Early Inflammatory Arthritis

Identifying and triaging the right people for/to the right pathway/service

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Overview

- Background
- Referral process
- National guideline
- The national EIA audit
- How we can improve EIA care

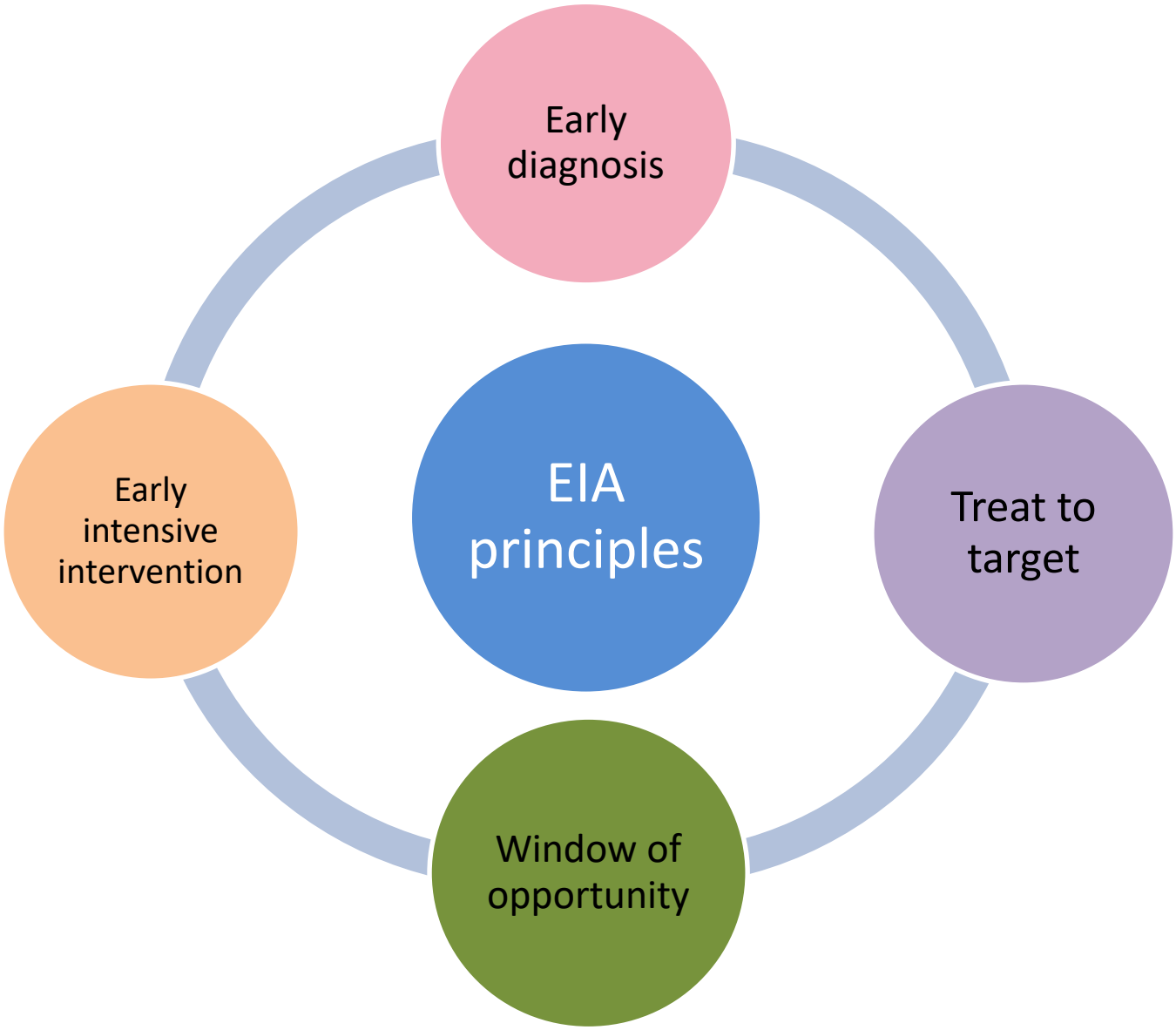
Background

- Rheumatoid arthritis is an inflammatory disease that typically affects the small joints

- Systemic disease

- Medical management aims:

- relieve symptoms
- modify the progress of the disease and the functional impairment associated with it
- reduce the risk of potential comorbidities


Early diagnosis
Treat to target
Window of opportunity
Early intensive intervention
EIA principles

EIA referral

- Refer **any** adult with **suspected persistent synovitis** of **undetermined cause** (NG100)

- *Small joints affected*
- *>1 joint affected*
- *3 month delay*

- EIA service/dedicated clinic

EIA referral

- Letter vs proforma
- Investigations (bloods including RhF/CCP/ANA, inflammatory markers; x-rays)
- Refer ***before*** results of investigations if there is obvious **synovitis of small joints**

NICE quality statements

QS1: GP referral time

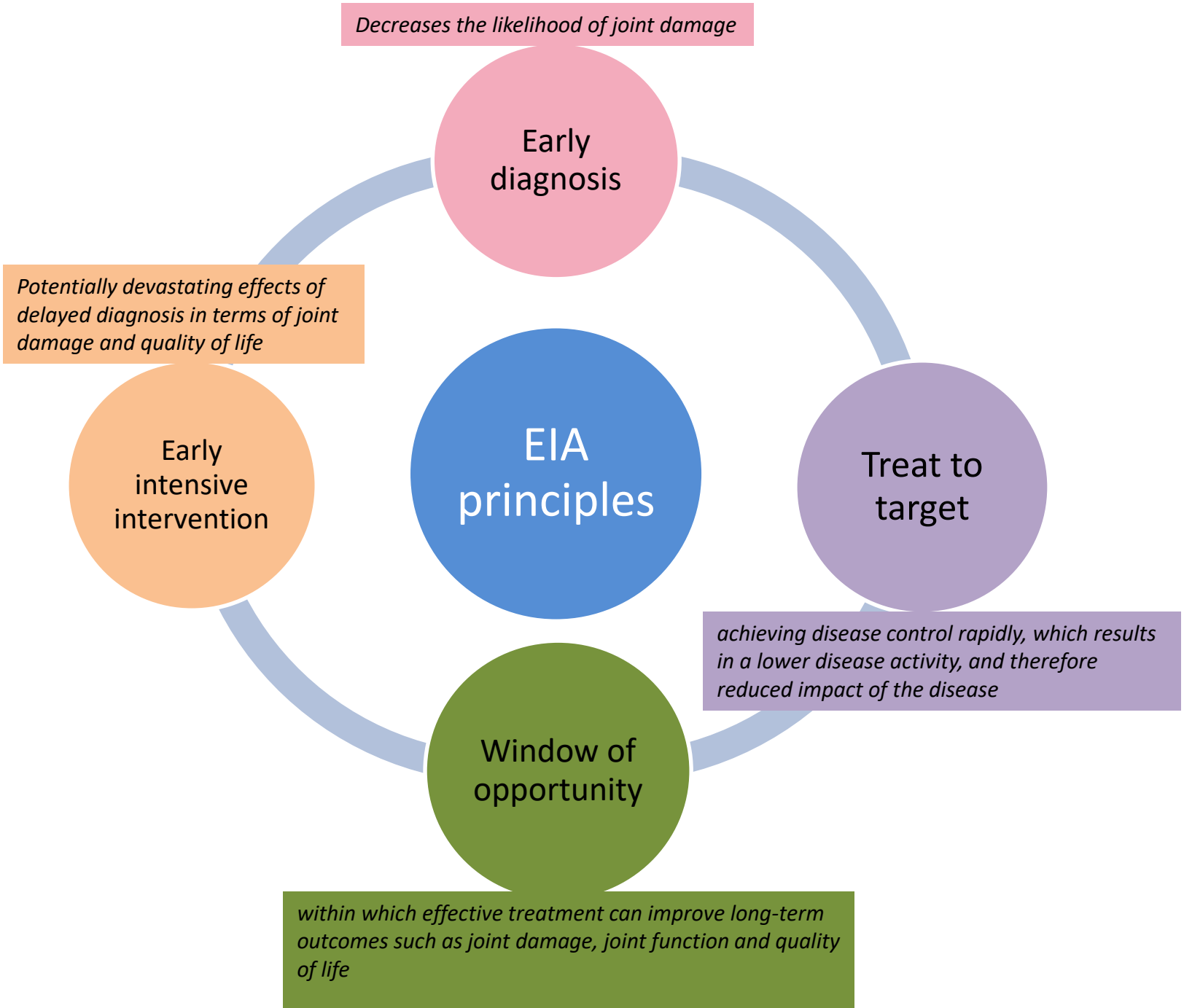
Patients with suspected synovitis referred within 3 days of presentation

QS2: Waiting time

*Patients seen in rheumatology **within 3 weeks** of referral*

QS3: Time to DMARD

*Treatment initiation (DMARD monotherapy, DMARD combination therapy and steroids) **within 6 weeks** of referral*


Decreases the likelihood of joint damage
Early diagnosis
Potentially devastating effects of delayed diagnosis in terms of joint damage and quality of life
Early intensive intervention
EIA principles
Treat to target
achieving disease control rapidly, which results in a lower disease activity, and therefore reduced impact of the disease
Window of opportunity
within which effective treatment can improve long-term outcomes such as joint damage, joint function and quality of life

ACR/EULAR (2010) Classification Criteria for Rheumatoid Arthritis

Symptom Duration (as reported by patient) Points

- < 6 weeks 0
- > 6 weeks 1

Joint Distribution Points

- 1 large joint 0
- 2-10 large joints 1
- 1-3 small joints (with or without involvement of large joints) 2
- 4-10 small joints (with or without involvement of large joints) 3
- > 10 joints (at least 1 small joint) 5

Serology Points

- RF- and CCP- 0
- Low RF+ or CCP+ 2
- High RF+ or CCP+ 3

Acute Phase Reactants Points

- Normal ESR or CRP 0
- Abnormal ESR or CRP 1

National EIA audit phase 1
Key findings

- 1 in 6 patients were referred by their GP to rheumatology services within 3 days, **(NICE Quality Standard 1**); one quarter of patients, however, waited more than 3 months to be referred

- 1 in 4 patients were seen by rheumatology services within 3 weeks of referral **(NICE Quality Standard 2)**

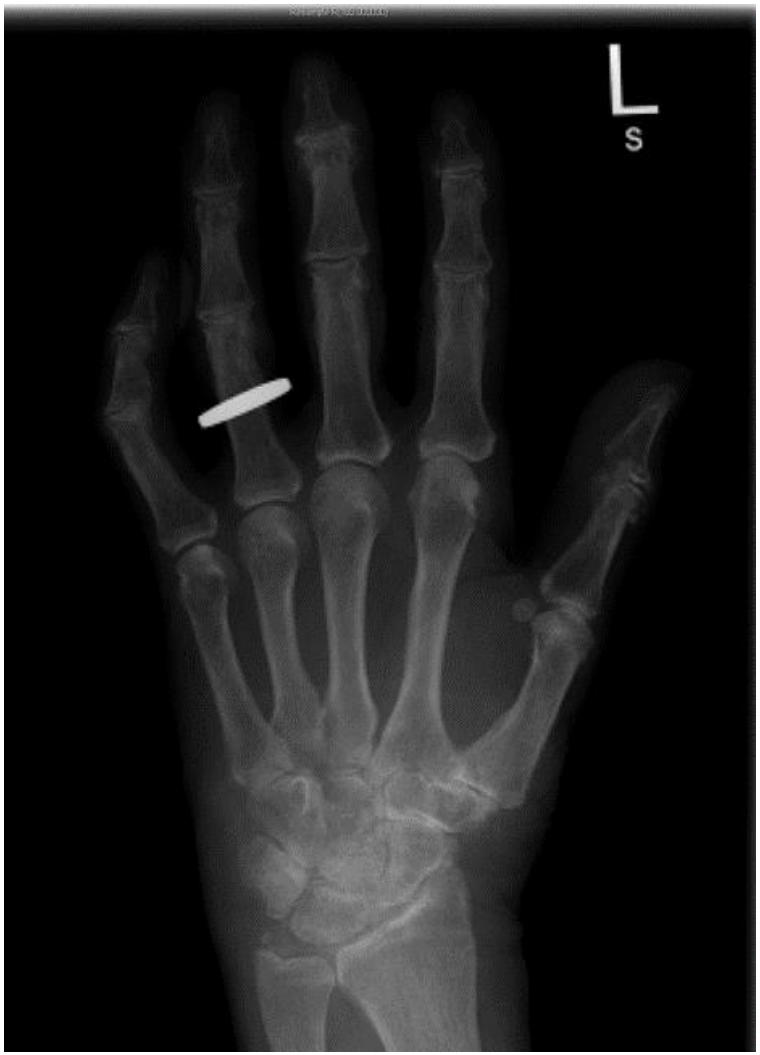
- Just over half of patients were treated with disease modifying drugs within 6 weeks, irrespective of whether they were seen within 3 weeks of referral **(NICE Quality Standard 3).**

Improving EIA care

- Synovitis small joint, no pre-existing IA -> refer on the day and request blood tests
- Patients who don't have IA often get discharged at first EIA appointment
- One stop shop EIA clinic (diagnosis + treatment initiation at first appointment)
- No EIA service without primary care!

Case – acute bilateral hand and wrist polyarthritis in elderly patient

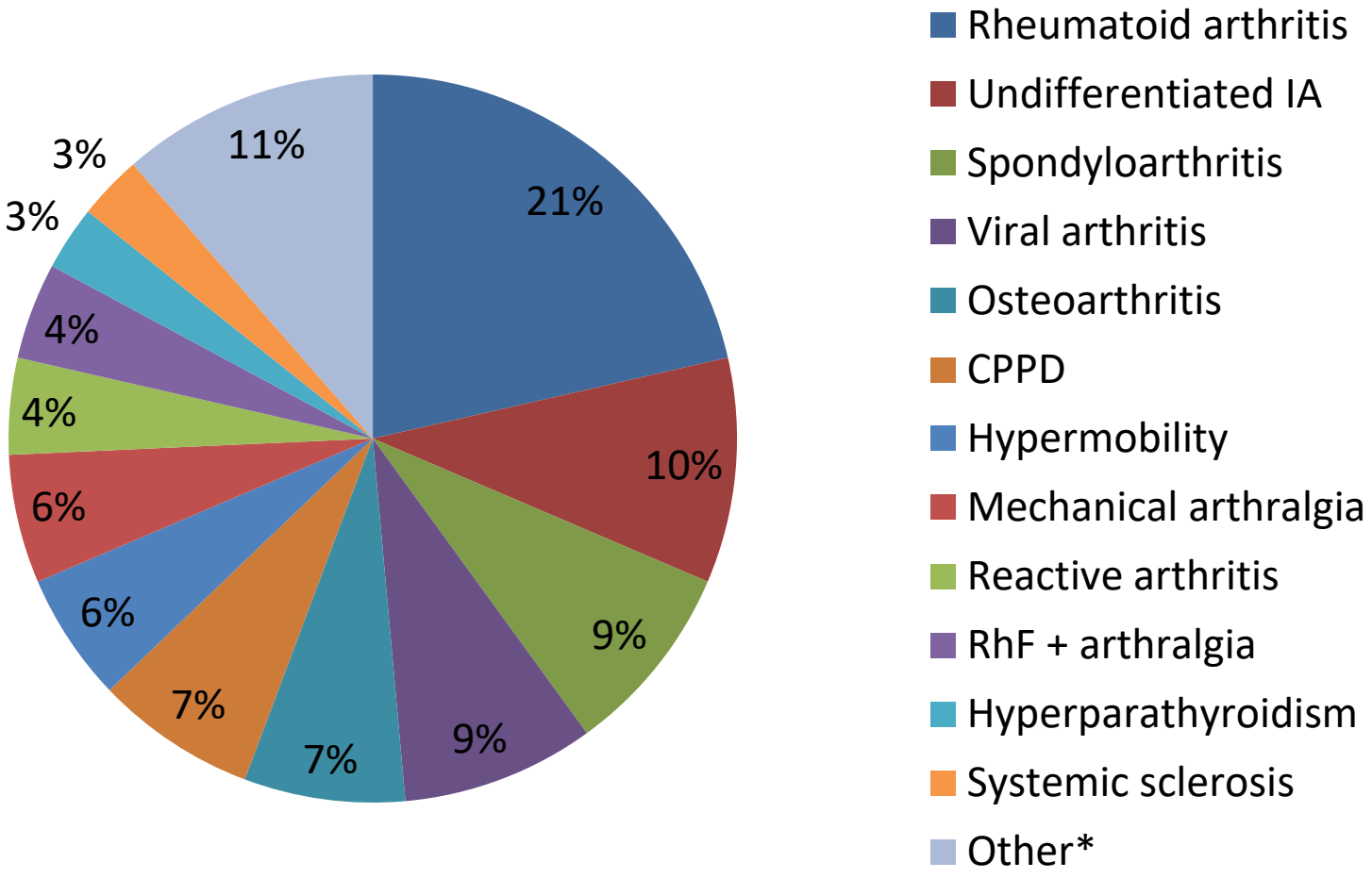
- 87 yo F with acute left hand swelling, followed by right hand swelling
- ESR and CRP in 30s
- RhF negative



EIA clinic Dec 2017 – Feb 2018

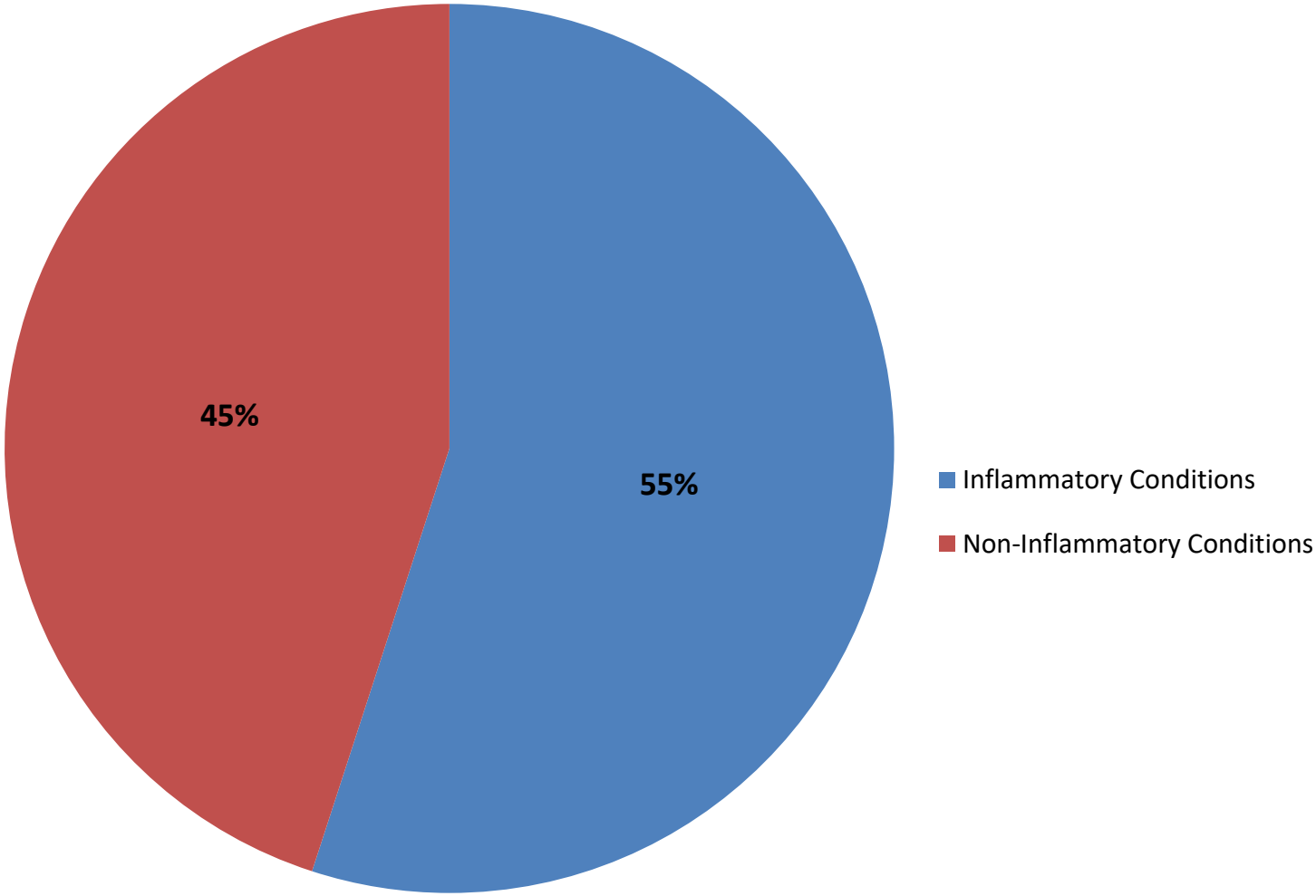
78 new patients (2 DNA)

78% inflammatory, 22% non-inflammatory/miscellaneous



**SLE/Sjogren's/undifferentiated CTD/sarcoid/gout/PsA/mechanical back pain/pigmented villonodular synovitis: 1 each*

EIA clinic Jan-Mar 2016



Resources

E-learning module and EIA toolkit

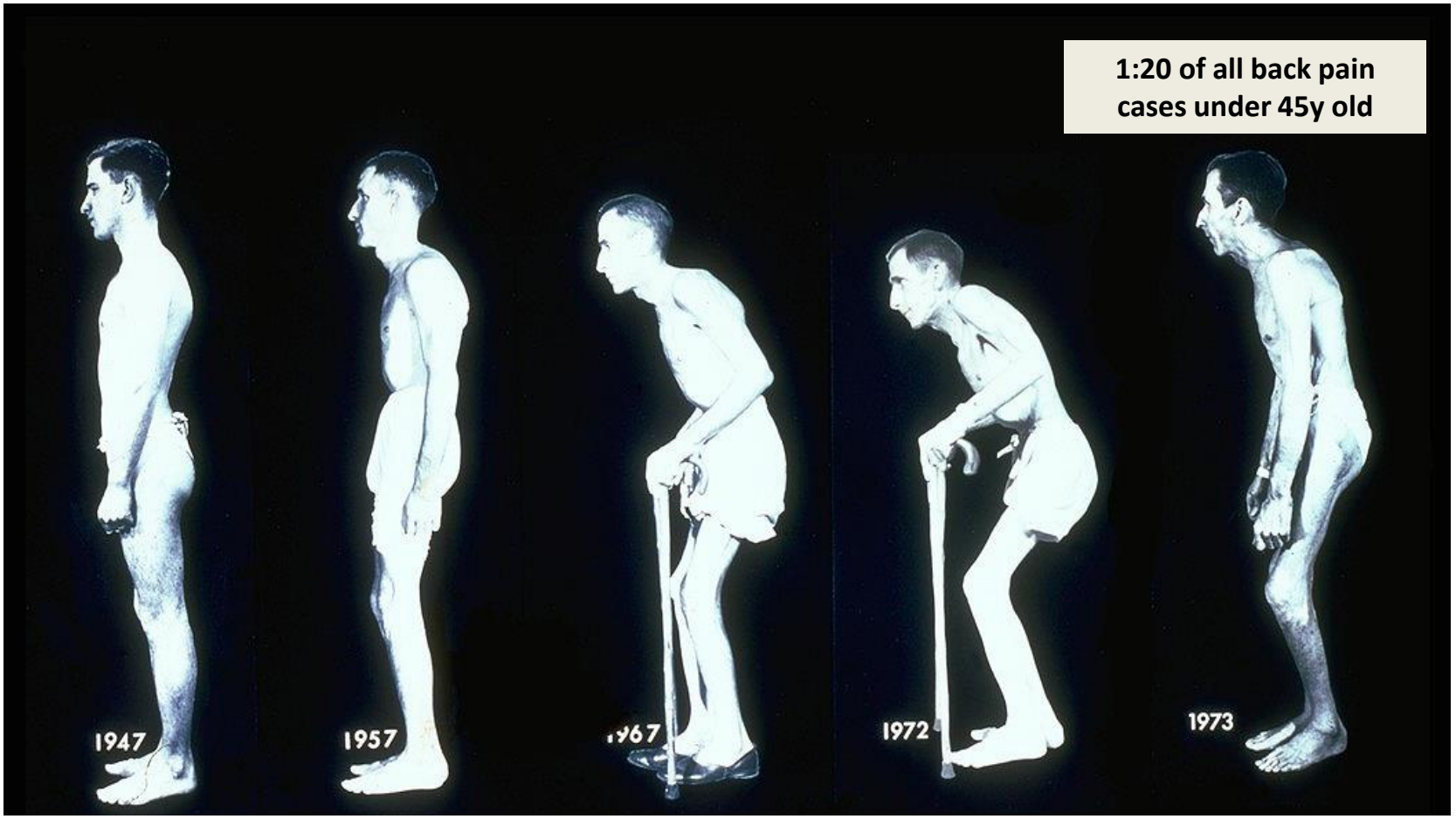
https://arthritisaudit.org.uk/pages/primcareres

NICE quality standards 33

https://www.nice.org.uk/Guidance/QS33

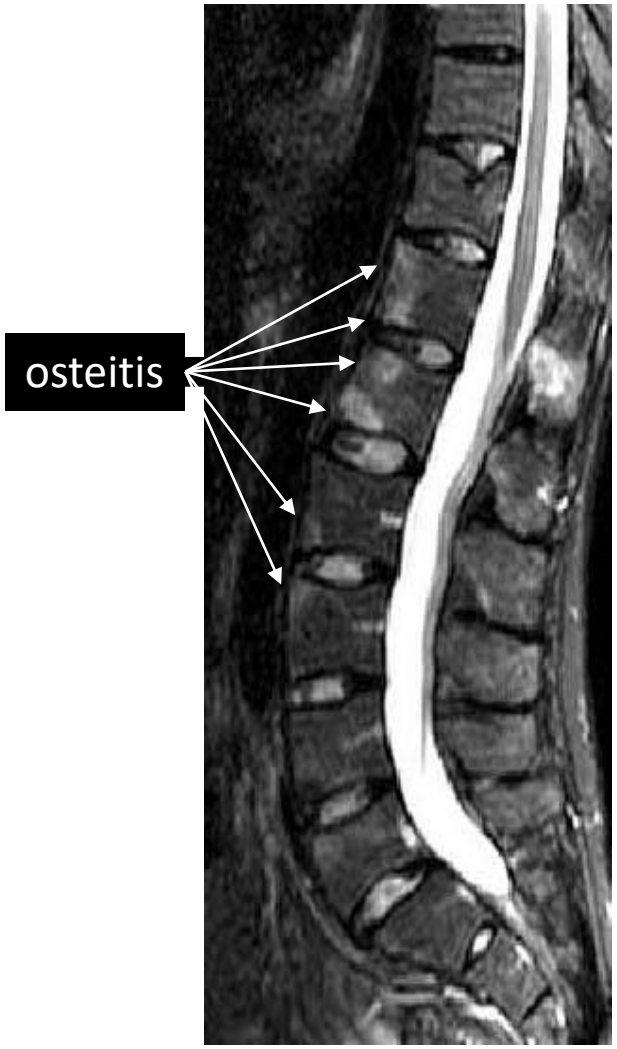
Spondyloarthritis
(incl ankylosing spondylitis)

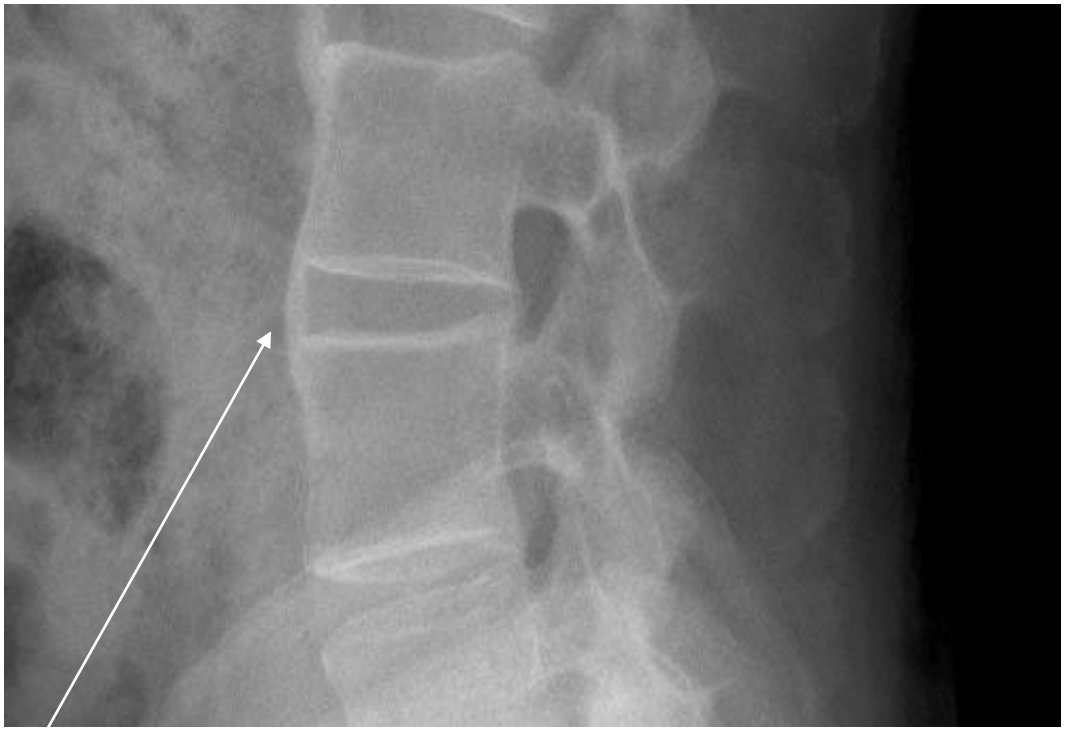
Dr Gavin Clunie MD FRCP



The prevalence of Spondyloarthritis has been reported from population studies to be up to 1.4% (1 in 70).
A German study estimated a prevalence of AS of 0.7% (1 in 150) taking into account the male:female ratio of 2–3:1.

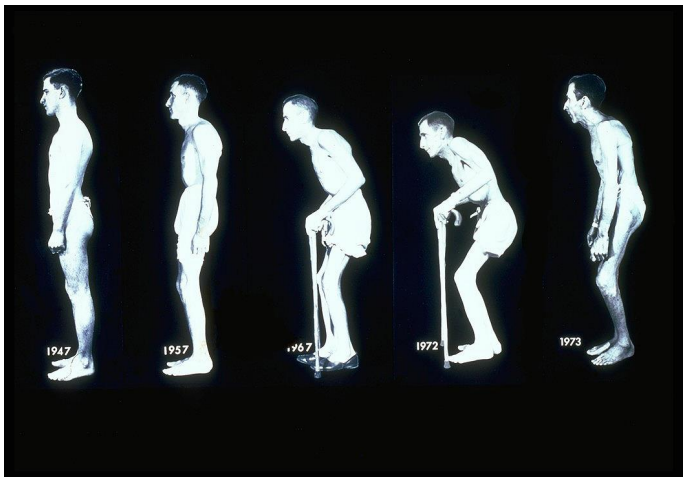
Spondyloarthritis
(incl ankylosing spondylitis)





Marginal (or paramarginal e.g. DISH)

Long-term features of untreated, unmanaged Spondyloarthritis



- Chronic disabling pain;
- Spinal restriction;
- Fatigue;
- Loss of work;
- Loss of independence;
- Osteoporosis and fragility fracture;
- Excess Healthcare usage / Social care costs;
- Non-musculoskeletal complications: eye, cardiac, renal, Gastrointestinal

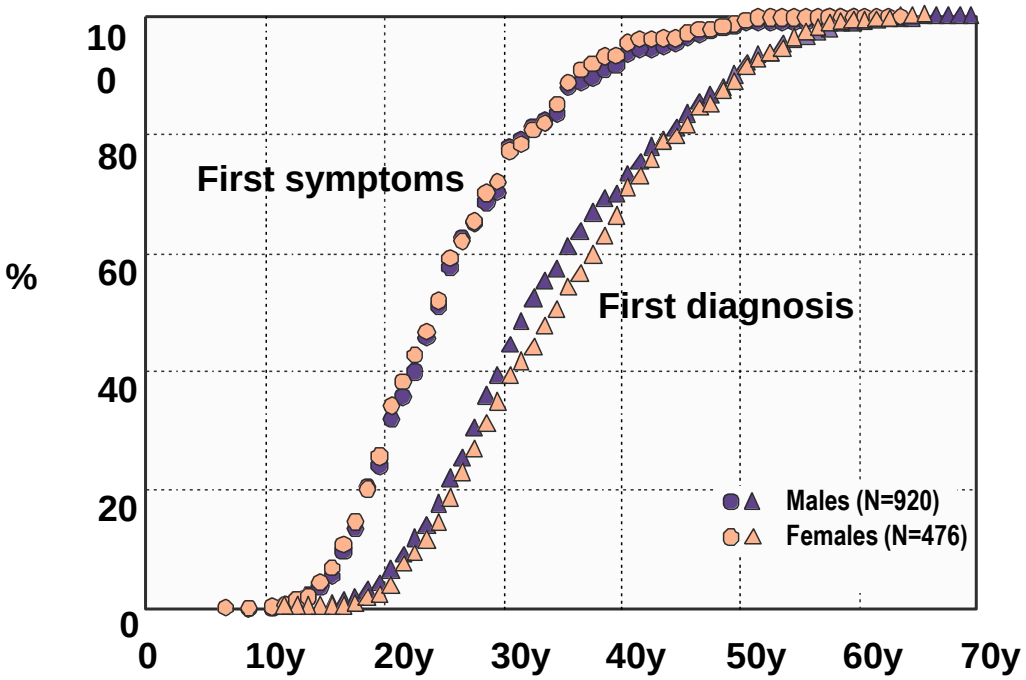
AxSpA diagnostic delay

Spondyloarthritis: diagnosis and management: summary of NICE guidance
BMJ 2017; 356 doi: https://doi.org/10.1136/bmj.j839

'….. There is an average delay of 8.5 years between symptom onset and diagnosis, with only around 15% of cases receiving a diagnosis within three months of initial presentation….'

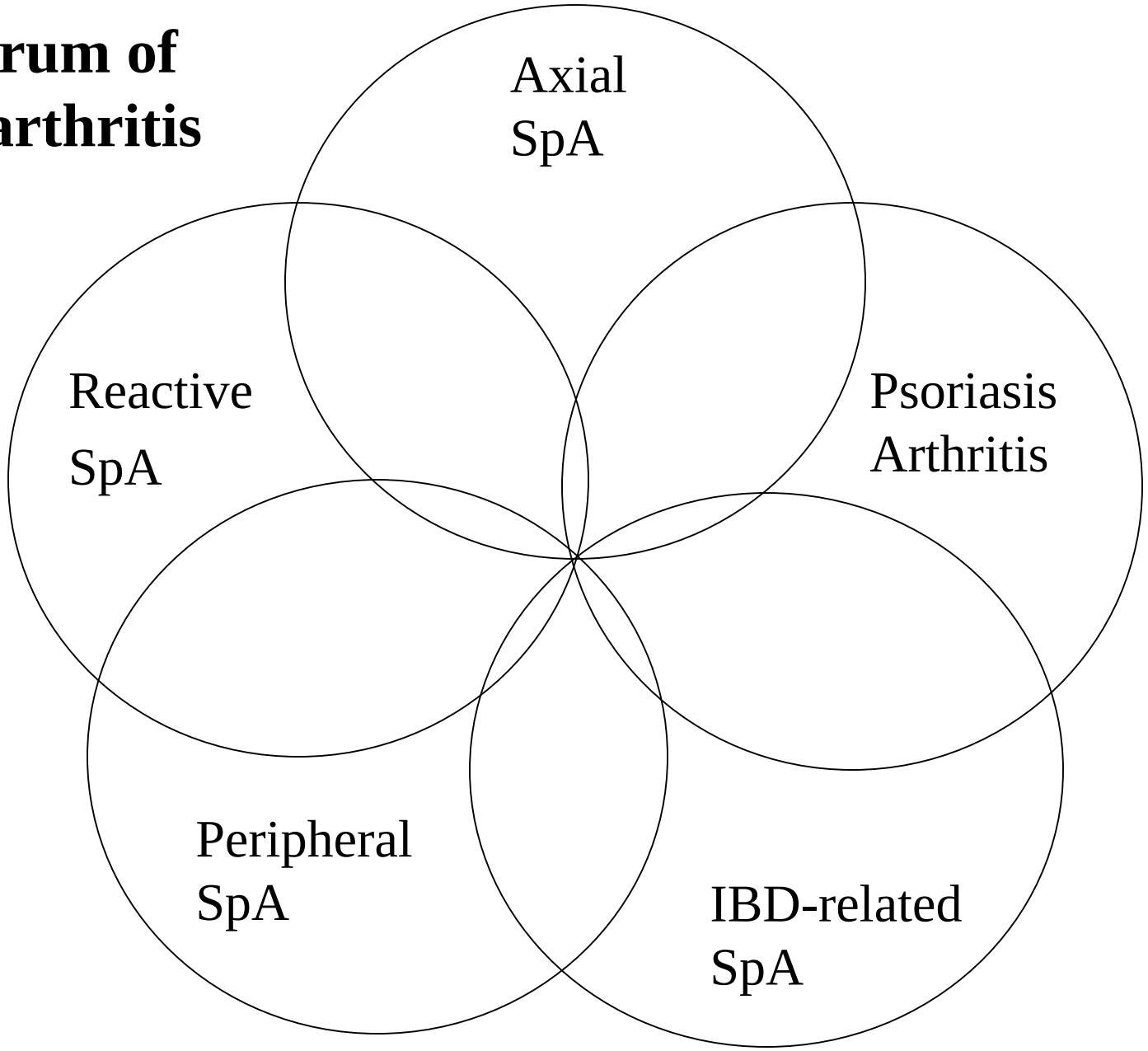
Ankylosing Spondylitis
age at first symptoms and at first diagnosis

Delay in diagnosis:
6-8 years



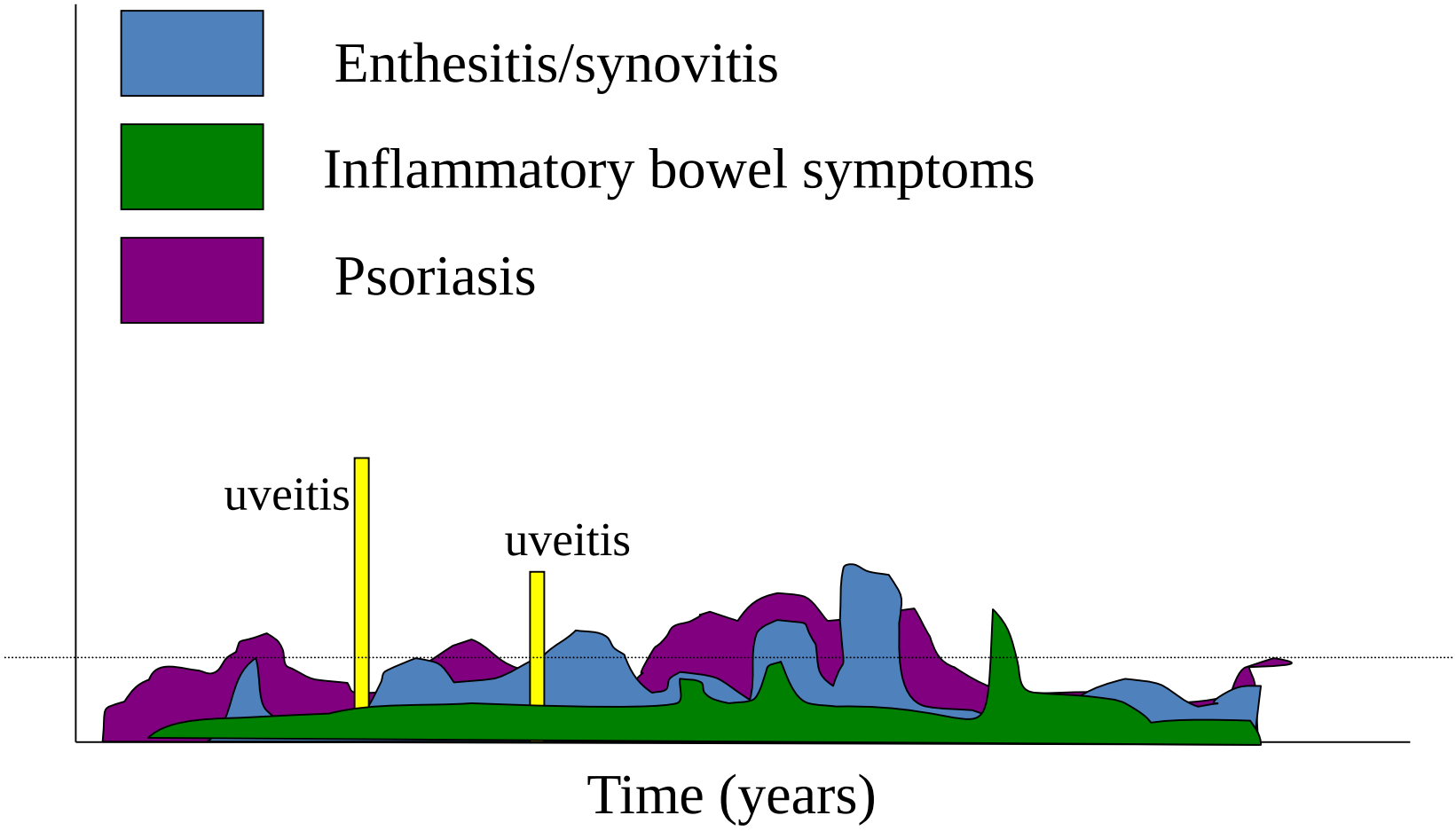
Reviewed in Rudwaleit, M., Khan, M. A. & Sieper, J. The challenge of diagnosis and classification in early ankylosing spondylitis: do we need new criteria? Arthritis Rheum. 52, 1000–1008 (2005)

The spectrum of spondyloarthritis



Features
B27
Uveitis
Aortitis
Urethritis
IBD
Psoriasis

Pattern of spondyloarthropathy



AxSpA diagnostic delay

'…..Healthcare professionals in non-specialist settings frequently fail to recognise signs and symptoms of spondyloarthritis. Axial presentations of spondyloarthritis are often misdiagnosed as mechanical low back pain, leading to delays in access to effective treatments. ….'

Spondyloarthritis: diagnosis and management: summary of NICE guidance
BMJ 2017; 356 doi: https://doi.org/10.1136/bmj.j839

Rheumatol Ther. 2017 Jun;4(1):121-132. doi: 10.1007/s40744-016-0051-1. Epub 2017 Jan 6.

High Prevalence of Undiagnosed Axial Spondyloarthritis in Patients with Chronic Low Back Pain Consulting Non-Rheumatologist Specialists in Belgium: SUSPECT Study.

Tant L[1], Delmotte N[2], Van den Enden M[3], Gangji V[1], Mielants H[4].

Joint Bone Spine. 2017 Jul;84(4):467-471. doi: 10.1016/j.jbspin.2016.06.005. Epub 2016 Jul 21.

Diagnostic delay in axial spondyloarthritis: A cross-sectional study of 432 patients.

Masson Behar V[1], Dougados M[2], Etcheto A[2], Kreis S[3], Fabre S[4], Hudry C[2], Dadoun S[3], Rein C[3], Pertuiset E[5], Fautrel B[3], Gossec L[6].

J Rheumatol. 2012 Oct;39(10):1996-9. doi: 10.3899/jrheum.120106. Epub 2012 Aug 1.

Initial diagnosis of lumbar disc herniation is associated with a delay in diagnosis of ankylosing spondylitis.

Gerdan V[1], Akar S, Solmaz D, Pehlivan Y, Onat AM, Kisacik B, Sayarlioglu M, Erhan C, Tezcan ME, Ozturk MA, Onen F, Akkoc N.

J Am Acad Dermatol. 2015 Aug;73(2):242-8. doi: 10.1016/j.jaad.2015.05.001. Epub 2015 Jun 6.

Prevalence of undiagnosed psoriatic arthritis among psoriasis patients: Systematic review and meta-analysis.

Villani AP[1], Rouzaud M[2], Sevrain M[3], Barnetche T[4], Paul C[5], Richard MA[6], Beylot-Barry M[2], Misery L[3], Joly P[7], Le Maitre M[8], Aractingi S[9], Aubin F[10], Cantagrel A[11], Ortonne JP[12], Jullien D[13].

Diagnostic delay in axSpA, AS and PsA

- The effect of Health Care System
  - Delay seems persistent despite better clinical tools
  - Lack of awareness in 1e care is probable but not well studied
  - UK Healthcare System might be contributory
  - All Healthcare Systems though report delay

  - So what is our HealhCare system, how is it changing and can we direct change to improve matters

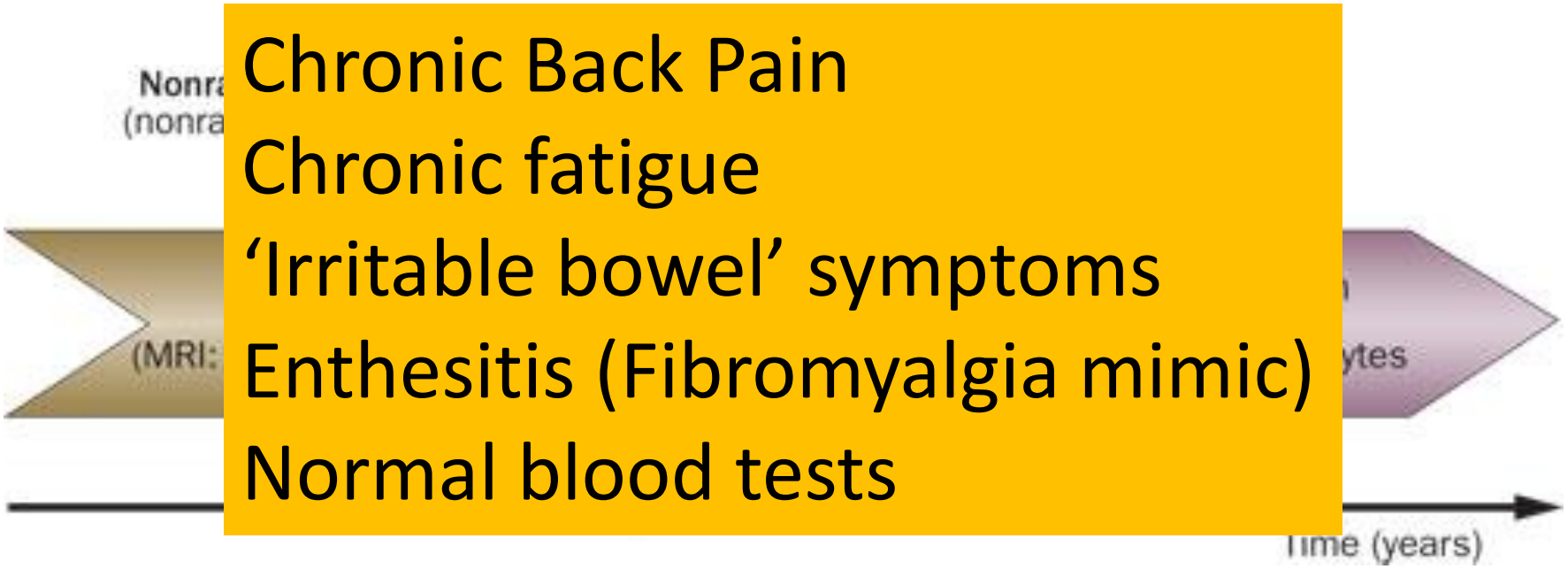
Inflammatory Back Pain predicts Spondyloarthritis/AS

- A positive IBP history at ages <45y is predictive of SpA/AS;
- The strength of predictivity of SpA/AS can be increased if there is HLA B27, if MRI is positive, and of course if classification criteria are met

Feature	Predictivity of having SpA/AS
IBP history	+
IBP history + HLA B27	++
IBP history + HLA B27 + positive MRI	++++
SpA/AS diagnostic criteria positive	++++

The challenge of making an early diagnosis in people who have Spondyloarthritis / Ankylosing Spondylitis

Routine laboratory tests are often normal
Part of the disease is fatigue (often the affected person's worst scoring symptom)
Many people with SpA have associated, often mild, inflammatory bowel symptoms
Many people with SpA have associated enthesitis (lesions at tendon/ligament insertions)



Chronic Back Pain
Chronic fatigue
'Irritable bowel' symptoms
Enthesitis (Fibromyalgia mimic)
Normal blood tests

Rudwaleit, M. & Sieper, J. (2012) Referral strategies for early diagnosis of axial spondyloarthritis
Nat. Rev. Rheumatol. doi:10.1038/nrrheum.2012.39

NICE GUIDELINE NG59
Published 2016

1.1 Assessment of low back pain and sciatica

Alternative diagnoses

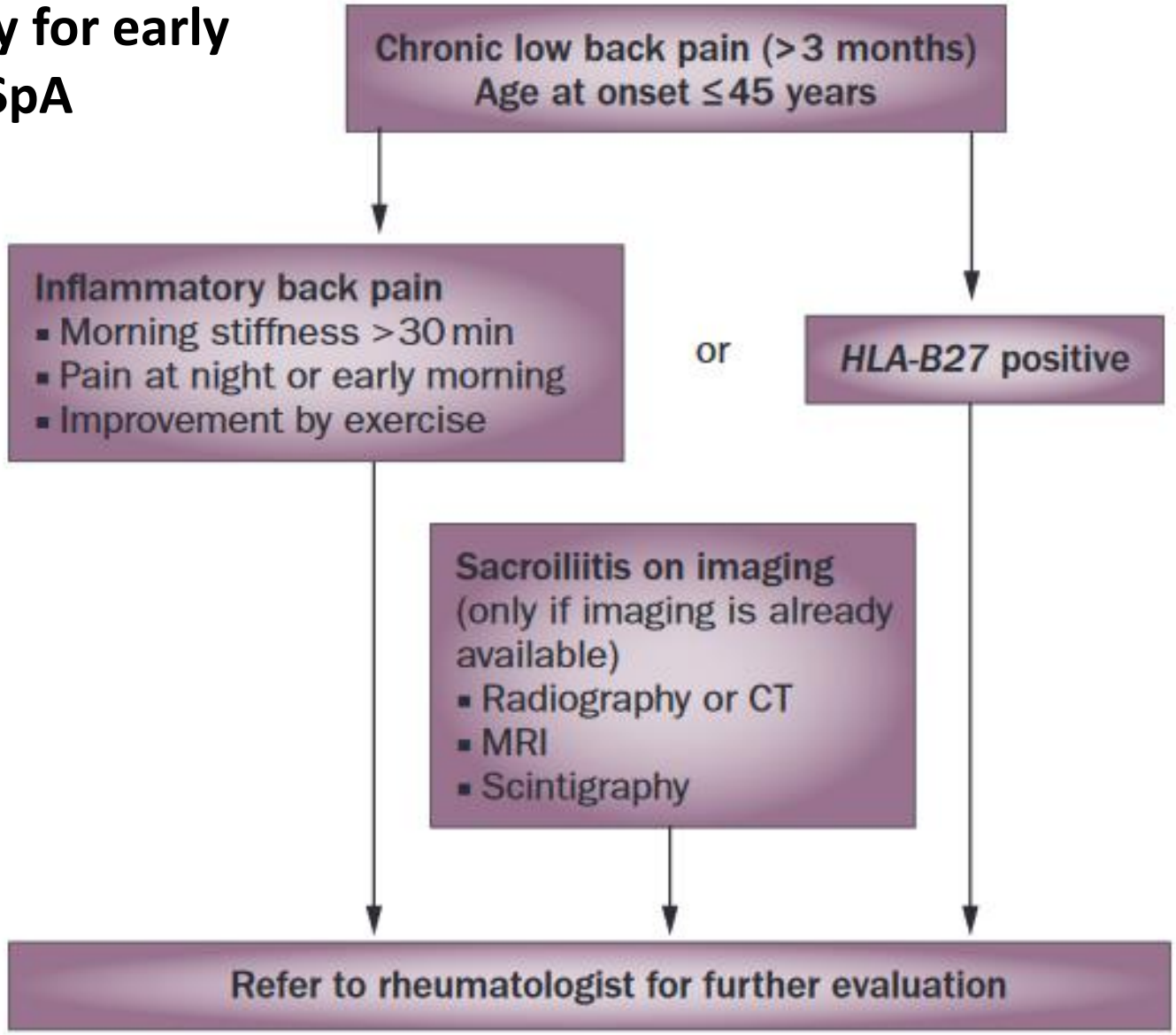
1.1.1 Think about alternative diagnoses when examining or reviewing people with low back pain, particularly if they develop new or changed symptoms. Exclude specific causes of low back pain, for example, cancer, infection, trauma or inflammatory disease such as spondyloarthritis. If serious underlying pathology is suspected, refer to relevant NICE guidance on:

- Metastatic spinal cord compression in adults
- Spinal injury
- Spondyloarthritis
- Suspected cancer

NG65

Axial presentations of spondyloarthritis are often misdiagnosed as mechanical low back pain, leading to delays in access to effective treatments. Peripheral presentations are often seen as unrelated joint or tendon problems, and can be misdiagnosed because problems can move around between joints.

Screening evaluation and Patient pathway for early diagnosis of axSpA



The Bottom Line

- How do we make patients with SpA more ‘visible’ in/to Primary Care Health Care systems?