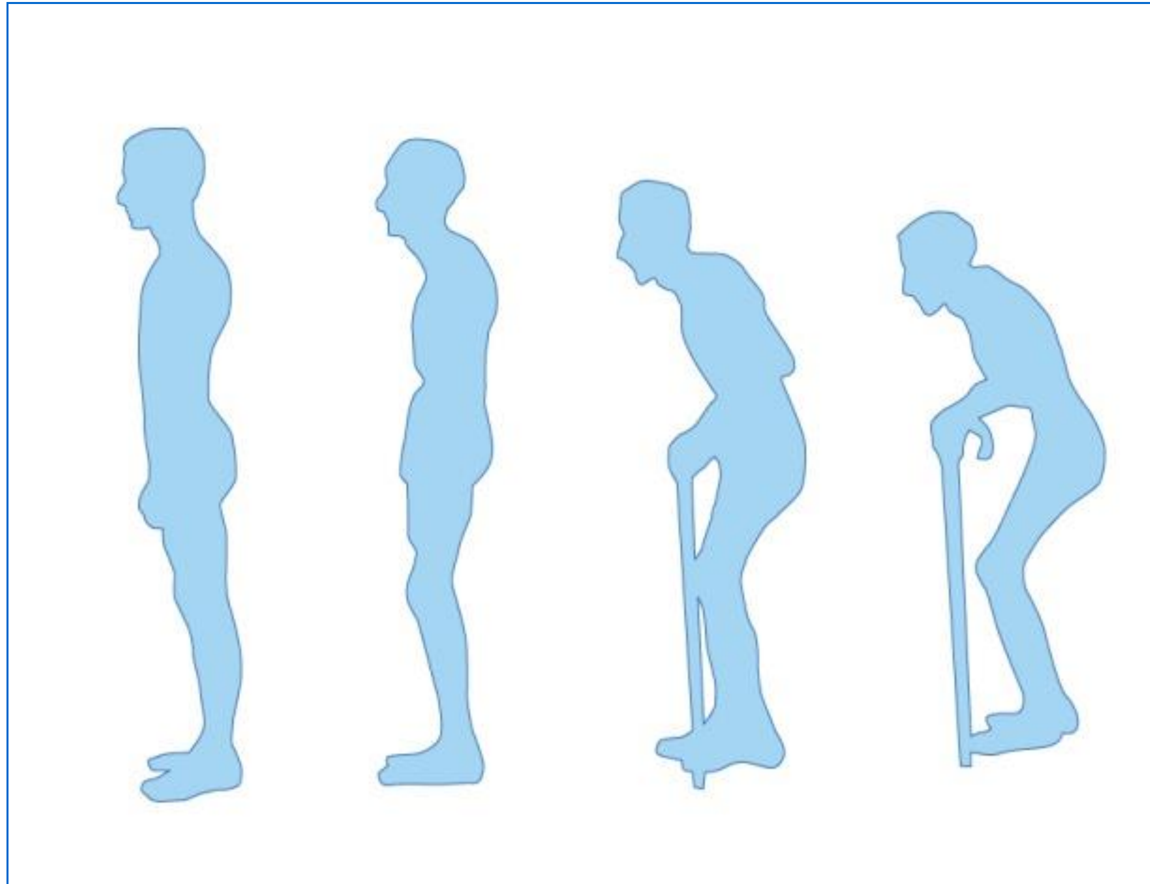
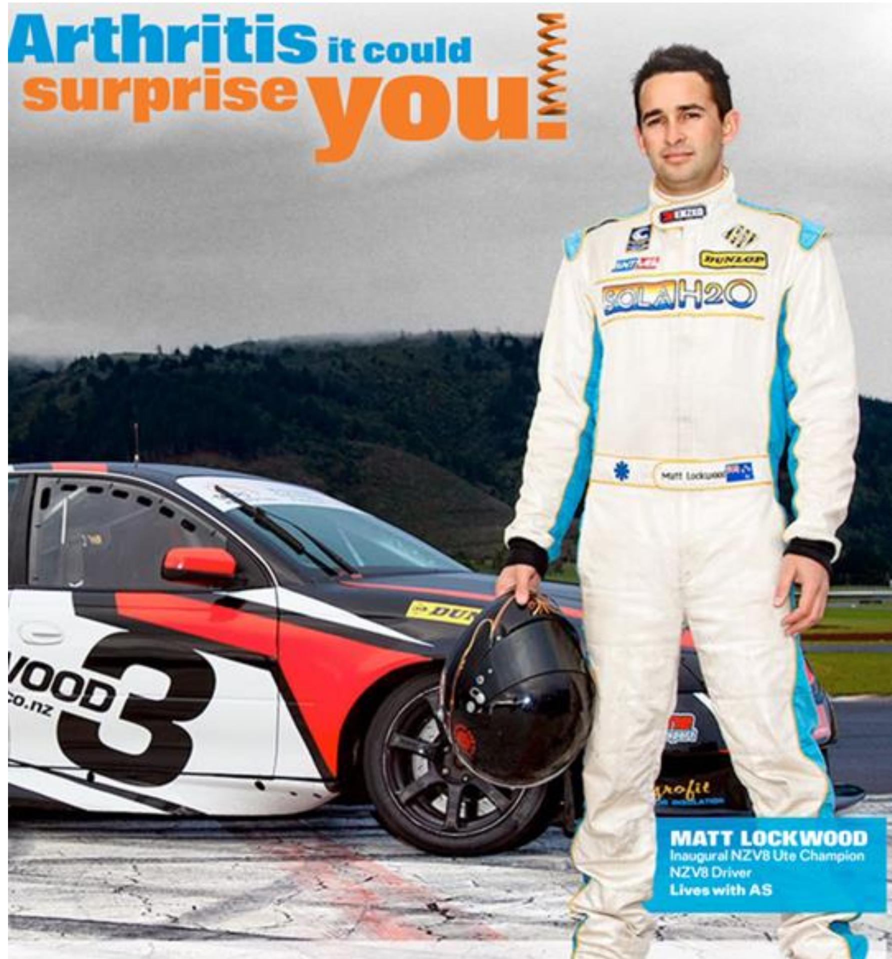
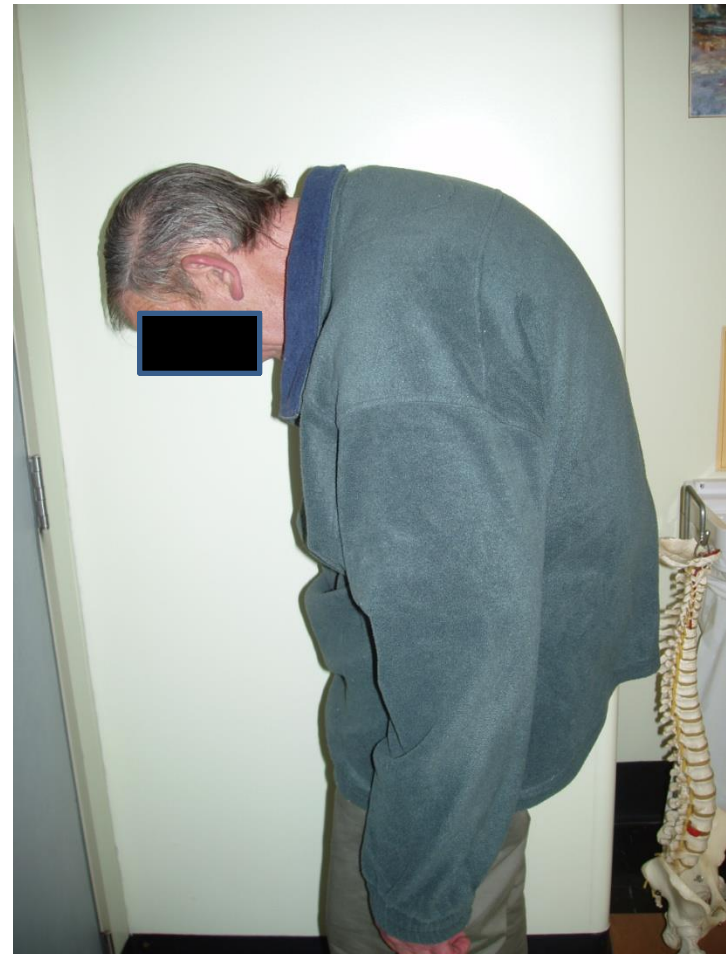


Image adapted from Little, H. et al. *Am J Med.* 1976; 60:279–285.

Real life





Psoriatic arthritis

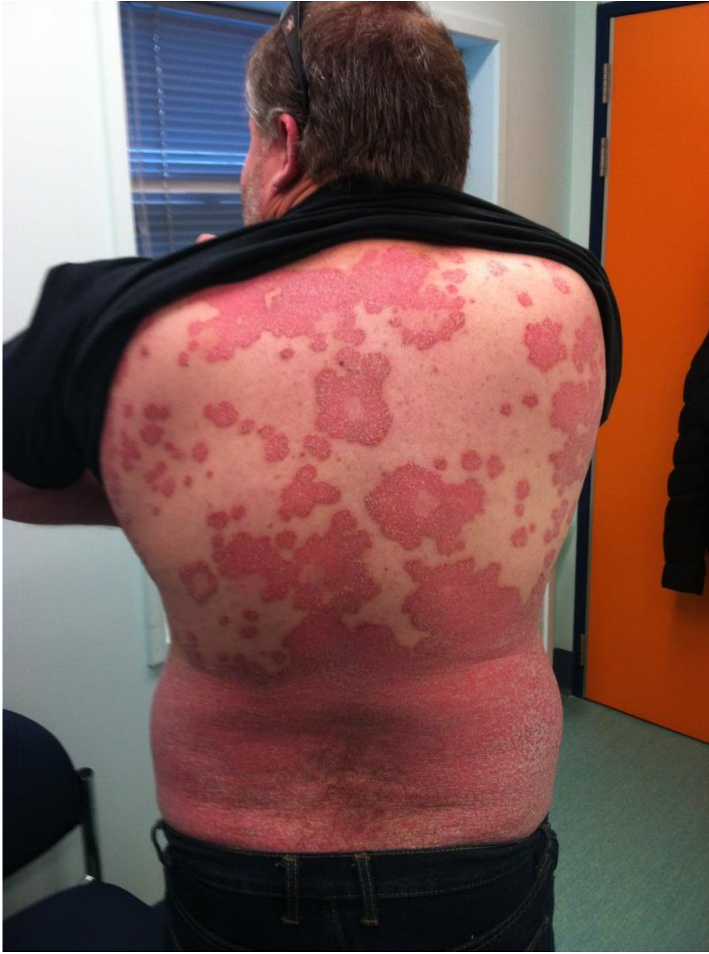
- Prevalence 0.3 - 1% c.f. skin Psoriasis 2%
- Occurs in >10% pts with psoriasis
- M:F 1:1
- peak 20-24yrs
- Usually RF negative, 17.5% CCP positive
- 5 subtypes

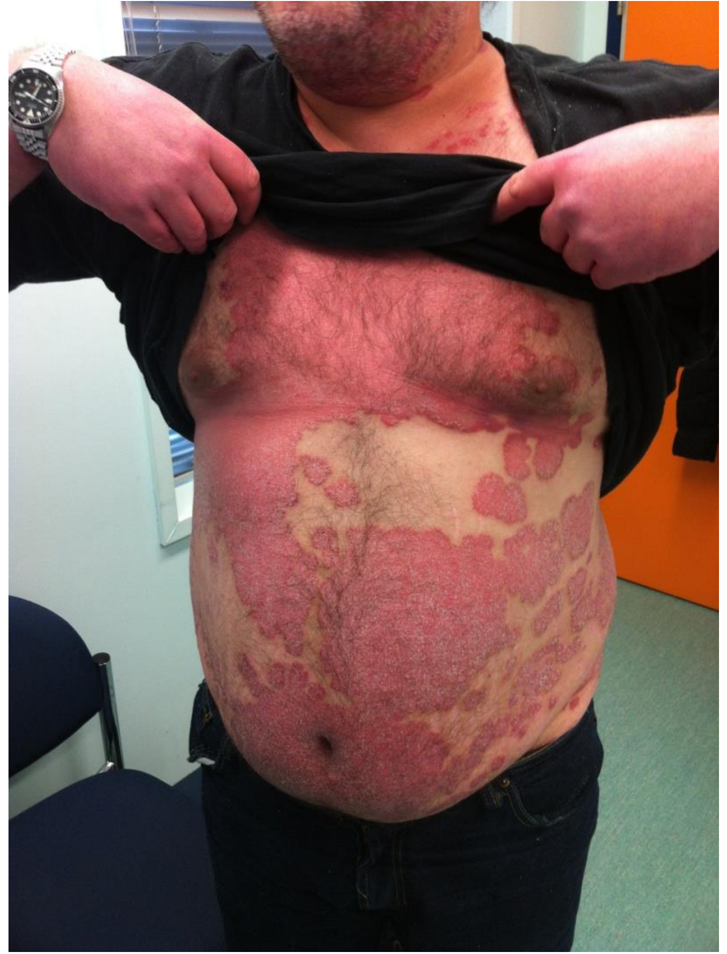
Patterns in PsA

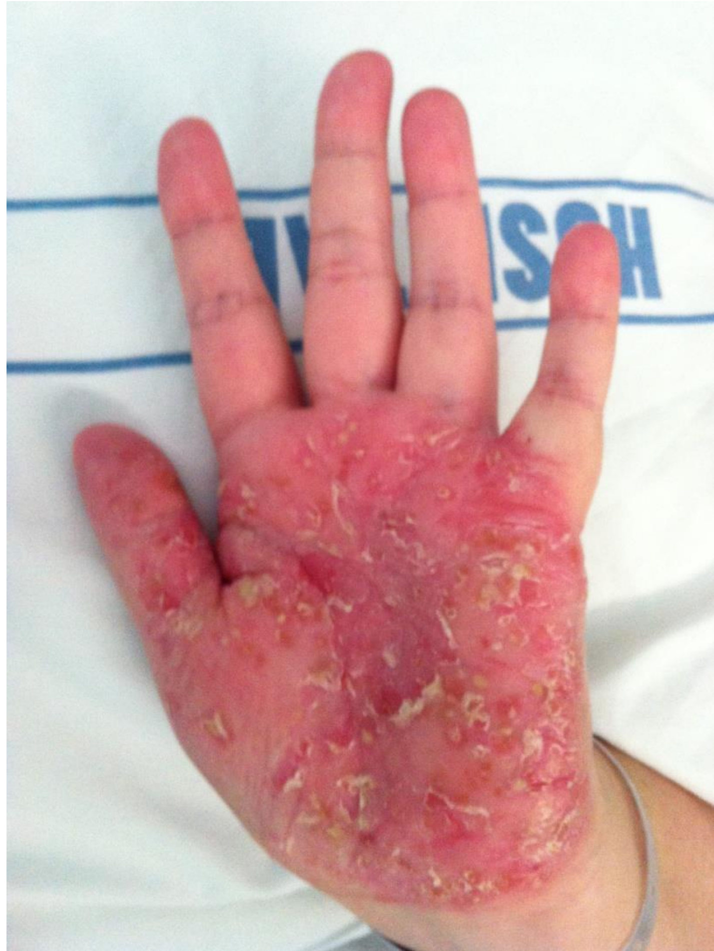
Pattern	Features	Rate
Oligoarticular	• Usually involves small joints, less frequently involves large joints • Normally oligoarthritis (≤4 joints)	~ 47%
Polyarticular	• Involves small joints and large joints • May be RF positive (clinically similar to RA) • Arthritis may develop concurrently with psoriasis	~ 25%
Spondylitis	• SIJ and vertebrae affected asymmetrically • More common in men • May coexist with peripheral PsA • Enthesitis prevalent	~ 23%
DIP synovitis	• Restricted to only DIP joints	
Arthritis mutilans	• Joint lysis • Telescoping movement	

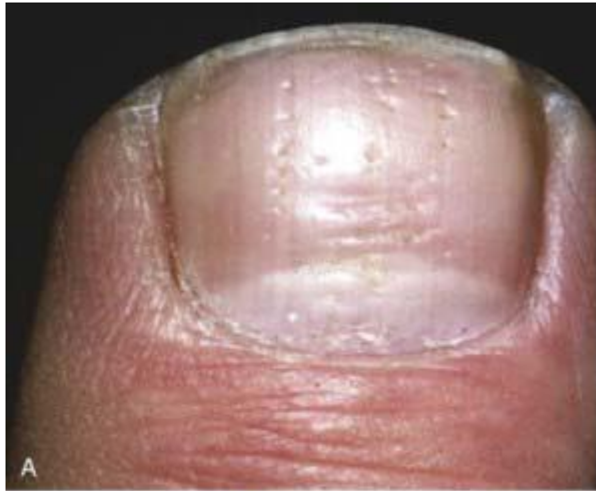
SIJ: sacroiliac joint

Gottlieb AB. Dermatol Nurs 2003;15:107–10; Harrison's Principles of Internal Medicine, 15th ed, 2001:2003–5





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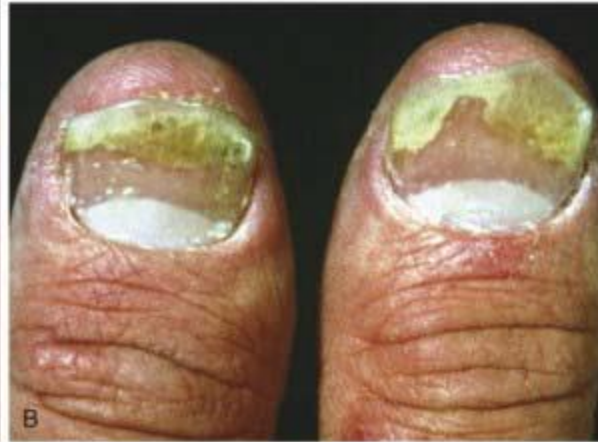
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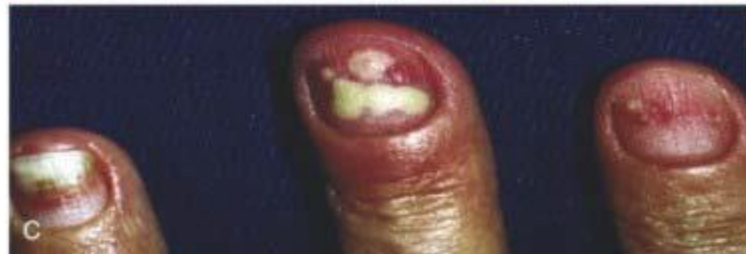
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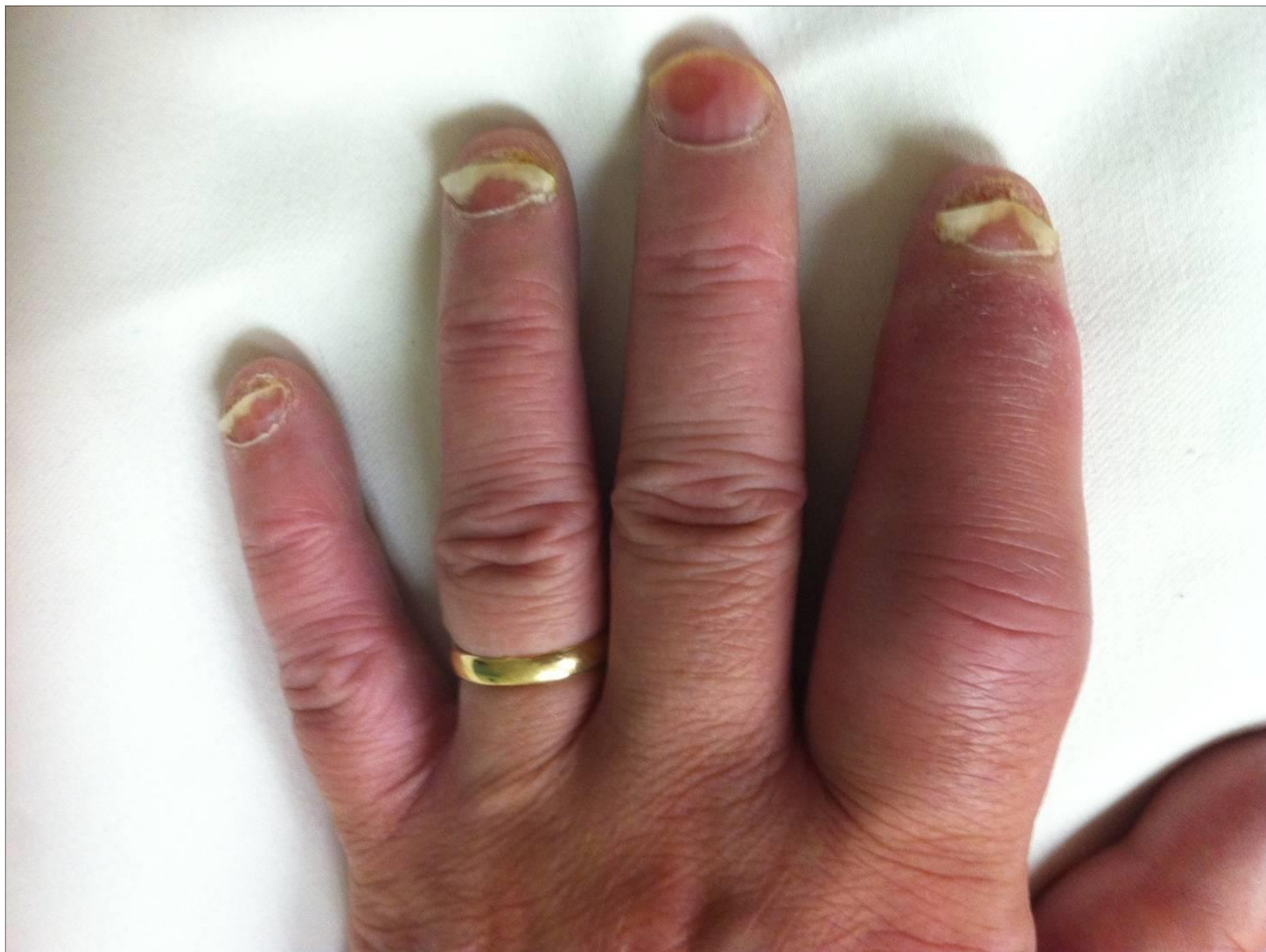
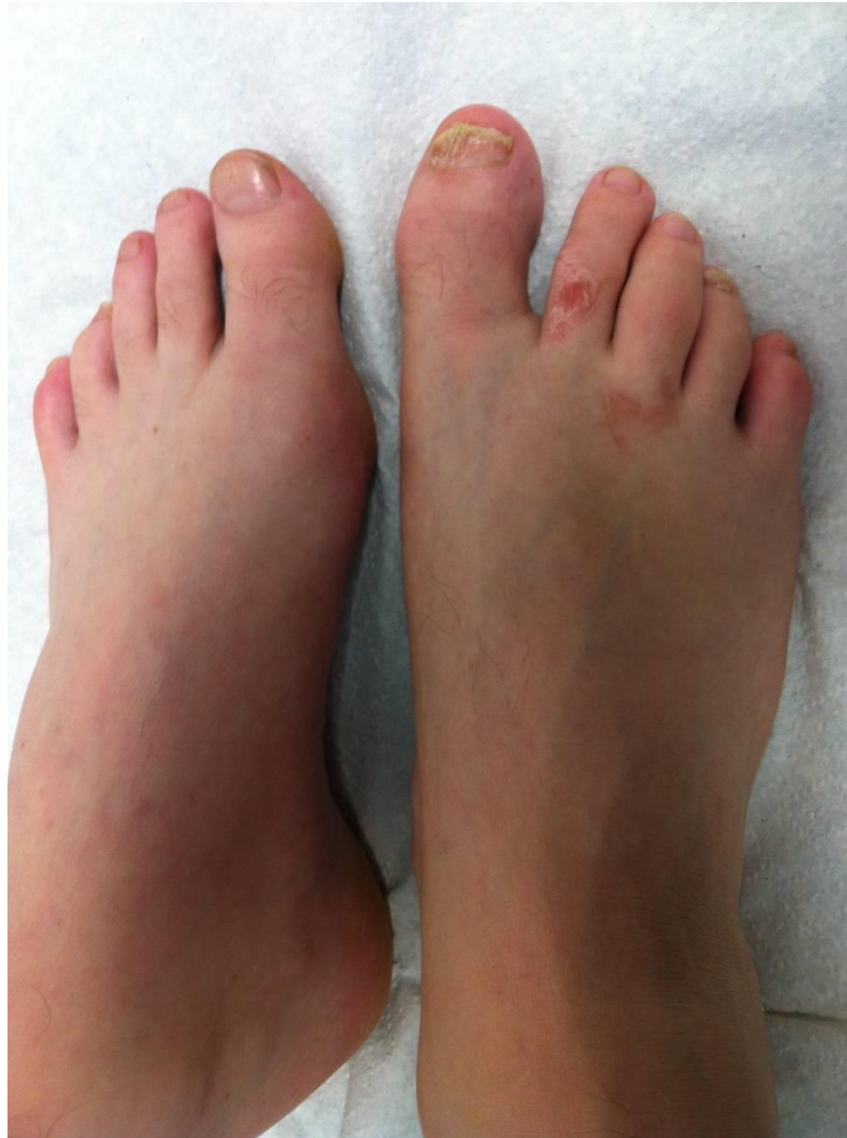
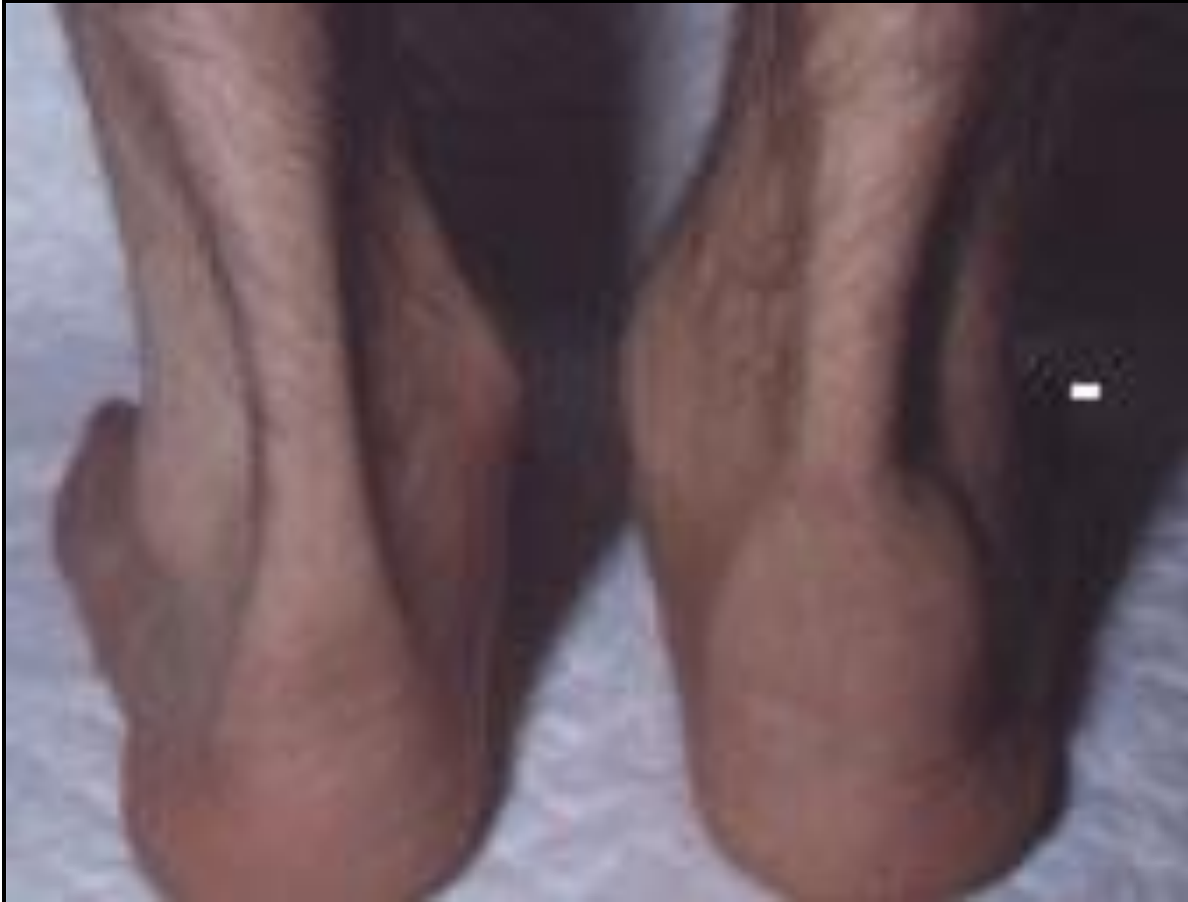






Arthritis associated with IBD

- 4-10% AS
- 23% sacroiliitis on x-ray
- 6% peripheral arthritis
- Type I - peripheral pauciarticular
- Type II - peripheral polyarticular
- Type III - sacroiliitis, spondylitis

Reactive arthritis

- Aseptic peripheral arthritis
- 1-4 weeks post infection
- Incidence 30-40 per 100 000 adults
- M:F 1:1
- 25% triggering infection unknown
- No diagnostic criteria
- Generally good prognosis
- 15-36% develop chronic arthritis

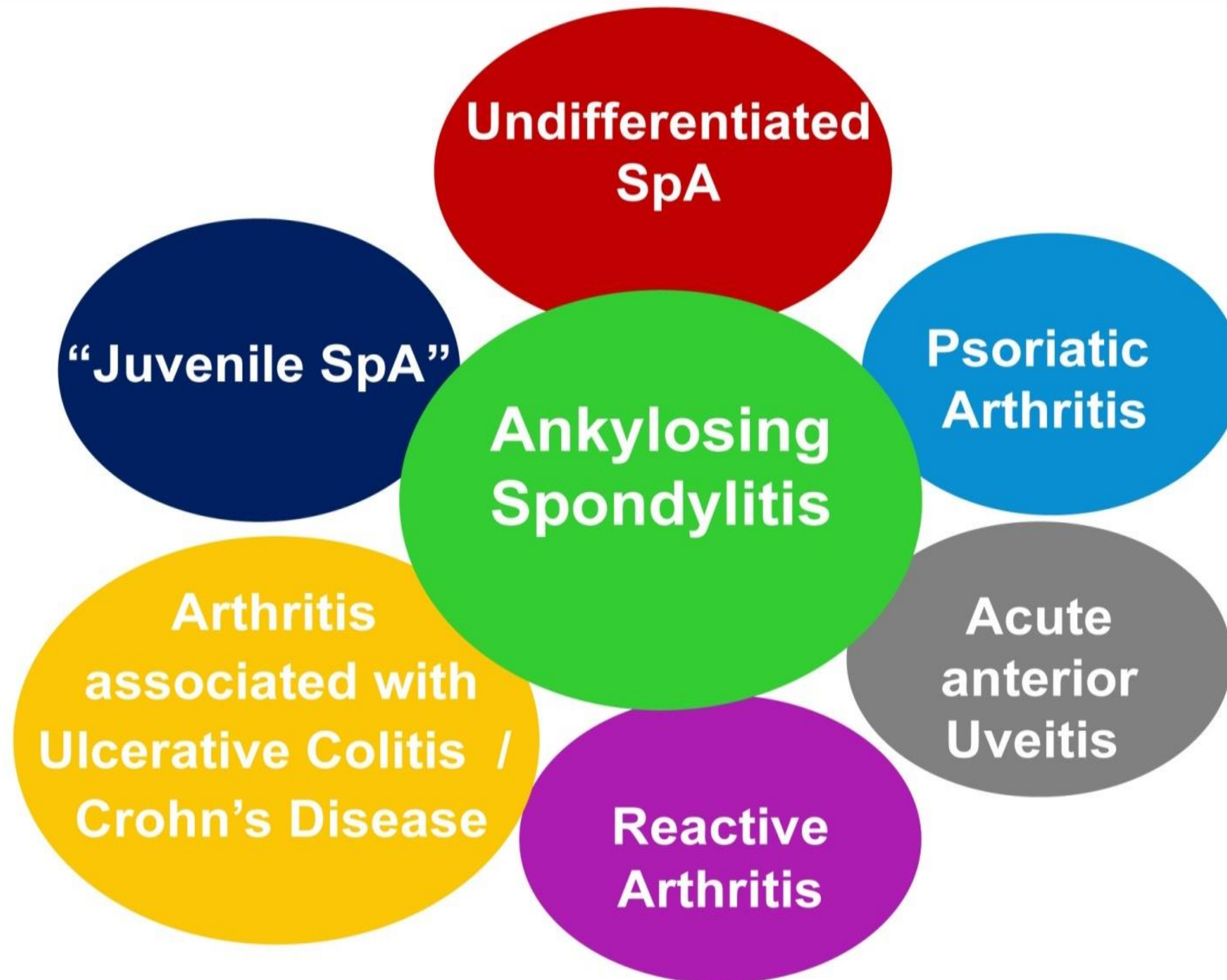
Undifferentiated SpA

- Features of SpA
- AS criteria not met
- No infection, psoriasis or IBD
- 42-68% progress to AS
- Predictors; sacroiliits, uveitis

Clinical assesment

- Inflammatory back pain
- Enthesitis or dactylitis
- Family history of SpA
- Psoriasis
- Inflammatory eye disease
- Bowel symptoms
- Preceding infections

Concept of Spondyloarthritis (SpA)



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ASAS Classification Criteria for Axial Spondyloarthritis

In patients with >3 months back pain and age at onset <45

Sacroiliitis on imaging Plus at least 1 SpA feature	**OR**	**HLA-B27 Plus 2 or more SpA features**

SpA features:

Inflammatory back pain
Arthritis
Enthesitis (heel)
Uveitis
Dactylitis
Psoriasis
Crohn's/Colitis
Good response to NSAIDs
Family hisotory SpA
HLA-B27
Elevated CRP

Rudwaleit M et al. Ann Rheum Dis 2009;68:777-783

ASAS classification criteria for peripheral spondyloarthritis

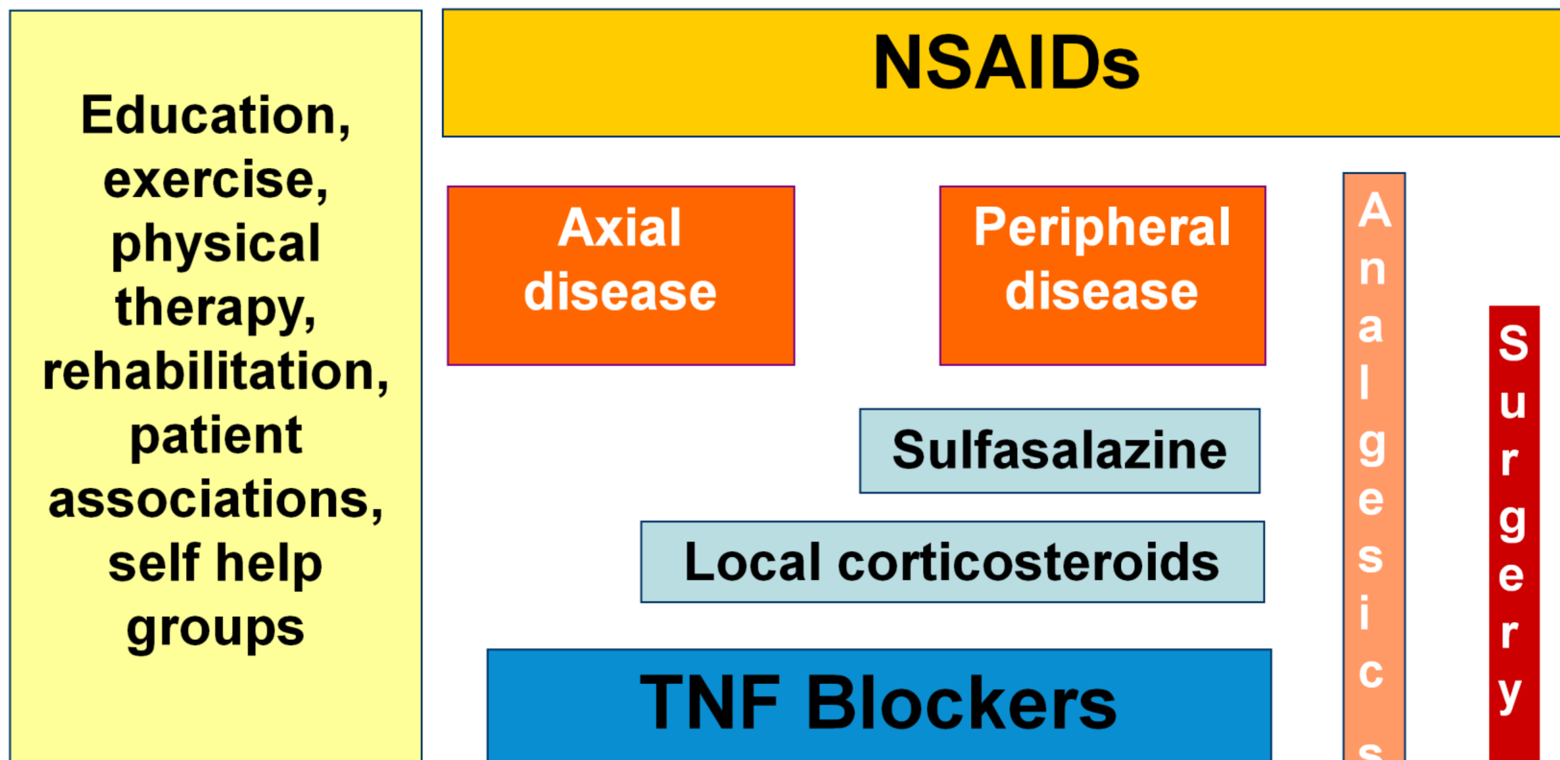
Arthritis or enthesitis or dactylitis

plus

≥ 1 SpA feature	OR	**≥ 2 other SpA features**
Uveitis		Arthritis
Psoriasis		Enthesitis
Crohn's/colitis		Dactylitis
Preceding infection		Inflammatory back pain (ever)
HLA-B27		Family history of SpA
Sacroiliitis on imaging		

Rudwaleit M et al. Ann Rheum Dis 2011;70:25-31

ASAS/EULAR Recommendations for the Management of Ankylosing Spondylitis



Zochling J et al. Ann Rheum Dis 2006;65:442-52 (with permission)

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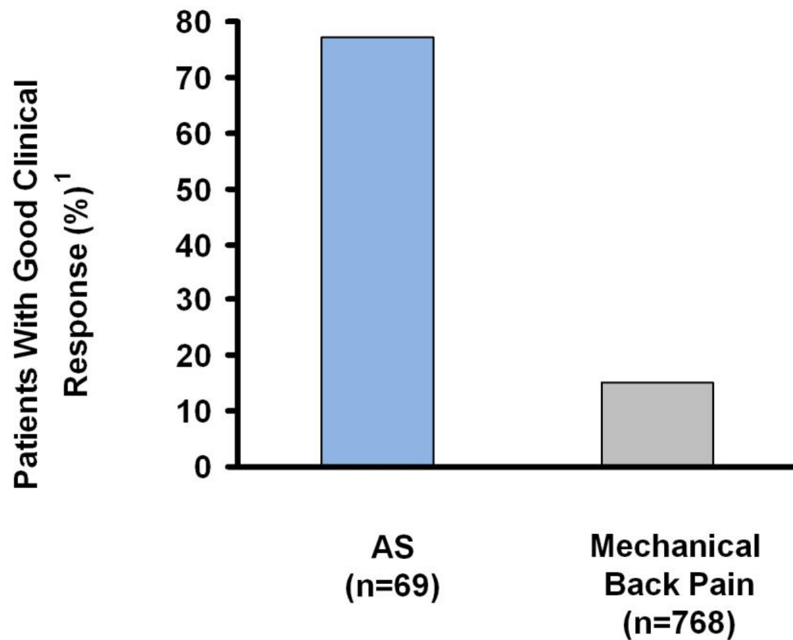
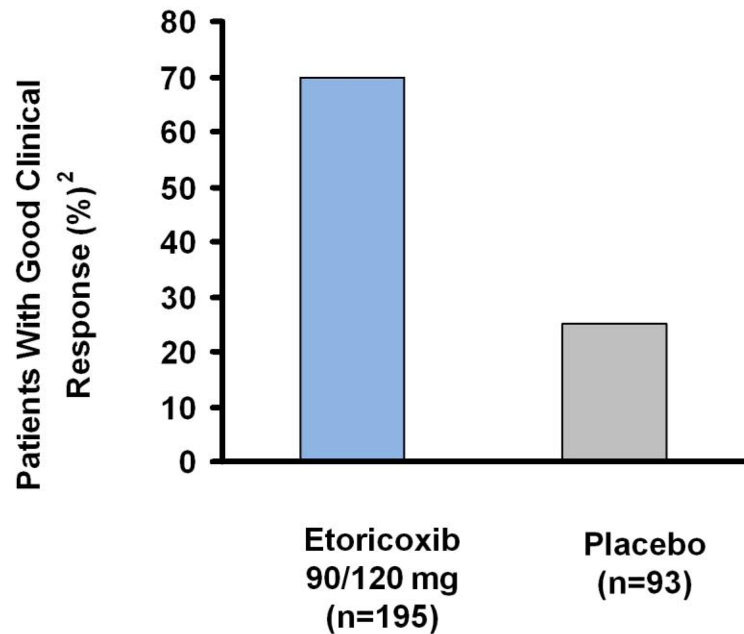
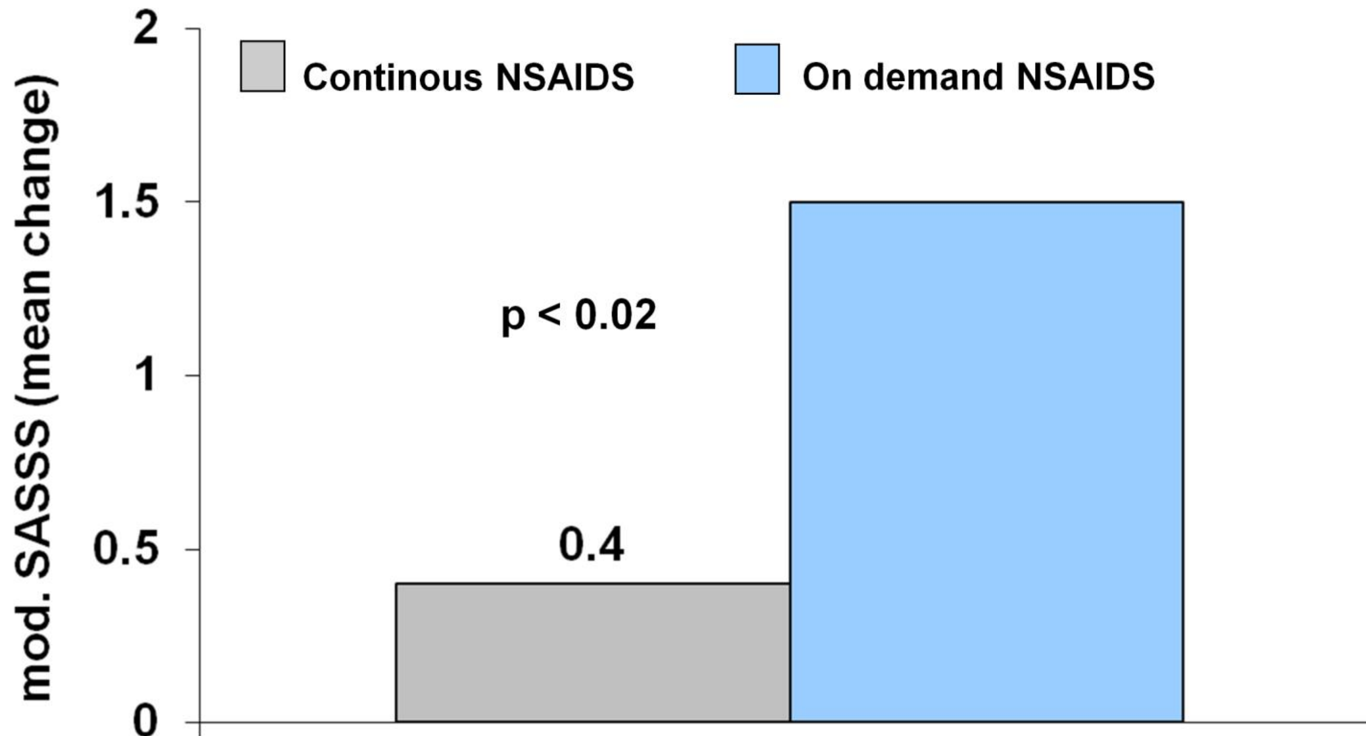
Efficacy of NSAIDs for the Treatment of Patients with Ankylosing Spondylitis





1. Amor B et al. Rev Rheum Engl Ed 1995;62:10-5
2. van der Heijde D et al. Arthritis Rheum 2005;52:1205-15

NSAID Therapy in Ankylosing Spondylitis: Radiographic Progression



* scored with blinded time sequence

Wanders A et al. Arthritis Rheum 2005;52:1756-65

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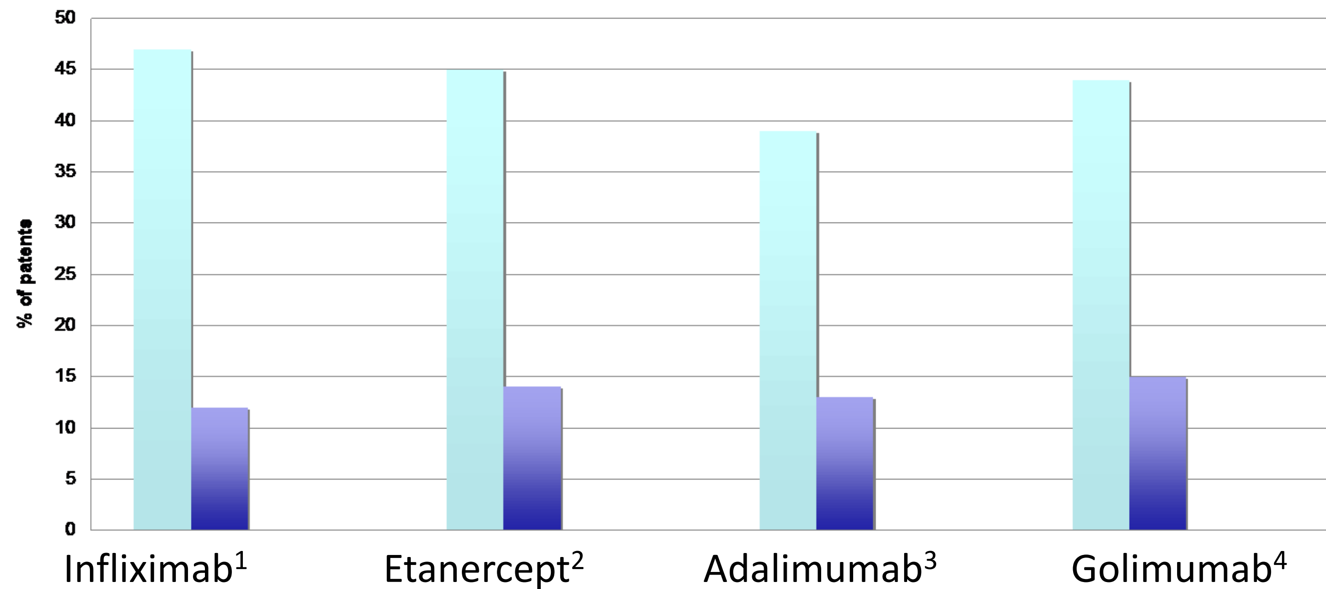
TNFα-Blockers for Ankylosing Spondylitis - ASAS40 response



1. *Van der Heijde D et al. Arthritis Rheum 2005; 52:582-91*
2. *Davis JC et al . Ann Rheum Dis 2005; 64:1557-62*
3. *Van der Heijde D et al. Arthritis Rheum 2006;54:2136-46*
4. *Inman RD et al. Arthritis Rheum 2008; 58:3402-12*

antiTNF funded for AS in NZ

- Adalimumab (Humira) 40mg sc q2/52
- Etanercept (Enbrel) 50mg sc q 1/52
- Infliximab(Remicade) 5mg/kg IV
  wks 0,2,6,6/52

- (Golimumab)

Pharmac criteria AS

- [ ] Patient has a confirmed diagnosis of ankylosing spondylitis 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 regime supervised by a physiotherapist

and

- [ ] Patient has limitation of motion of the lumbar spine in the sagittal and the frontal planes as determined by the following Bath Ankylosing Spondylitis Metrology Index (BASMI) measures: a modified Schober's test of less than or equal to 4 cm and lumbar side flexion measurement of less than or equal to 10 cm (mean of left and right)

or

- [ ] Patient has limitation of chest expansion by at least 2.5 cm below the following 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

BASDAI

Bath Ankylosing Spondylitis disease activity index

Please place a mark on each line below to indicate your answer to each question relating to **the past week**

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

   NONE ____ VERY SEVERE

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

   NONE ____ VERY SEVERE

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

   NONE ____ VERY SEVERE

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

   NONE ____ VERY SEVERE

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

   NONE ____ VERY SEVERE

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

   ____

   0 hrs ½ 1 1½ 2 or more hours

Garrett S et al. J Rheumatol 1994;21:2286-91

Rx of Axial vs. Peripheral Arthritis

- Axial disease
  - NSAIDS,Physical Rx,antiTNF
- Peripheral Joint Disease
  - NSAIDs,
  - IA Steroids, DMARDS: mtx, SSZ, Lef, CsA
  - antiTNF

Pharmac criteria PsA

- [ ] 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 15 swollen, tender joints

  or

- [ ] Patient has persistent symptoms of poorly controlled and active disease in at least four 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

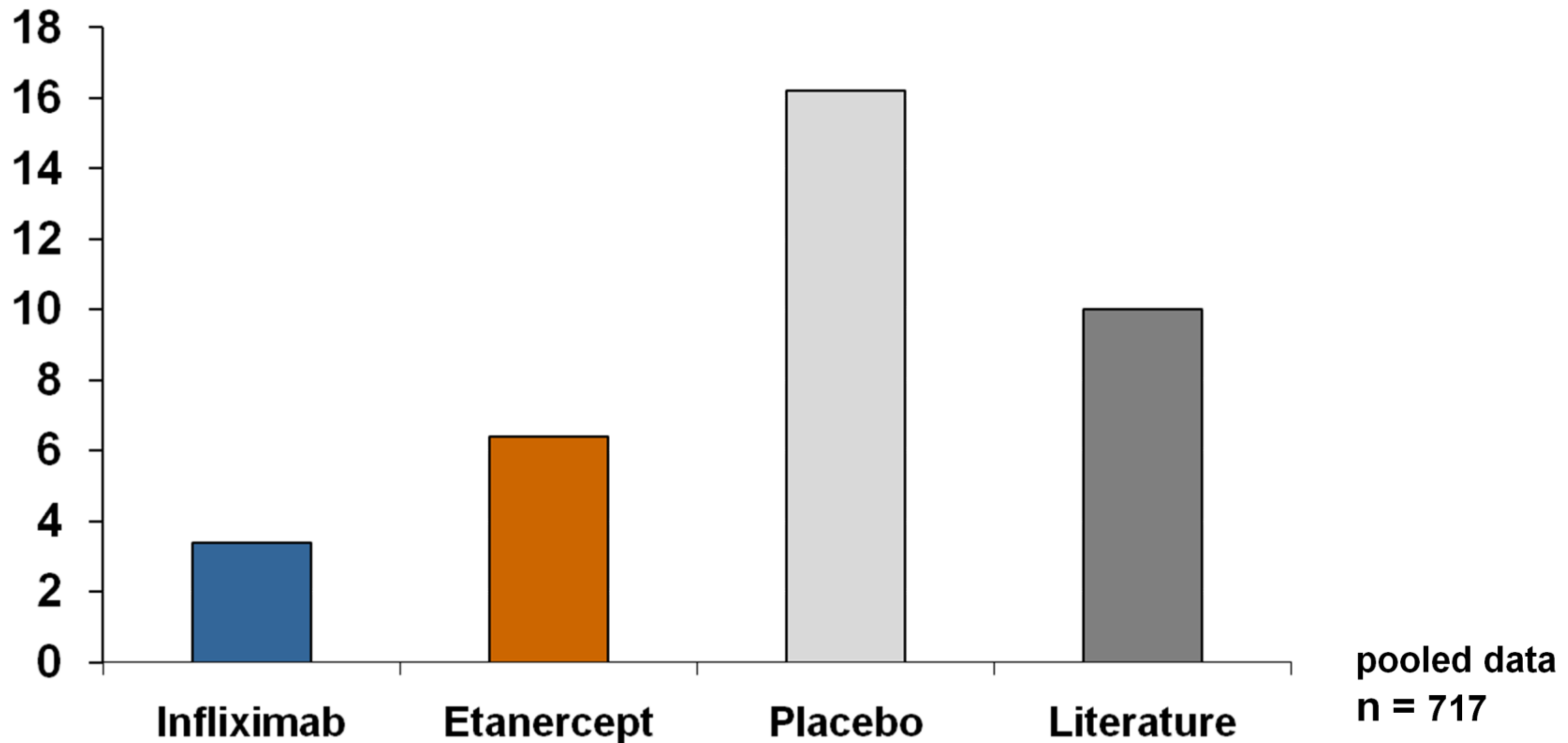
ACR 20-Response in Patients with Psoriatic Arthritis Treated with TNFα-Blockers*

*Different studies, no head to head comparison

	Week 14		Week 12		Week 12		Week 14	
	Infliximab[1]	Placebo	Etanercept[2]	Placebo	Adalimumab[3]	Placebo	Golimumab[4]	Placebo
%	58	11	59	15	58	14	51	9

1. Antoni C et al. Ann Rheum Dis 2005;64:1150-57
2. Mease P et al. Arthritis Rheum 2004;50:2264-72
3. Mease P et al. Arthritis Rheum 2005;52:3279-89
4. Kavanaugh A et al. Arthritis Rheum 2009;60:976-86.

Decreased Incidence of Acute Anterior Uveitis (AAU) in Patients on Anti-TNFα-Therapy



Braun J et al. Arthritis Rheum 2005;52:2447-51

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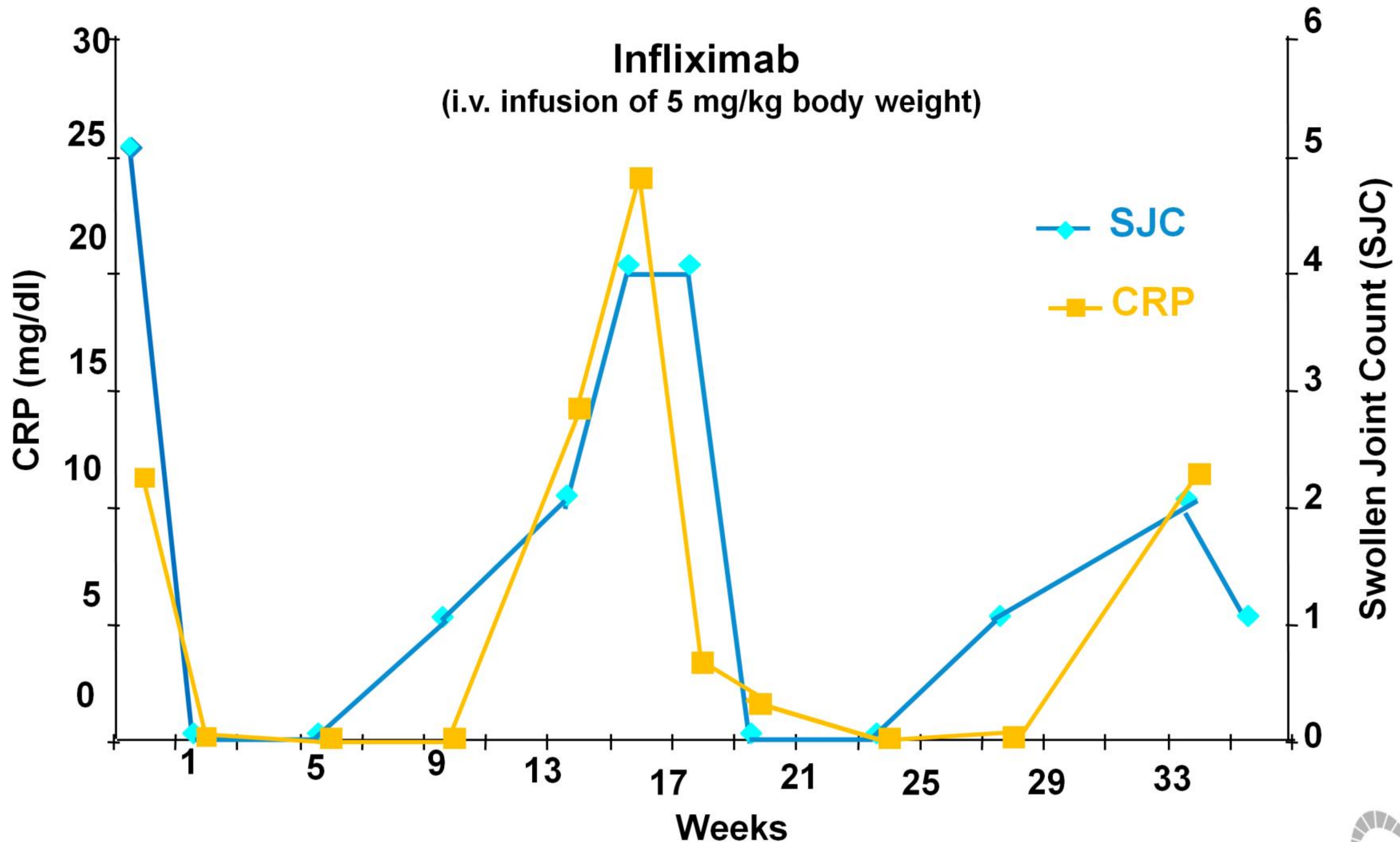
Effect of Anti-TNFα-Therapy on Articular Symptoms in Crohn's Disease



van den Bosch F et al. Lancet 2000;356:1821-2 (with permission)

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Who and When to Refer AxSpA

- Inflammatory back pain
  - Age at onset <40
  - Insidious onset
  - Improvement with exercise
  - No improvement with rest
  - Night pain (with improvement upon getting up)
  - HLAB27,CRP,FBC,Baseline pelvic XRAY
- Awaiting Appt:
  - trial of regular NSAIDs (+/-PPI), Physiotherapy

Who and when to refer pSpA

- Inflammatory arthritis +/-IBP
  - Uveitis
  - Dactylitis
  - Skin Psoriasis
  - Enthesitis(heel)
  - IBD
  - FamHx SpA

  - Good response to NSAIDs
  - Elevated CRP or low Hb, HLAB27 +

Summary

- SpA group of inflammatory arthropathies with a number of shared features
- Move away from traditional classification criteria with a focus on likely Rx responses
- Effective treatments available in primary care: NSAIDS should be trialled
- Effective treatments in secondary care: early referral may save unnecessary pain and disability via access to DMARDs and antiTNF