

HEY!

WANNA COME PLAY IN THE SNOW WITH US?



VAIL



BEAVER CREEK



BRECKENRIDGE



KEYSTONE



HEAVENLY



NORTHSTAR



KIRKWOOD

Acute Emergencies in Rheumatology

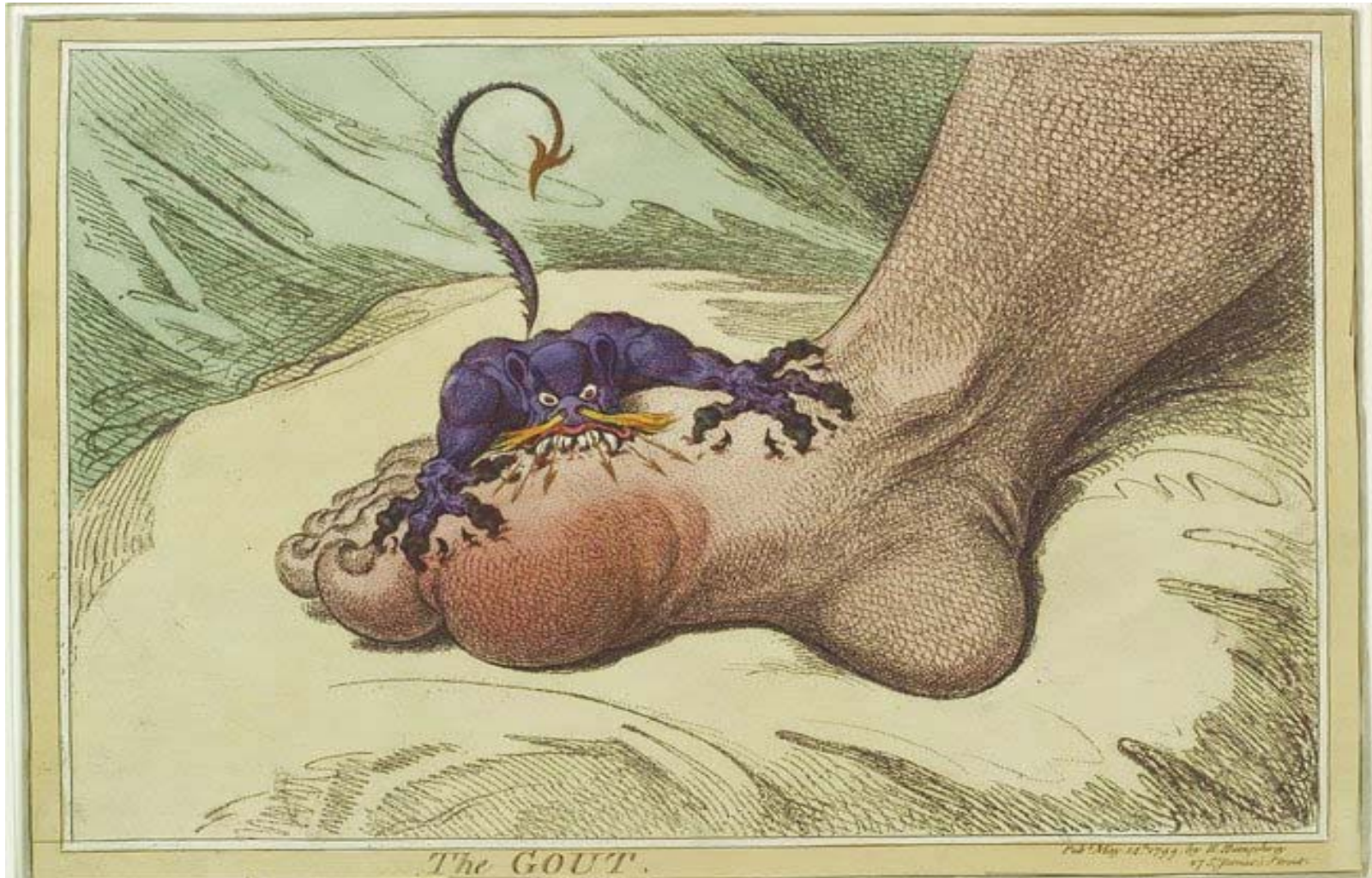
Clare Higgins

Northwick Park hospital and St
George's Hospital
London

Acute Rheumatological Emergencies

- The Acute Hot joint
- Inflammatory back pain..
- Systemic lupus erythematosus(SLE)
- Inflammatory muscle problems
- Adults onset Stills Disease

The Acute Hot joint !

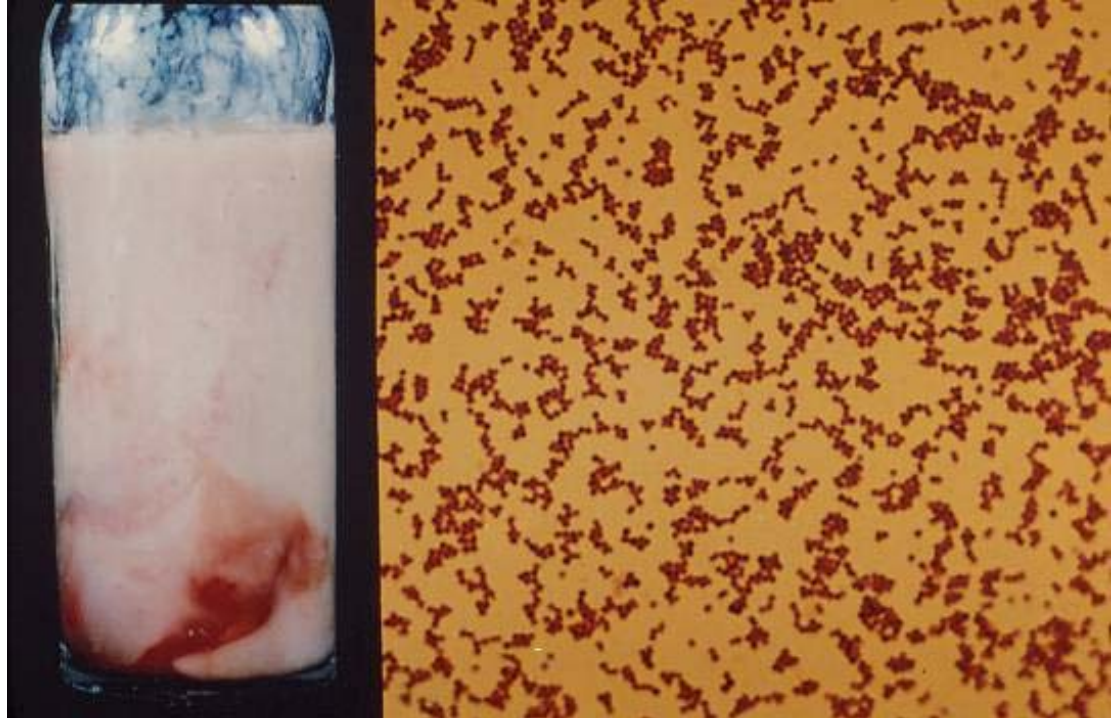






Should we aspirate this?





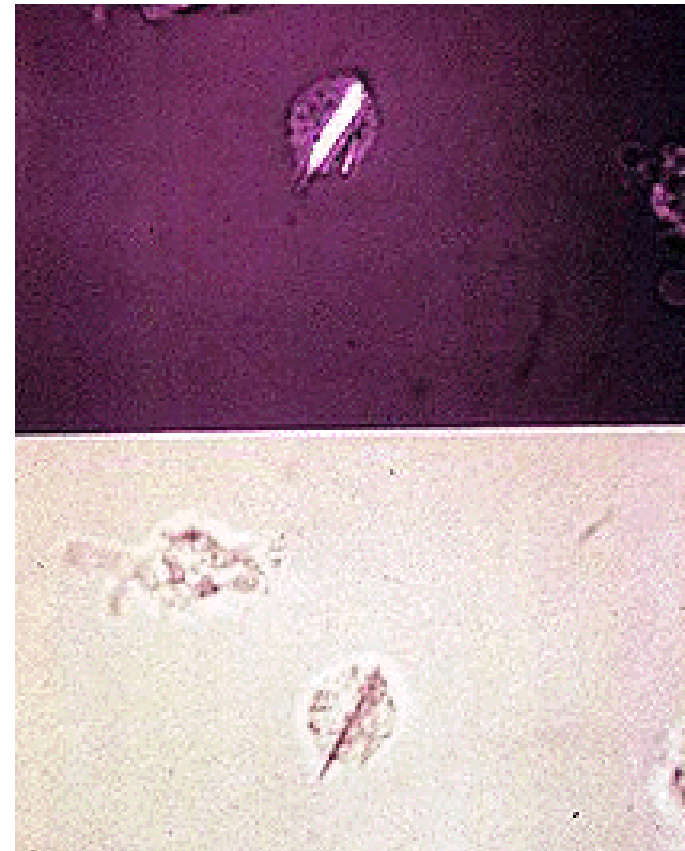
What is the differential Diagnosis?

- Acute crystal arthritis
- **Urate crystals- gout**
 - **Calcium pyrophosphate**
 - - Pseudo gout
 - **Hydroxyapatite-**
 - Milwaukee shoulder
- Septic arthritis
- Osteomyelitis
- New presentation of inflammatory arthritis

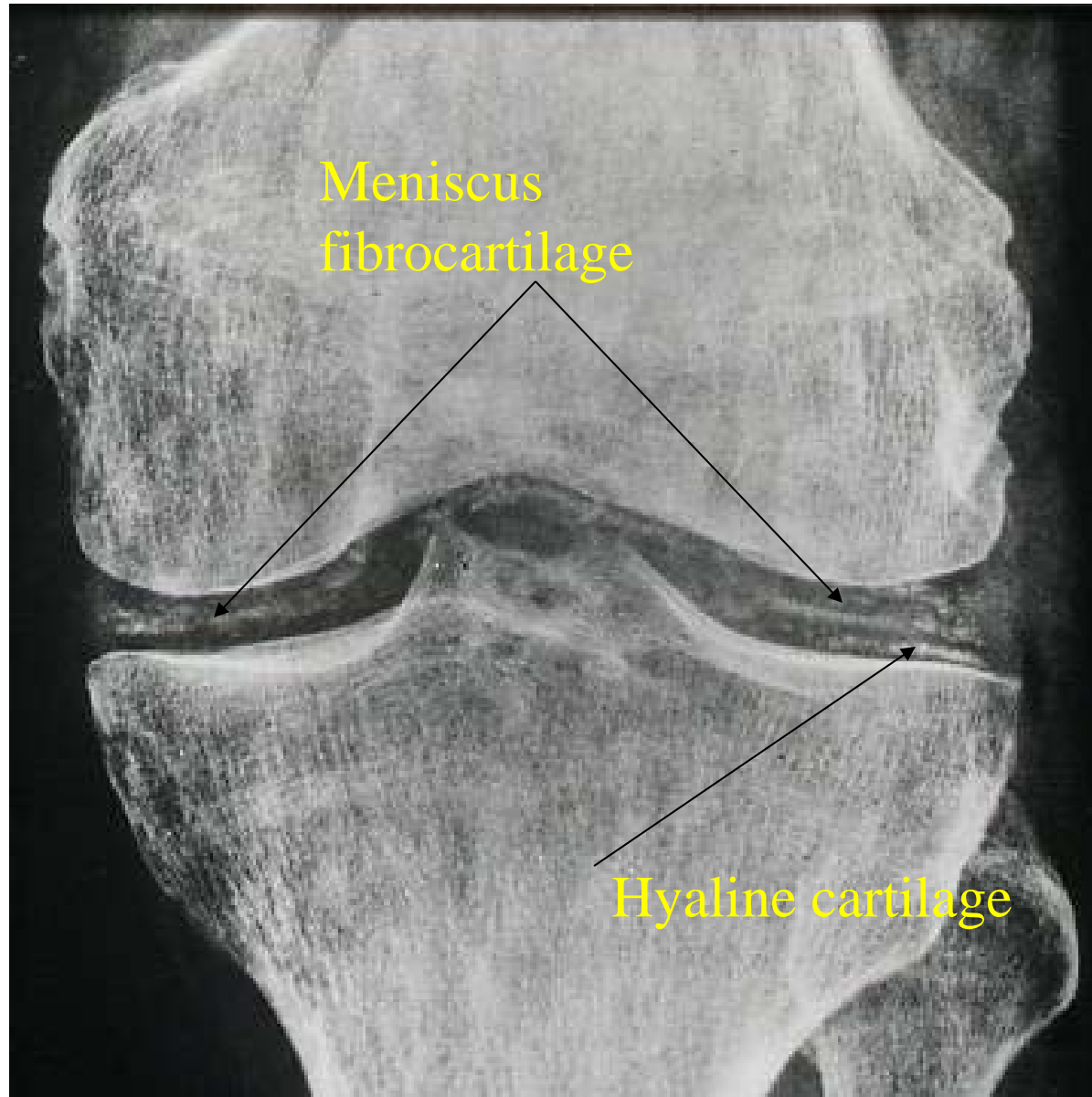


How should it be diagnosed?

- Do we need this?
- Do you know where to send it?



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Calcified hyaline and fibrocartilage with linear and spotty appearances and well-preserved joint space

Challenges with the Acute Hot Joint

- Missing the acute septic arthritis
- Missing the osteomyelitis.
- Crystals not obtained from the joint.

Challenges with Acute Hot Joints

- Diagnosis
- ??



Back Pain?





Have you got... The **S** factor?

Spinal pain & stiffness
in a young adult

Spinal pain & stiffness lasting
more than 3 months in a young
adult could be inflammatory if you
tick 4 out of 5 boxes:

- ☐ It started before the age of 40
- ☐ It started slowly: it did not come on suddenly
- ☐ You have noticed improvement with exercise
- ☐ There is no improvement with rest
- ☐ You experience pain at night (with improvement on getting up)

Endorsed by
PCR
PRIMARY CARE
RHEUMATOLOGY SOCIETY

RCGP Royal College of
General Practitioners

This could be inflammatory arthritis

See your doctor now!
Delay can cause long term disability

For further information see www.arthritisresearchuk.org

Arthritis
Research UK

Providing answers today and tomorrow
All our messages are a special thanks to the
Rheumatology Research Fundraising Group



inflammatory back pain

ASAS Criteria (*Sieper J et al Ann Rheum Dis 2009;68:784-8*): Back pain of more than 3 months duration is inflammatory if:

- Age at onset less than 40 years
- Insidious onset
- Improvement with exercise
- No improvement with rest
- Pain at night (with improvement on getting up)

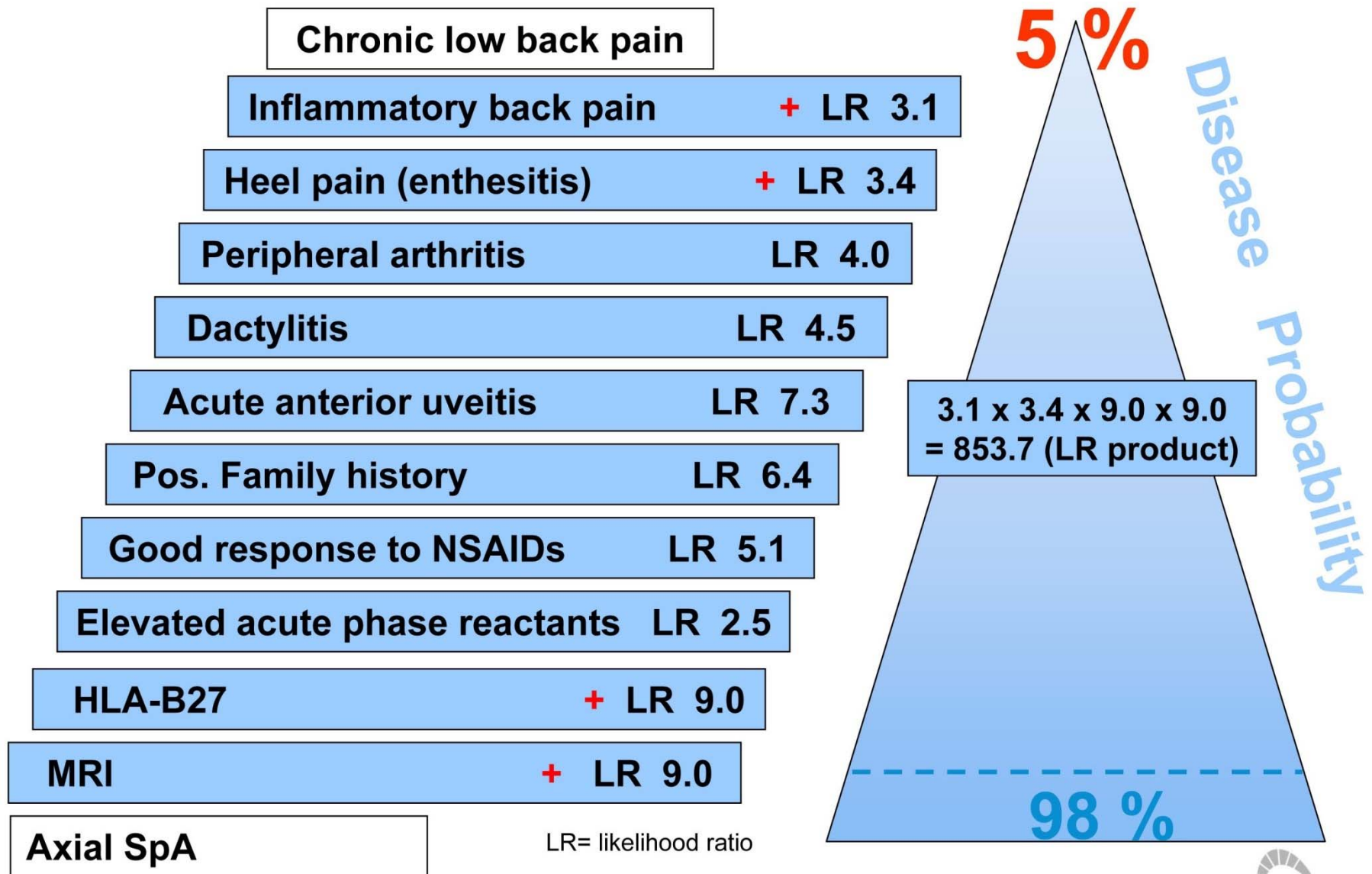
The criteria are fulfilled if at least 4 of 5 parameters are present

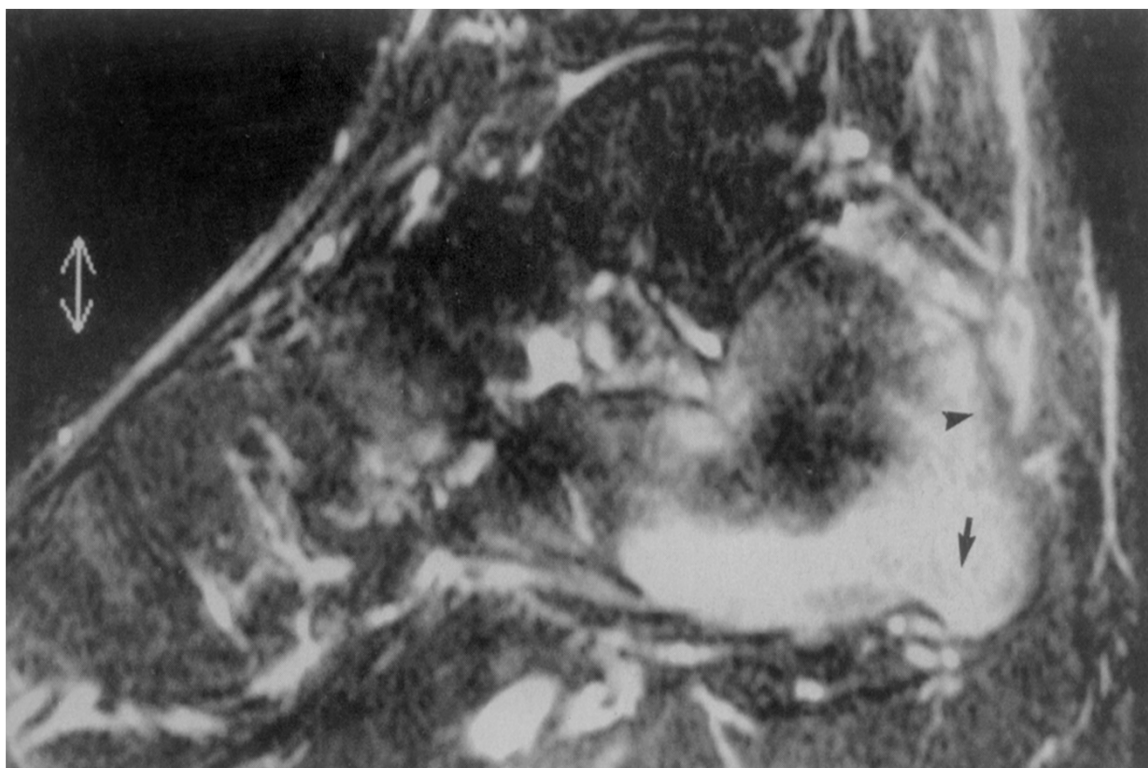




and 50% of people with AS have
other associated problems.....

Diagnostic Pyramide for Axial Spondyloarthritis







4340672807

23/07/1985

Seq: *tir2d1_21

Slice: 4 mm

Pos: 20.0747

TR: 6000

TE: 80

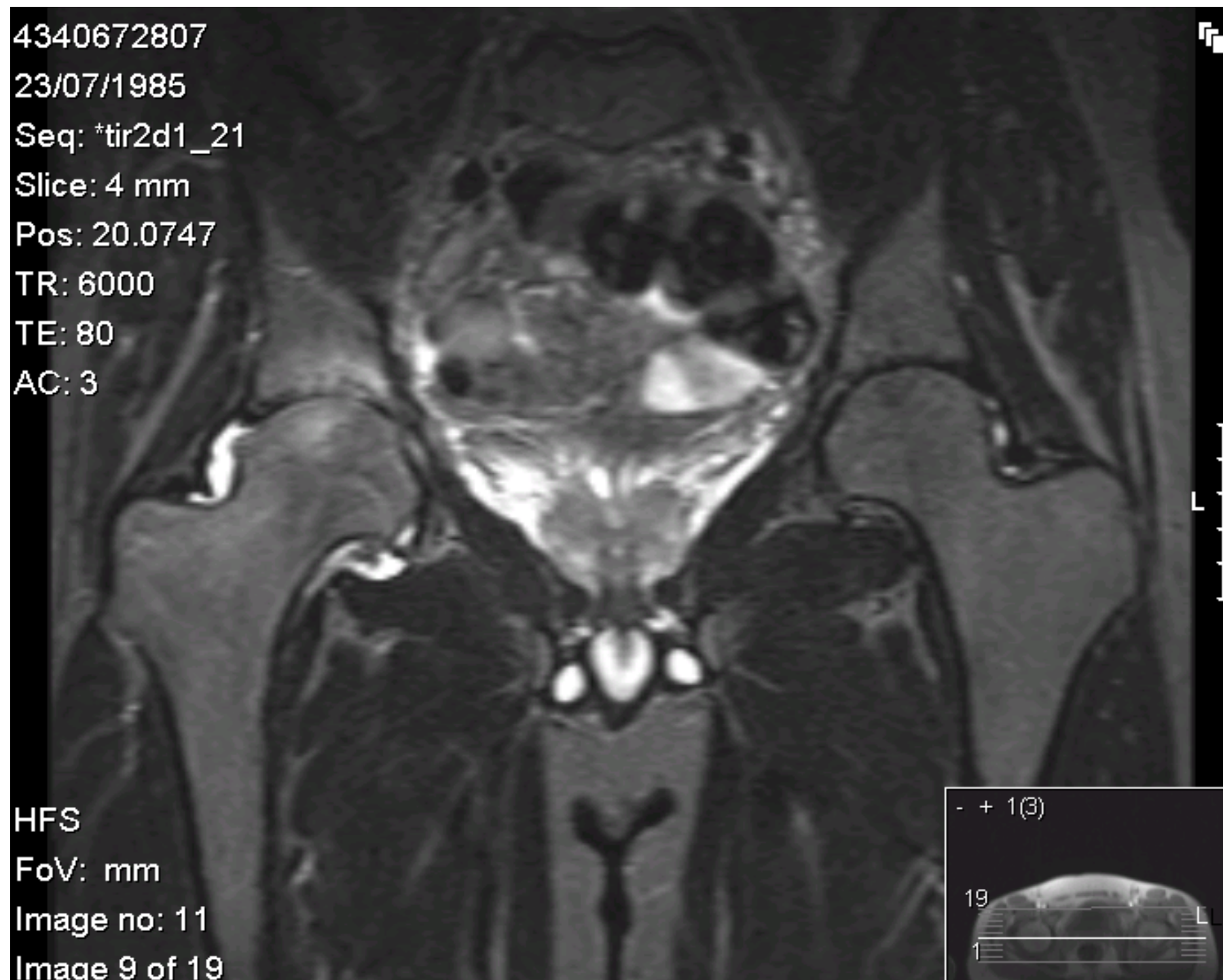
AC: 3

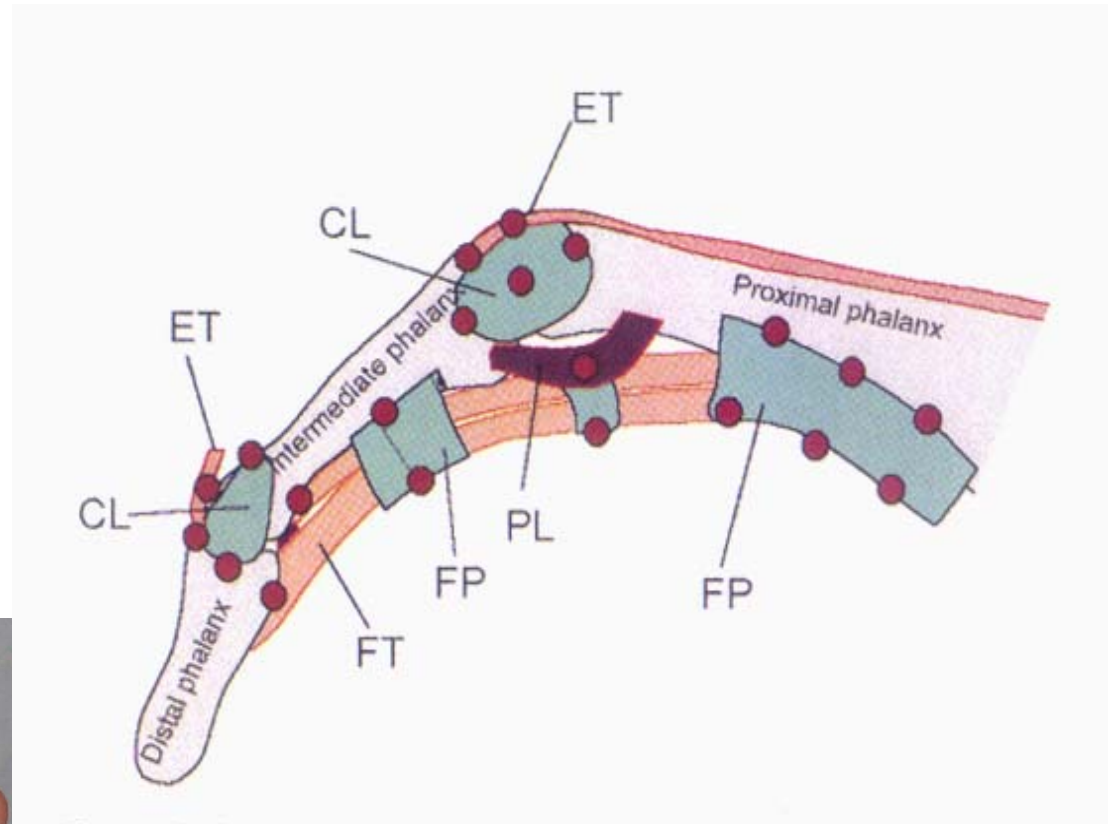
HFS

FoV: mm

Image no: 11

Image 9 of 19

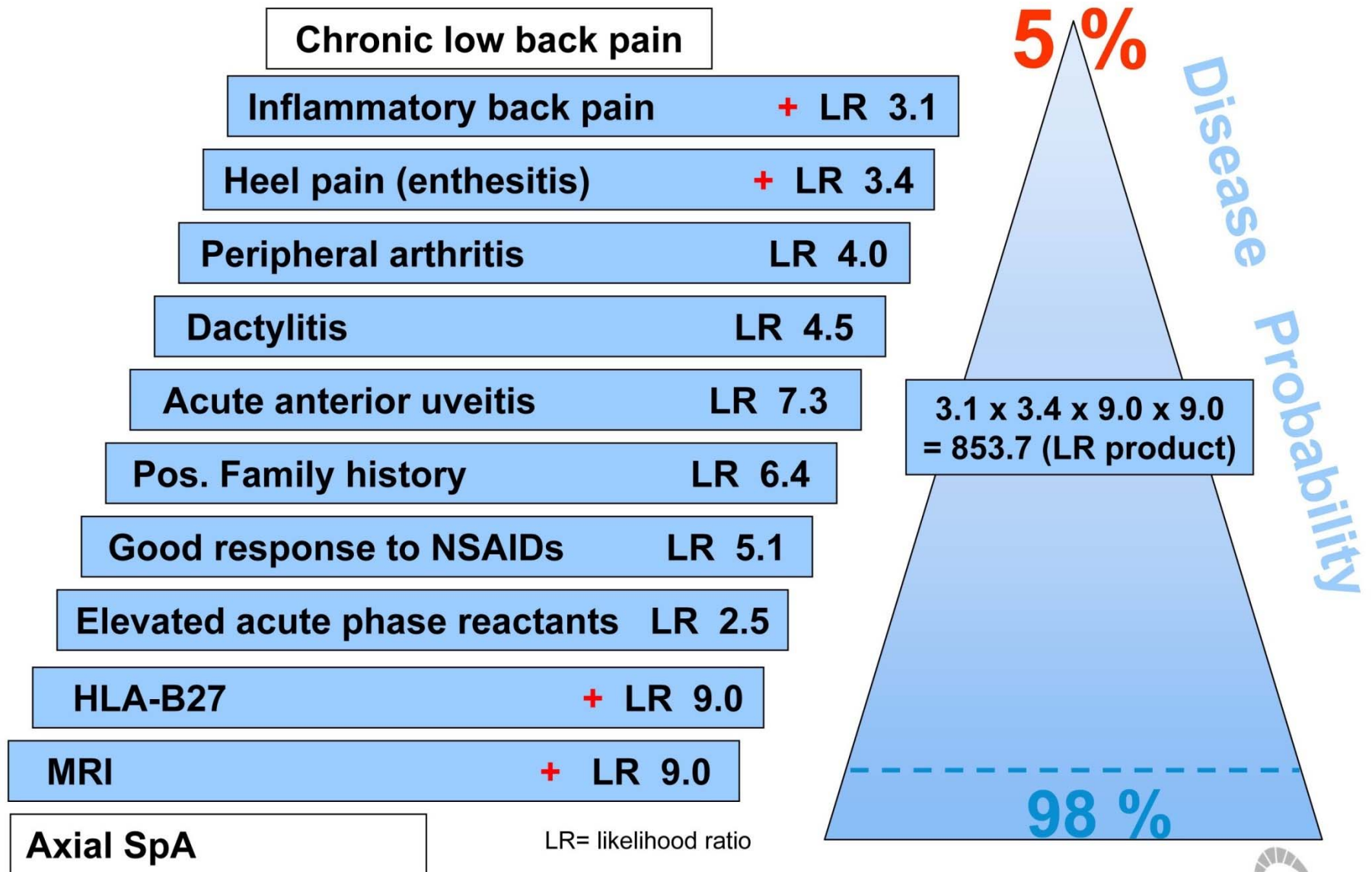








Diagnostic Pyramide for Axial Spondyloarthritis



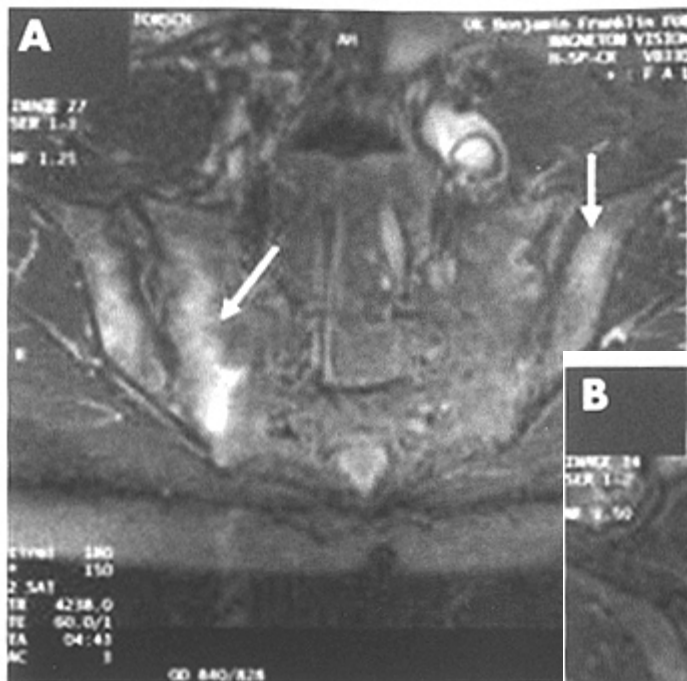
Spondyloarthritides

- This group have a similar prevalence to RA
- They share common clinical lesions.
- Inheritance of HLA-B27 is common to all the SpA. The prevalence of these disorders relate to HLA-B27.
- Diagnosis of Ankylosing spondylitis is often delayed
- Identification of inflammatory back pain is very important in determining the diagnosis.
- Use of Anti- tumour necrosis factor biologic drugs has revolutionised the treatment of severe AS.

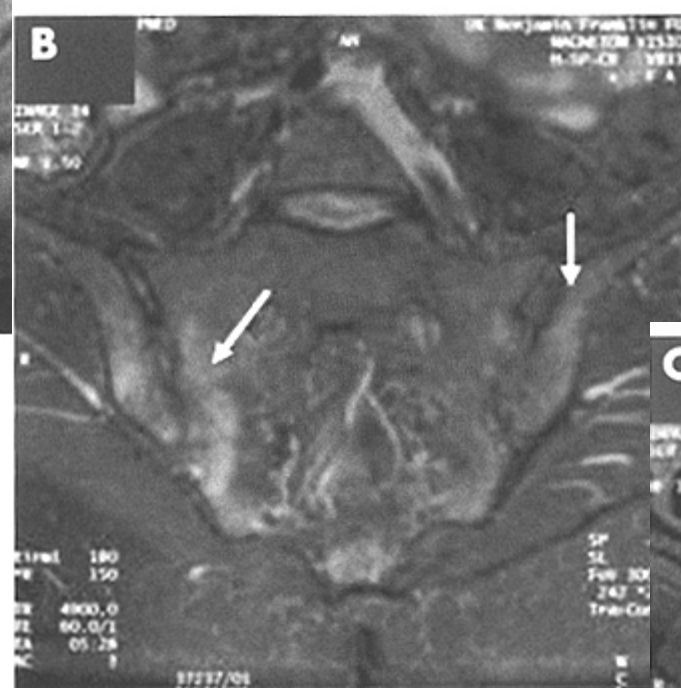


Percentage Prevalence of HLA-B27 in Indigenous Populations of the World





At baseline



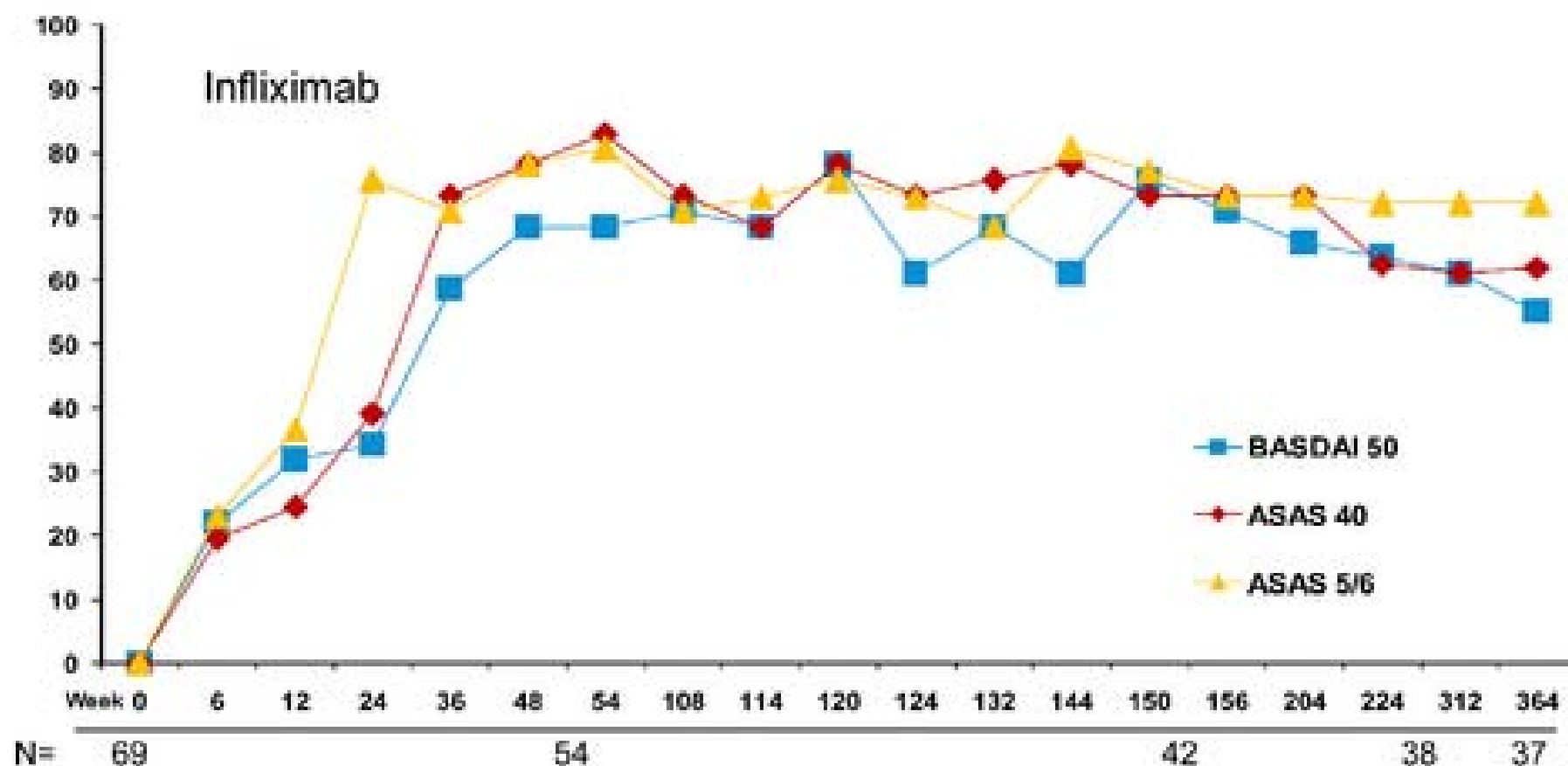
After 6 weeks



After 24 weeks

Longterm Clinical Efficacy of TNF α -Blocker in AS

Results over 7 years



N = number of patients on therapy

Braun J et al. Lancet 2002;359:1187-93

Braun J et al. Ann Rheum Dis 2008;67:340-5

Baraliakos X et al. EULAR 2008, Paris, FRI0290





Connective tissue diseases.Acute presentations



Case Study AT

- 24yr old vegetarian Asian female
- presented via emergency dept.
- Vomiting, 5kg wt loss, night sweats
- Productive cough & pleurisy
- Initial Diagnosis Pulmonary Tuberculosis
- Investigation. Hb 7.8g/dl(low).blood white cells 3.5(low)
- ESR 105mm/hr C reactive protein <4(n)
-

Reviewed 24hrs later

- Facial rash, alopecia, febrile, chest X ray clear
- Diagnosis Probable SLE
- ? Why??

AT (2)

- Further investigations. ANA 1/2560 **homogenous(very high)**
- DNA binding .>300;(**HIGH**)
- IgG 26.7;IgA 6.9 IgM 2.4;g/l(**raised**)
- C3 0.3 C4 0.05;g/lComplements(**-low**)
- Coombs (+) creatinine 105umol/L 24hr urinary protein **2.35 grams/24hrs**
- Renal Biopsy WHO Class IV (Diffuse Proliferative Glomerulonephritis)
- **Treatment** Intravenous Methyl Prednisolone 1gram X3
- Dramatic recovery!

Recognizing SLE

“Typical bloods”

- Anaemia
- Lymphopaenia
- Normal/low platelets
- High ESR
- Low C3 and C4
- Autoantibodies

Characteristic rashes



Is it a connective tissue disease?

- Raynauds syndrome of recent onset.
- Non specific inflammation with no infection
- Screen for autoantibodies positive.(ANA/DNA)
- Raised ESR with normal C reactive protein.
- Low white cell count with low lymphocyte count and low platelets.
- Rashes.
- Multisystem disease.

I can't get out of my chair!



Mrs AU age 35 presented to the dept unable to get out of a chair with severe pain and weakness.

- Facial rash
- Rash on the hands and fingers
- Shortness of breath
- Weakness and muscle pain for 4 weeks
- ?Raynauds syndrome
- Generally unwell.
- Raised ESR, Raised muscle enzymes.
- Raised anti nuclear antibody 1/2500

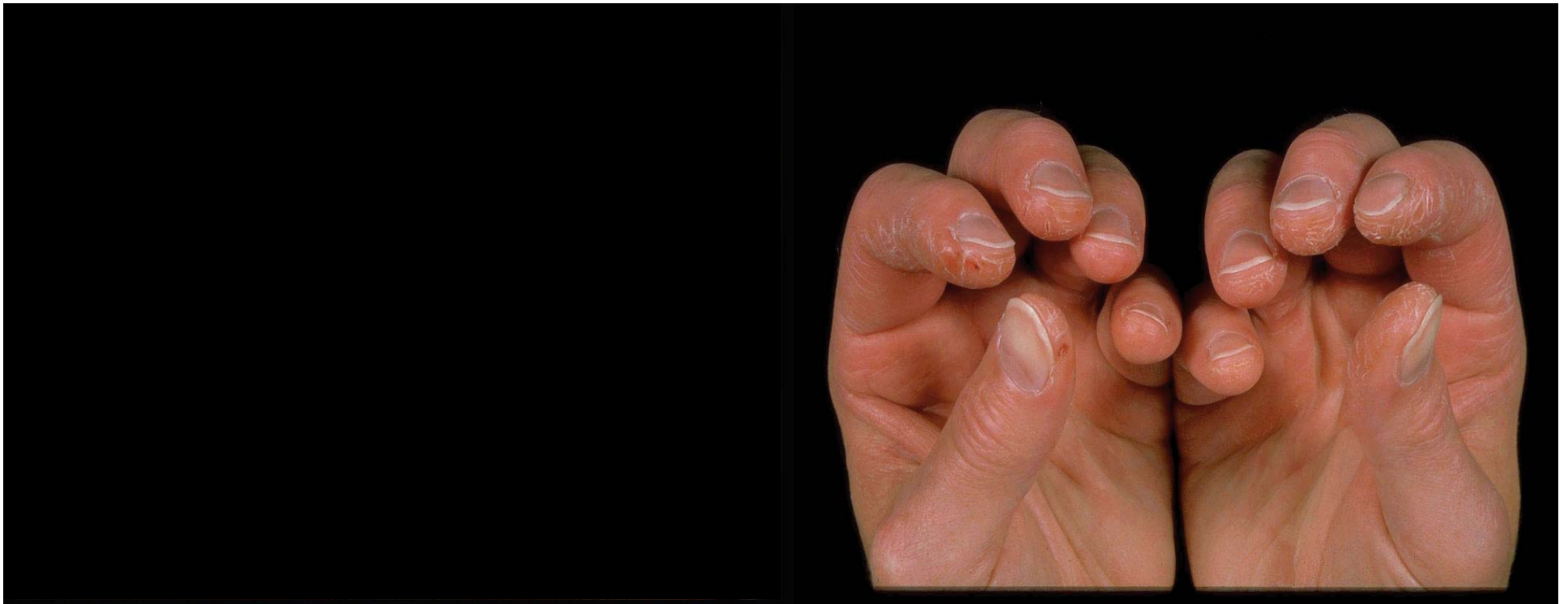
Dermatomyositis - facial rashes



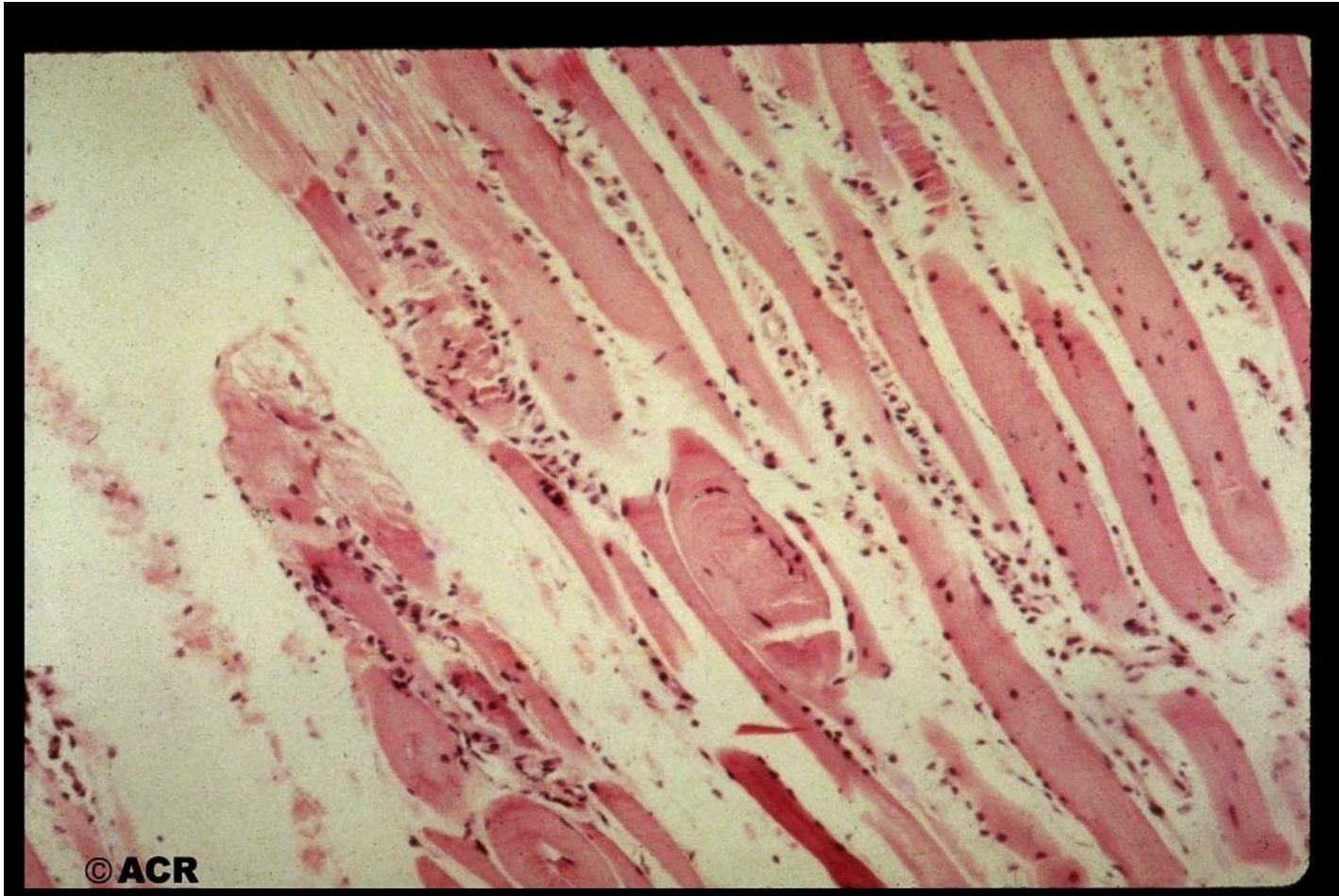
Dermatomyositis - Gottron's papules

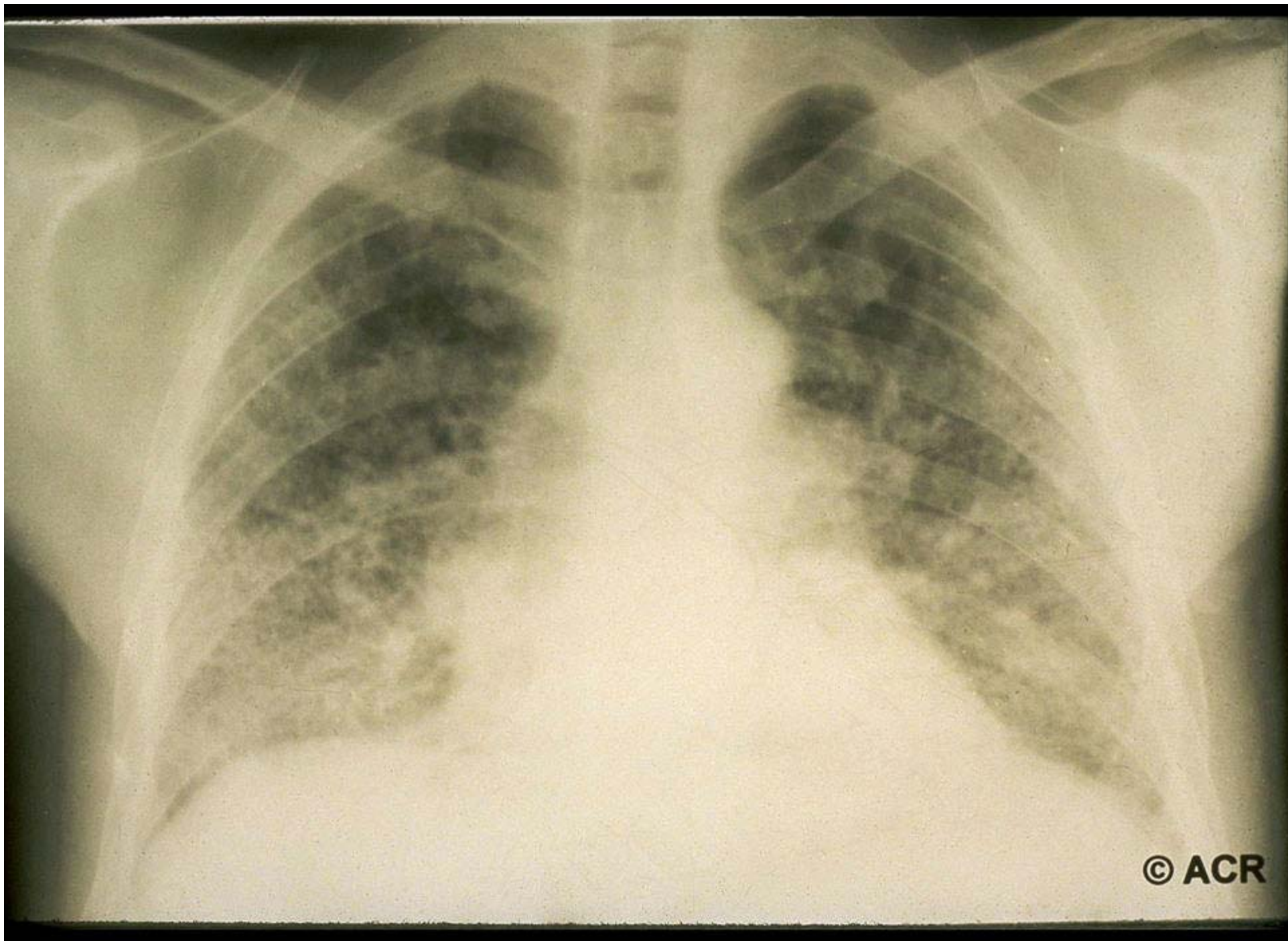


Anti JO 1- mechanic's hands



Acute Myositis





© ACR

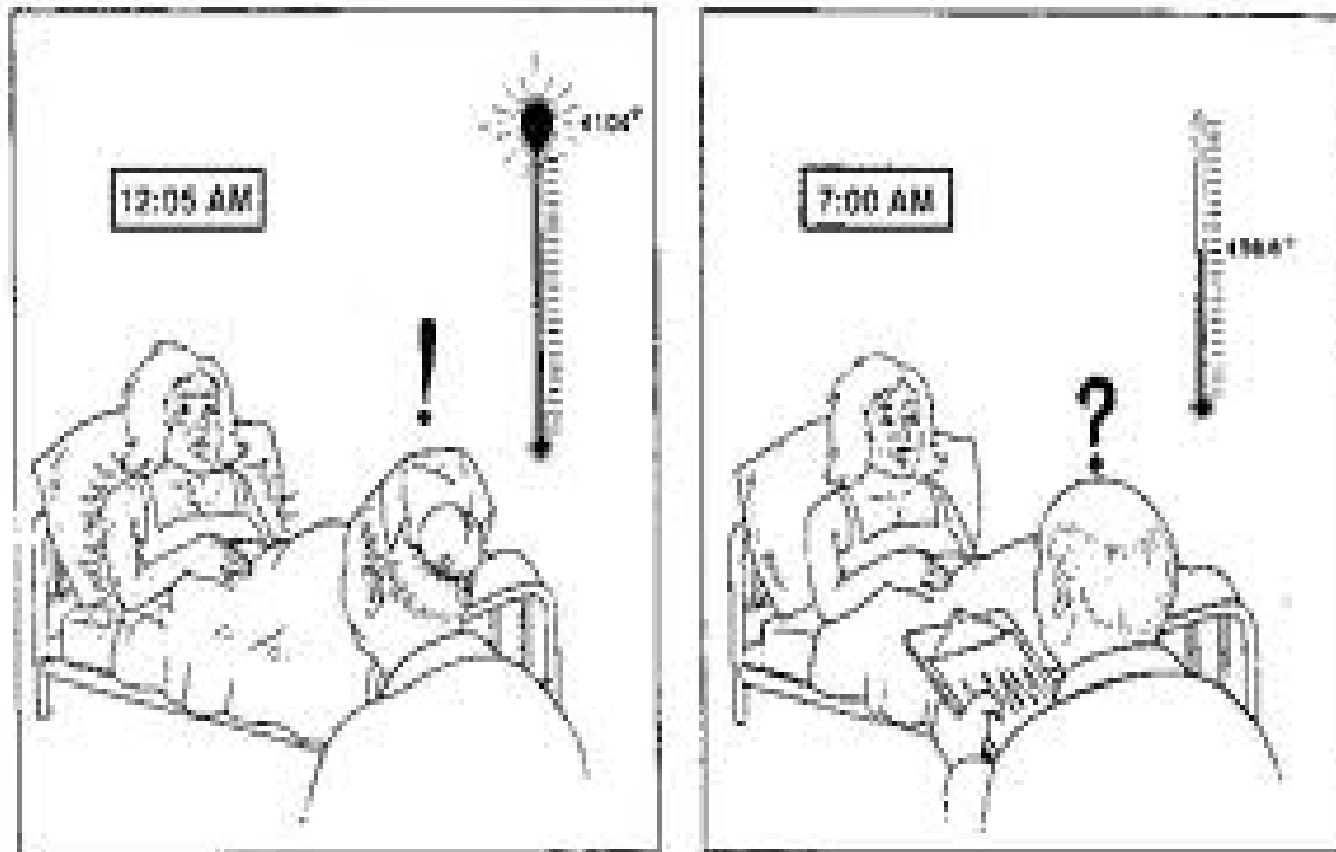
Dermatomyositis

- Rash
- Abnormal muscle enzymes
- Abnormal muscle biopsy and electrical studies and MRI of the thighs.
- Autoantibodies- positive ANA and Extractable nuclear antibodies:--
- Treatment steroids and cyclophosphamide
- ,intravenous Immunoglobulin.
- Rituximab???

Myositis and anti synthetase syndrome

- Mechanic hands
- Myositis
- Anti Jo1 antibodies
- Other antibodies positive –anti trna synthetase
- Manual identification.-Ku etc

Periodic fevers!



Patient with Fever and acute arthritis miss LR

- Pyrexia often Periodic, at night.
 - Rose coloured rash on the body and face
 - Acutely swollen joints
 - General Malaise and weight loss over 2 weeks.
-
- Abnormal liver function tests.
 - Raised ESR

Adult onset Still's disease.



- Fever, rash +/-arthritis, pharyngitis, serositis
- Raised inflammatory markers
- Negative RF/ANA
- **High ferritin>20,000**
- **(normal less than150)**

Still's Disease Rash



Treatment

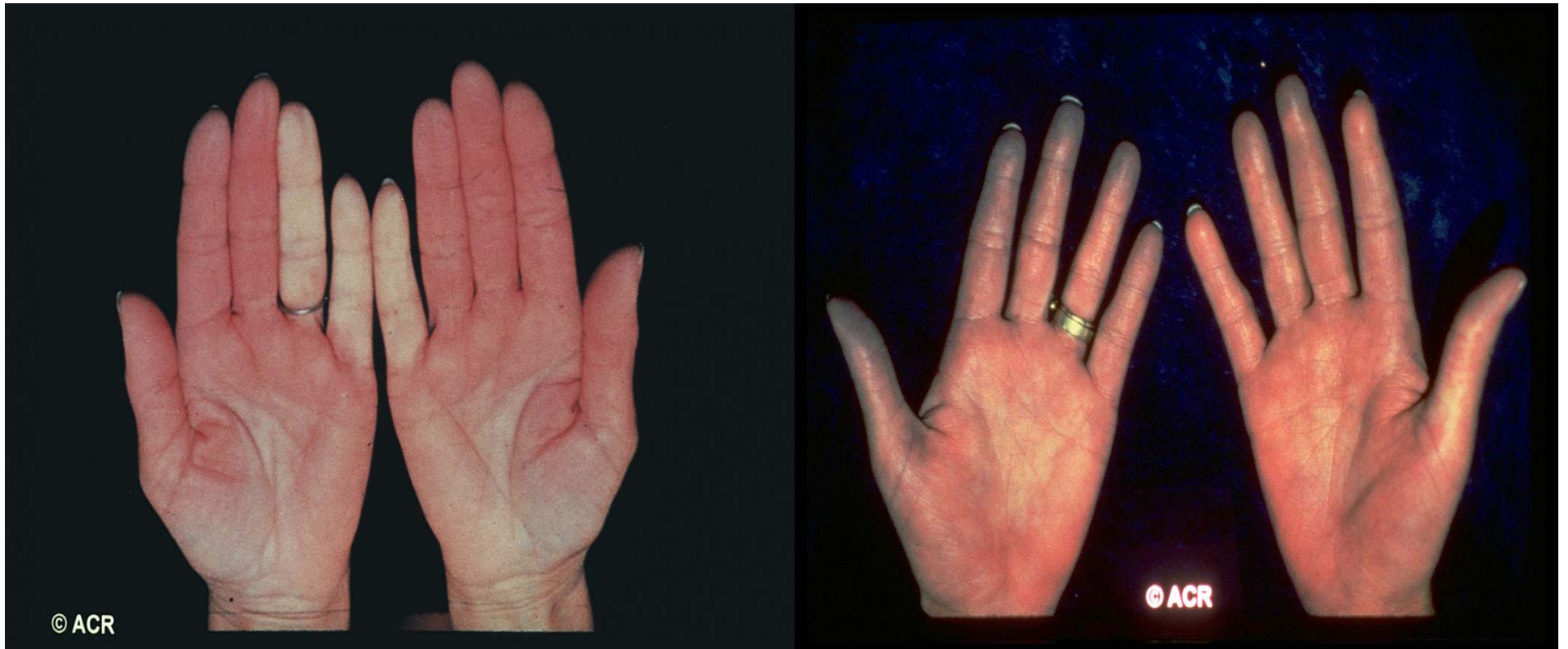
- Anti inflammatory
- Steroids
- Biological therapy- Tocilizumab-Anti IL-6

Northwick park hospital Harrow





Raynauds



Small vessel ischaemia

