Understanding Spondylarthritis: Diagnosis and Treatment

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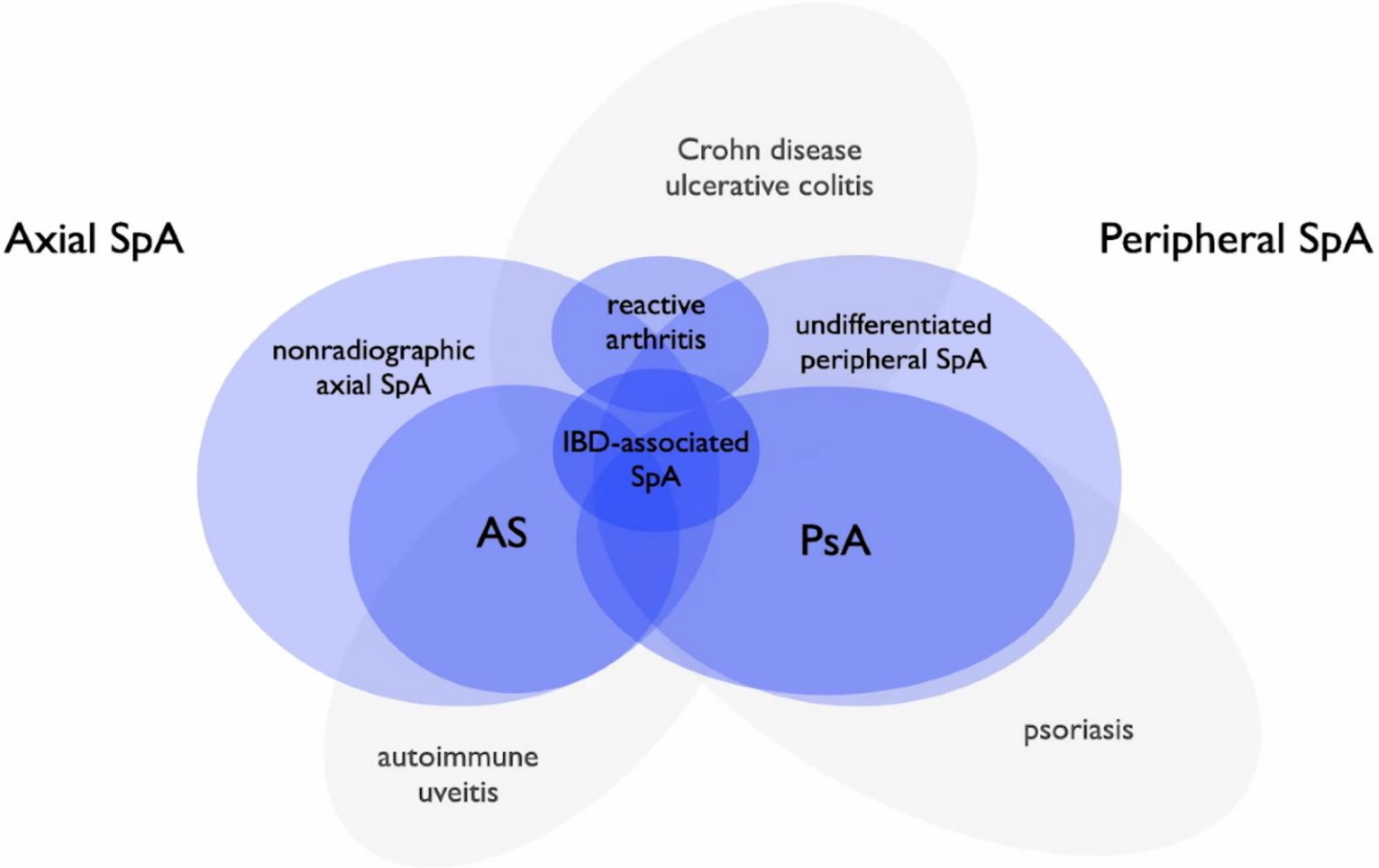
THIS IS MODERN MEDICINE


Crohn disease
ulcerative colitis
Axial SpA
Peripheral SpA
reactive
arthritis
nonradiographic
axial SpA
undifferentiated
peripheral SpA
IBD-associated
SpA
AS
PsA
psoriasis
autoimmune
uveitis

Types of Spondyloarthritis

IBD-associated

- 25% of IBD cases
- More common with extensive colonic disease
- Joint and bowel symptoms may not correlate

Reactive Arthritis

- Sterile inflammatory arthritis
- 1-4 weeks after infection
- More common after GU or GI infection
- >50% self limiting lasting 3-5 months
- 20% chronic course requiring immunosuppressive therapy

Psoriatic arthritis

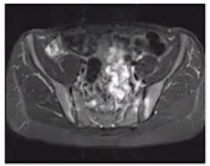
- Inflammatory arthritis in 20-30% of psoriasis
- Psoriasis precedes arthritis by ~10 years in 70%
- Symmetric polyarthritis, asymmetric oligoarthritis, distal arthritis, arthritis mutilans, axial

Axial SpA

- Ankylosing spondylitis

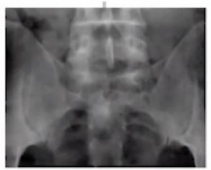
axial SpA

non-radiographic — radiographic (AS)



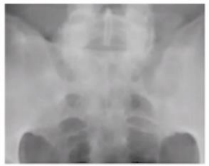
inflammatory back pain
other clinical SpA features

MRI sacroiliitis



inflammatory back pain
reduced spinal mobility

X-ray sacroiliitis
syndesmophytes



time [years]

mNY criteria 1984

ASAS axial SpA criteria 2009

ASAS Classification Criteria

Back Pain ≥ 3 months duration and age of onset < 45	
HLA-B27 positive plus ≥2 feature of SpA	Sacroiliitis on imaging plus ≥1 feature of SpA
Features of Spondyloarthritis • Inflammatory Back Pain • Arthritis • Heel enthesitis • Anterior uveitis • Psoriasis • Inflammatory Bowel Disease • Dactylitis • Good Response to NSAIDs • Family history of SpA • HLA-B27 • Elevated CRP	Sacroiliitis on imaging • Active inflammation on MRI highly suggestive of sacroiliitis associated with SpA ('ASAS positive MRI') • Definite radiographic changes according to modified New York criteria

ASAS = Assessment of SpondyloArthritis international Society

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History

- Inflammatory back pain
- Peripheral joints
- Ocular
- Skin
- GI symptoms
- Family history
- (cardiac, renal, pulm)

- Age: <40-45
- Onset: insidious
- Morning stiffness: >60 min
- Nocturnal pain: frequent
- Effect of exercise: improvement
- Effect of rest: exacerbation
- Back motility: loss in all planes
- Alternating buttock pain

Examination

Axial

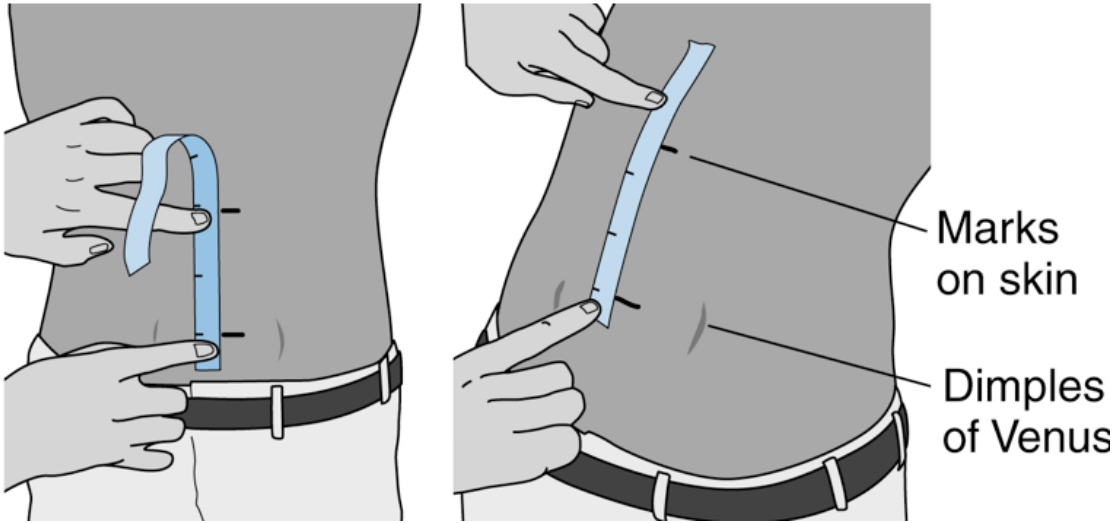
- Spinal Flexion
- Loss of lordosis
- Occiput-to-wall distance
- Chest expansion

Peripheral

- Peripheral joints
- Enthesitis
- Dactylitis

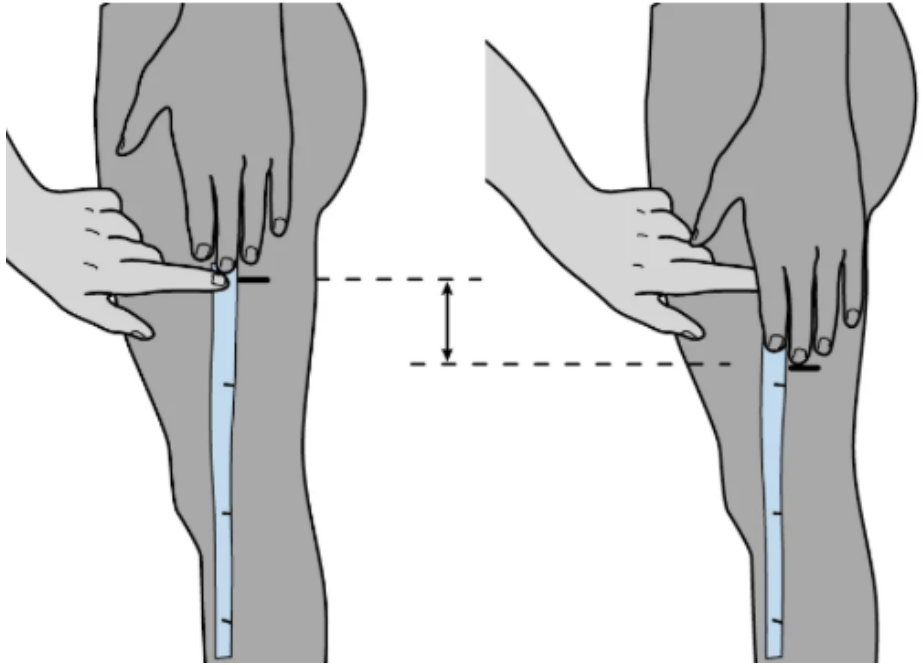
Examination

Modified Schober test

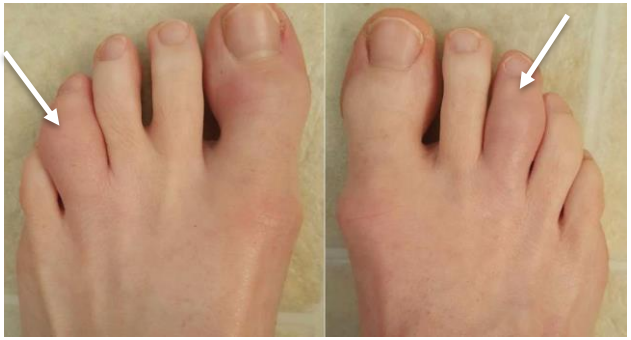


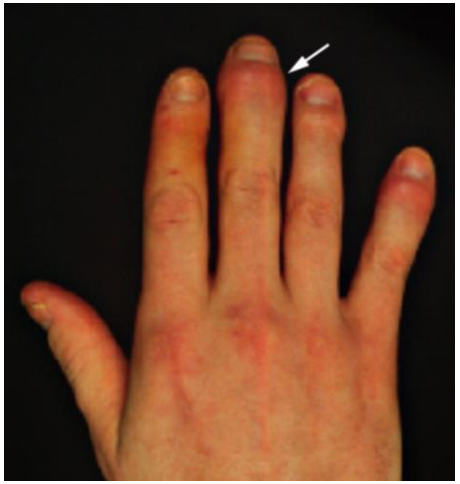
Examination

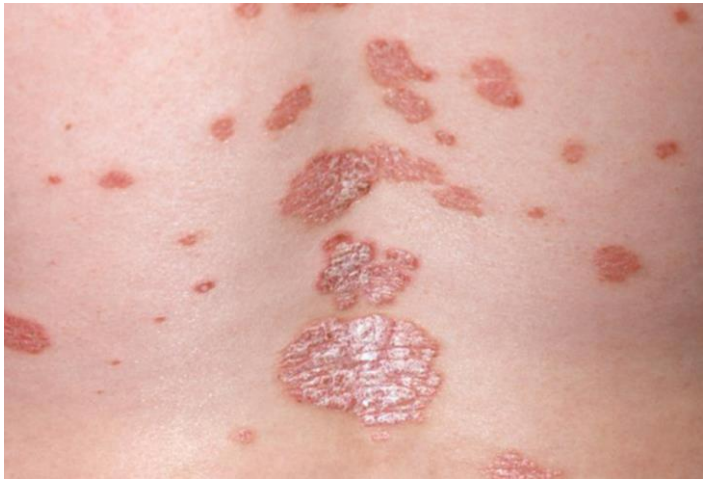
Lateral flexion

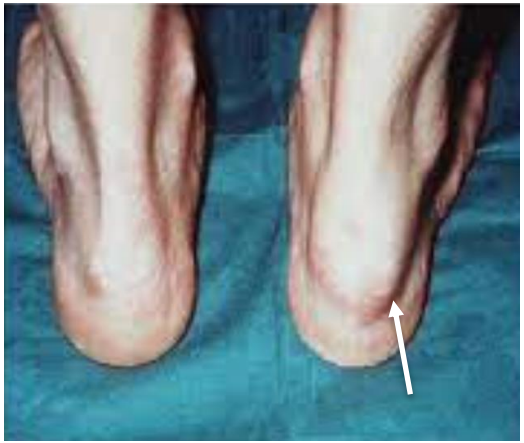


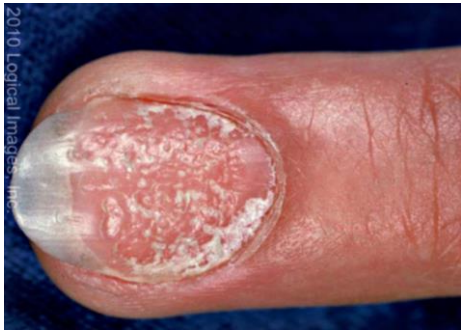
Examination











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Investigations

Labs

General labs: FBC, liver enzymes, kidney function

ESR/CRP

HLA-B27

RF and CCP

Pre-DMARD screening

Imaging

X-ray

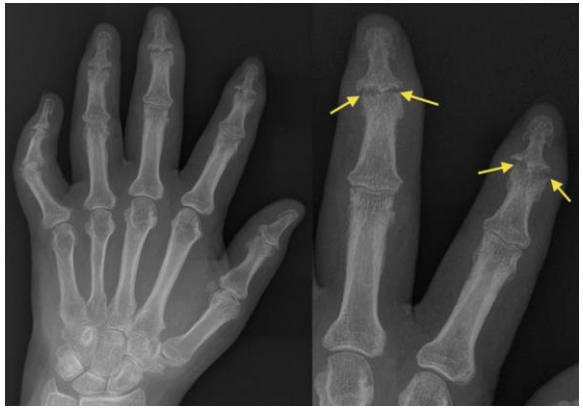
- Hand and foot baseline
- SI joints - Ferguson view
- Spine – shiny corner sign, squaring of vertebral bodies, syndesmophytes, fusion

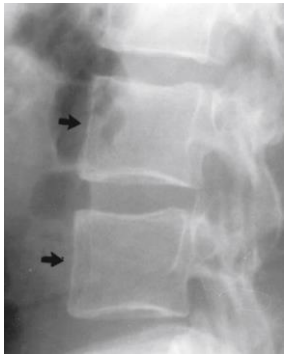
MRI

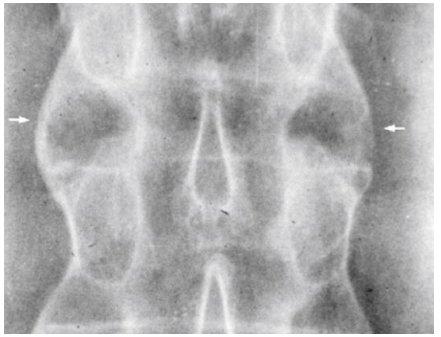
- Detection of early inflammatory signs (BME, synovitis, capsulitis)
- Structural changes (erosions, ankylosing)

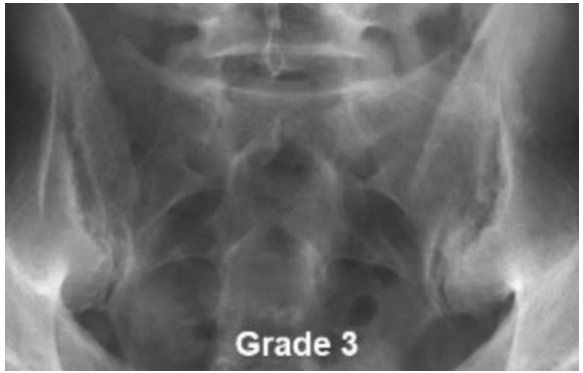
Ultrasound with Doppler

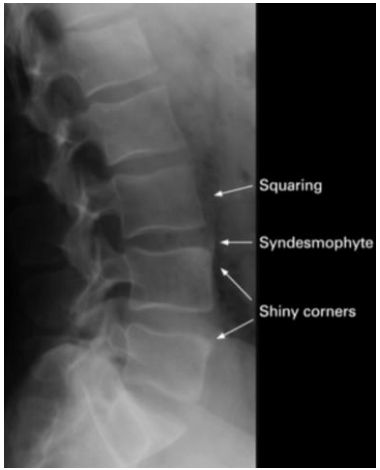
Investigations

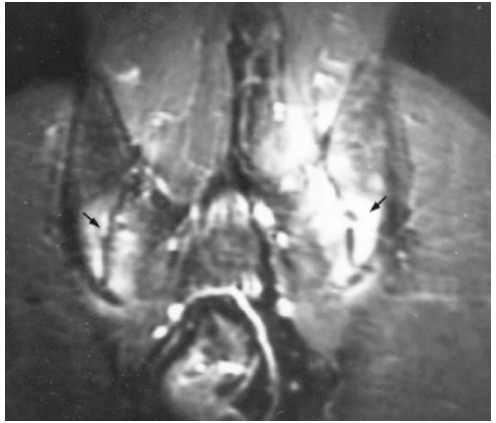












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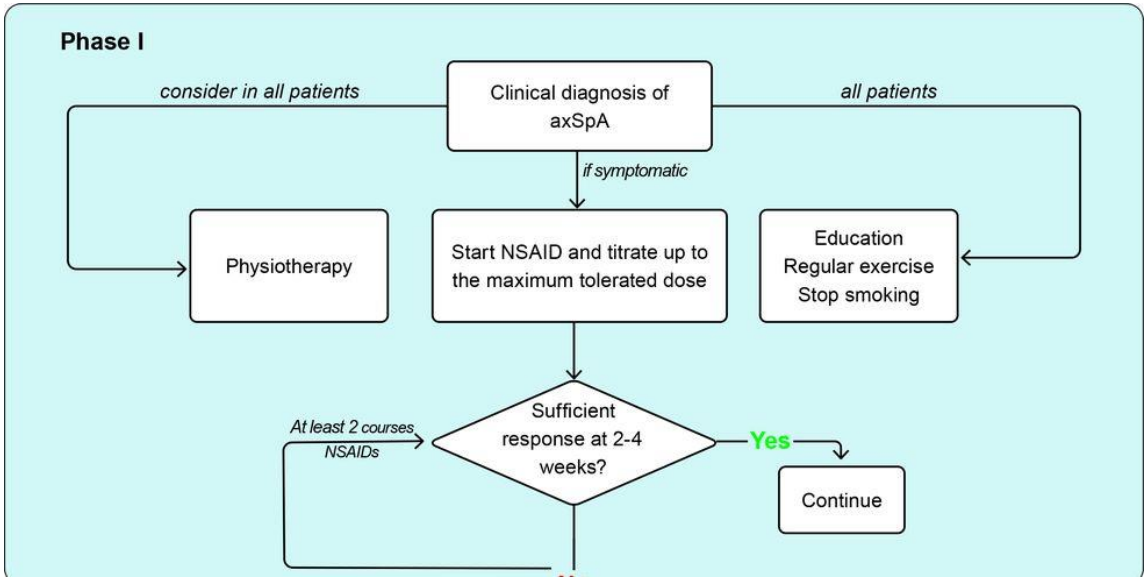
Management

NSAID, oral glucocorticoids, intraarticular injection

Traditional DMARDs/oral treatments
- Methotrexate
- Sulfasalazine
- Leflunomide
- Cyclosporin
- Apremilast

Biologic DMARDs
- TNFi
- IL-17i
- IL12/23i
- Abatacept
- JAKi

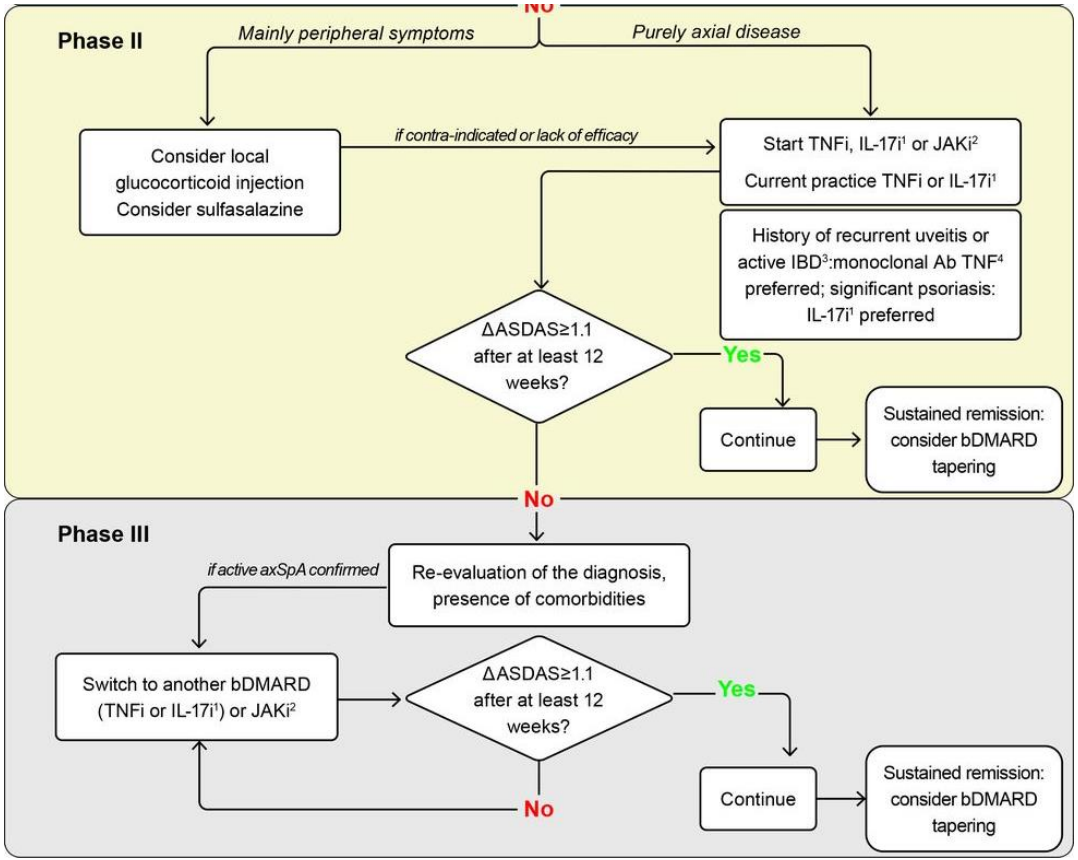
Management



- NSAIDs + PT are first line
- No role for cDMARDs
- Consider local injections

Sofia Ramiro et al. Ann Rheum Dis 2023;82:19-34

Management



- Start TNFi, IL-17i or JAKi
- uveitis or IBD → TNFi preferred
- PsO → IL-17i preferred
- If disease activity remains high switch to another class of bDMARD

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Case 1

- 63 yo M with history of **psoriasis** p/w 4/52 **joint pain**
- ROS: use related LBP, no IBD symptoms, no infections and no eye symptoms
- PMH: mild psoriasis x20 years, HTN, HLD, active smoking, past IVDU
- SH: retired, active with yard work and gardening
- Exam:
    - Active PsO on knees and behind ears,
    - Joints: **L wrist** pain/swelling/reduced ROM, **R 4th digit** dactylitis
    - US exam L wrist active synovitis +Doppler and effusion + and R 4th digit tenosynovitis
- Labs: neg RF/CCP, ↑CRP, ↑PLT
- Treatment:
    - NSAIDs, local GC injection
    - Infliximab → palmoplantar pustulosis reaction
    - Steroids PO taper + Secukinumab (IL-17i)

Case 2

- 45 yo F presenting with 11/12 worsening **back pain** (2 hours of AM stiffness, nighttime awakening, good NSAIDs, regular yoga/stretching)
- PMH: x2 c-section, **uveitis** x2 (last 5 years ago)
- ROS: no peripheral arthritis, no dactylitis, no GI symptoms
- FH: PsO in sister
- Exam: Reduced spinal flexion in both planes
- Investigations: normal ESR, CRP, +HLAB27, normal SIJ and spine x-ray → MRI SIJ +BL sacroiliitis
- Treatment
    - Continue exercise
    - Failed NSAIDs
    - Any TNFi (excluding etanercept)
    - Adalimumab

Take Home Points

- SpA is a clinical diagnosis
- Ask about all common SpA features
- Look for PsO in nails
- Sacroiliitis, dactylitis and enthesitis are hallmarks of SpA
- Negative HLA-B27 is good for ruling out axSpA

Thank You

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