بسم الله الرحمن الرحيم

RHEUMATOID ARTHRITIS

RHEUMATOID ARTHRITIS

A chronic, systemic, inflammatory disorder of unknown etiology that primarily involves joints.

- Usually non-remitting.
- Arthritis is usually symmetrical.
- Progress from peripheral to more proximal joints.

- **Epidemiology :**

  -Female : Male 2-3 : 1

  -Incidence : 30/100,000 .

  -Any age group can be affected .

  -Mostly 30-55 years .

  -Only 5% of patients are above 65 yrs.

Early diagnosis with the 2010 ACR / EULAR classification criteria

For early RA Diagnosis

6 / 10 = RHEUMATOID ARTHRITIS

Table 3. The 2010 American College of Rheumatology/Europ[illegible] Against Rheumatism classification criteria for rheumatoid arthritis

	Score
Target populatio[illegible] (W[illegible]o sh[illegible]d b[illegible] tested?): Patients who	
1) have at l[illegible]st 1 j[illegible]nt with definite clinical synovitis (swelling)*	
2) w[illegible]h [illegible]ynoviti[illegible] not better explained by another disease†	
Class[illegible]fi[illegible]ation criteria for RA (score-based algorithm: add score of categori[illegible]	
a score of ≥6/10 is needed for classification of a patient as [illegible]	
A. Joint involvement§	
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
B. Serology (at least 1 test result is needed for classification)††	
Negative RF *and* negative ACPA	0
Low-positive RF *or* low-positive ACPA	2
High-positive RF *or* high-positive ACPA	3
C. Acute-phase reactants (at least 1 test result is needed for classification)‡‡	
Normal CRP *and* normal ESR	0
Abnormal CRP *or* abnormal ESR	1
D. Duration of symptoms§§	
<6 weeks	0
≥6 weeks	1

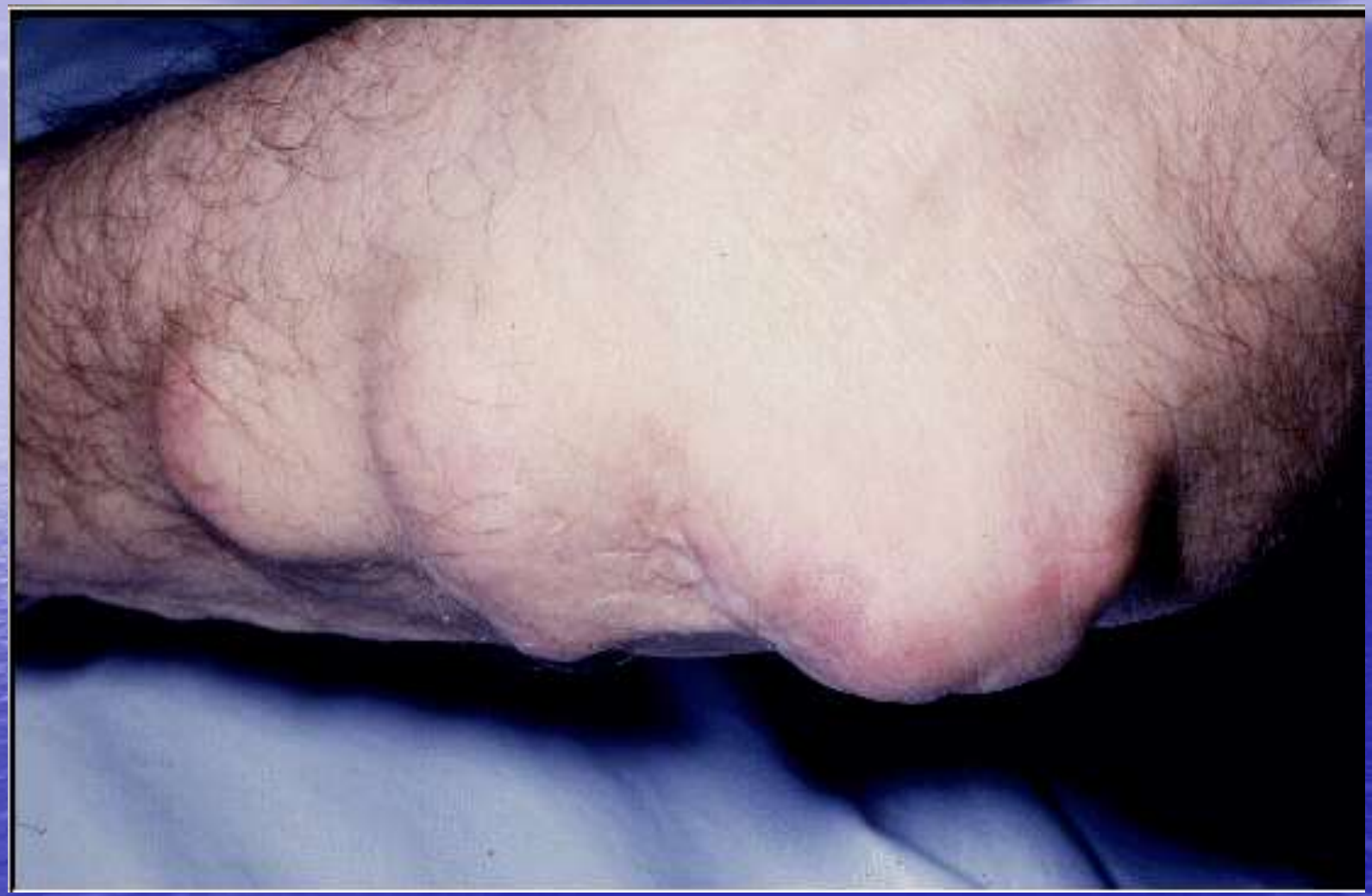
* The criteria are aimed at classification of newly presenting patients. In addition, patients with erosive disease typical of rheumatoid arthritis (RA) with a history compatible with prior fulfillment of the 2010 criteria should be classified as having RA. Patients with longstanding disease, including those whose disease is inactive (with or without treatment) who, based on retrospectively available data, have

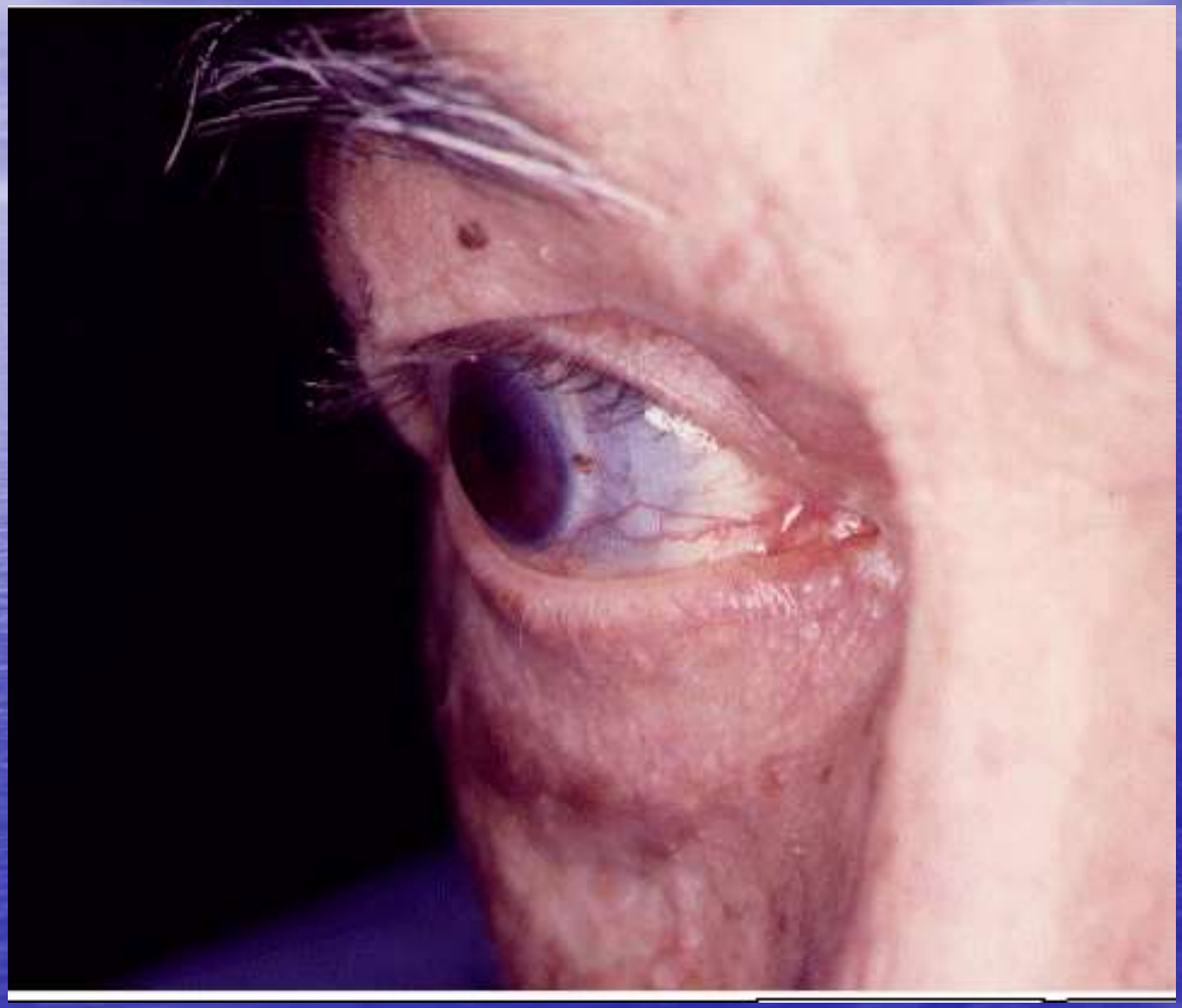
- **Extra-articular features**:

  -sub cut. rheumatoid nodules .
  -pleuropericaditis .
  -neuropathy .
  -scleritis .
  -splenomegaly (felty's syndrome) .
  -sjogren's syndrome .
  -vasculitis .

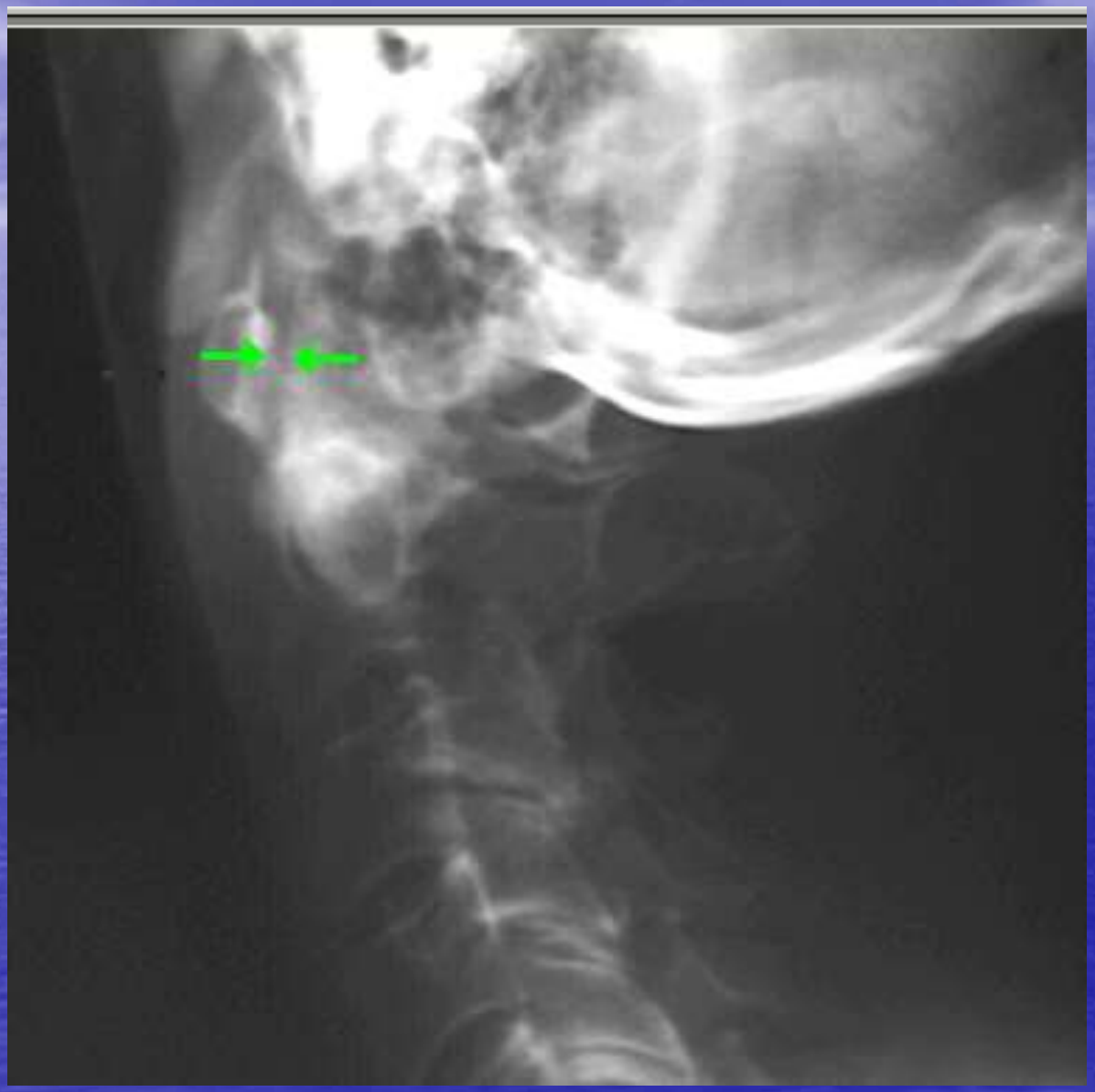
- **Systemic features**
- Anorexia, weight loss and fatigue may occur throughout the disease course.
- Osteoporosis is a common complication and muscle-wasting may occur as the result of systemic inflammation and reduced activity.

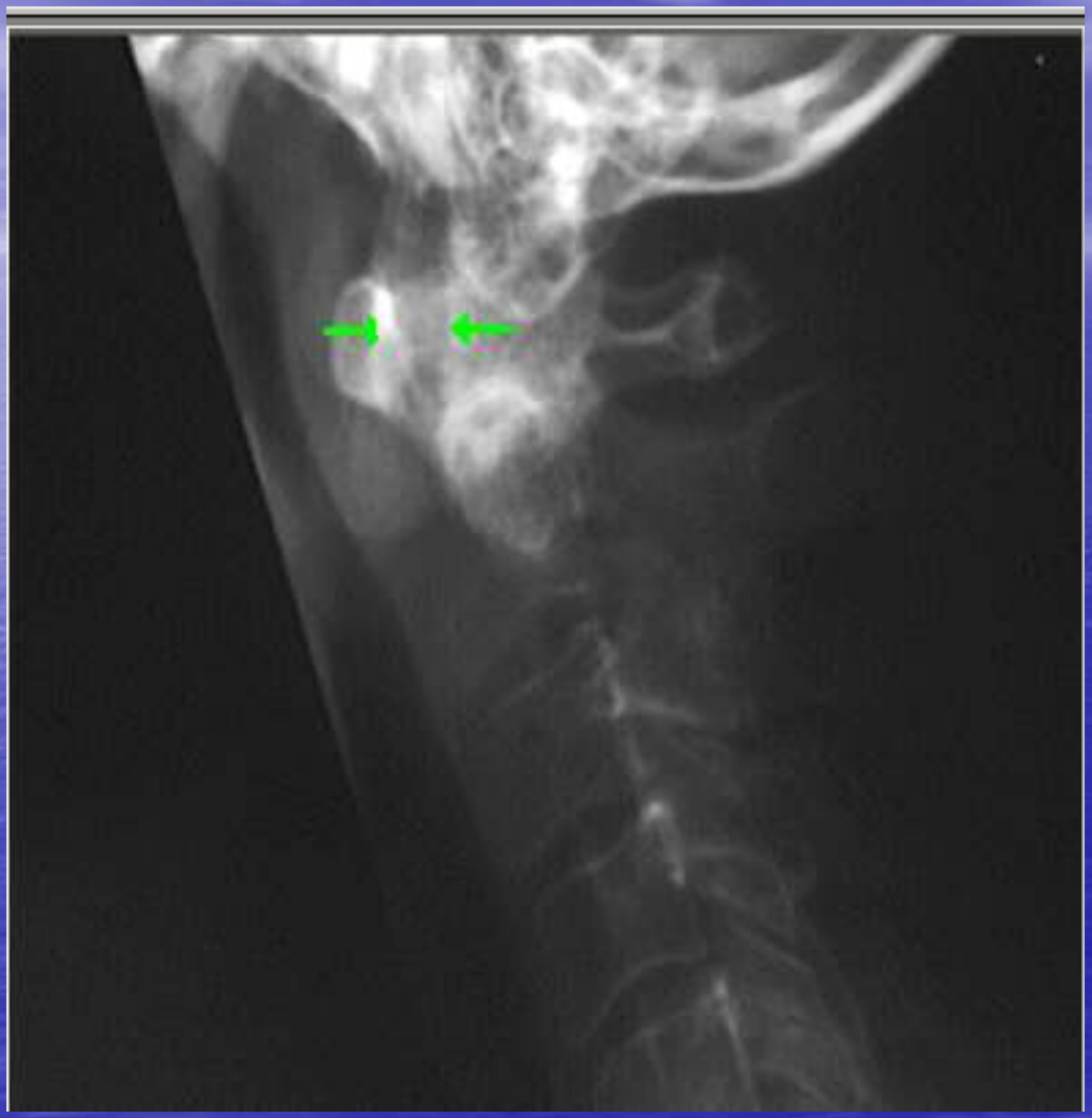
- **Ocular involvement**
- The most common symptom is dry eyes (keratoconjunctivitis sicca) due to secondary Sjögren's syndrome.
- Scleritis and peripheral ulcerative keratitis are uncommon but more serious and potentially sight-threatening complications.





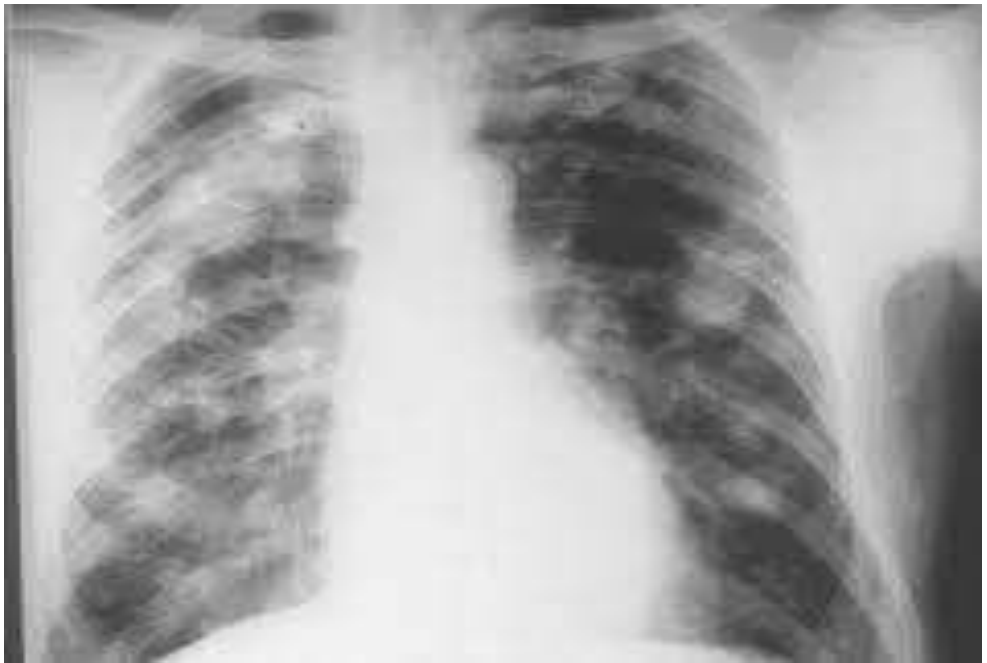
- **Peripheral neuropathy:**
- Symptoms include burning, tingling and numbness.
- Entrapment neuropathies may result from compression by hypertrophied synovium or by joint subluxation.
- Median nerve compression is the most common and bilateral carpal tunnel syndrome can occur as a presenting feature of RA.
- **Cardiac involvement:**
- Heart block, cardiomyopathy, coronary artery occlusion and aortic regurgitation have all been reported but are rare.
- The risk of cardiovascular disease is increased due to a combination of conventional risk factors and the effects of inflammatory cytokines on vascular endothelium.





Rheumatoid pneumoconiosis (Caplan syndrome)

- Rheumatoid pneumoconiosis is swelling and scarring of the lungs. It occurs in people with RA who have breathed in dust, such as from coal or silica.
- It is believed that in these patients, there is an alteration which causes the increased immune response to foreign materials in the lungs.

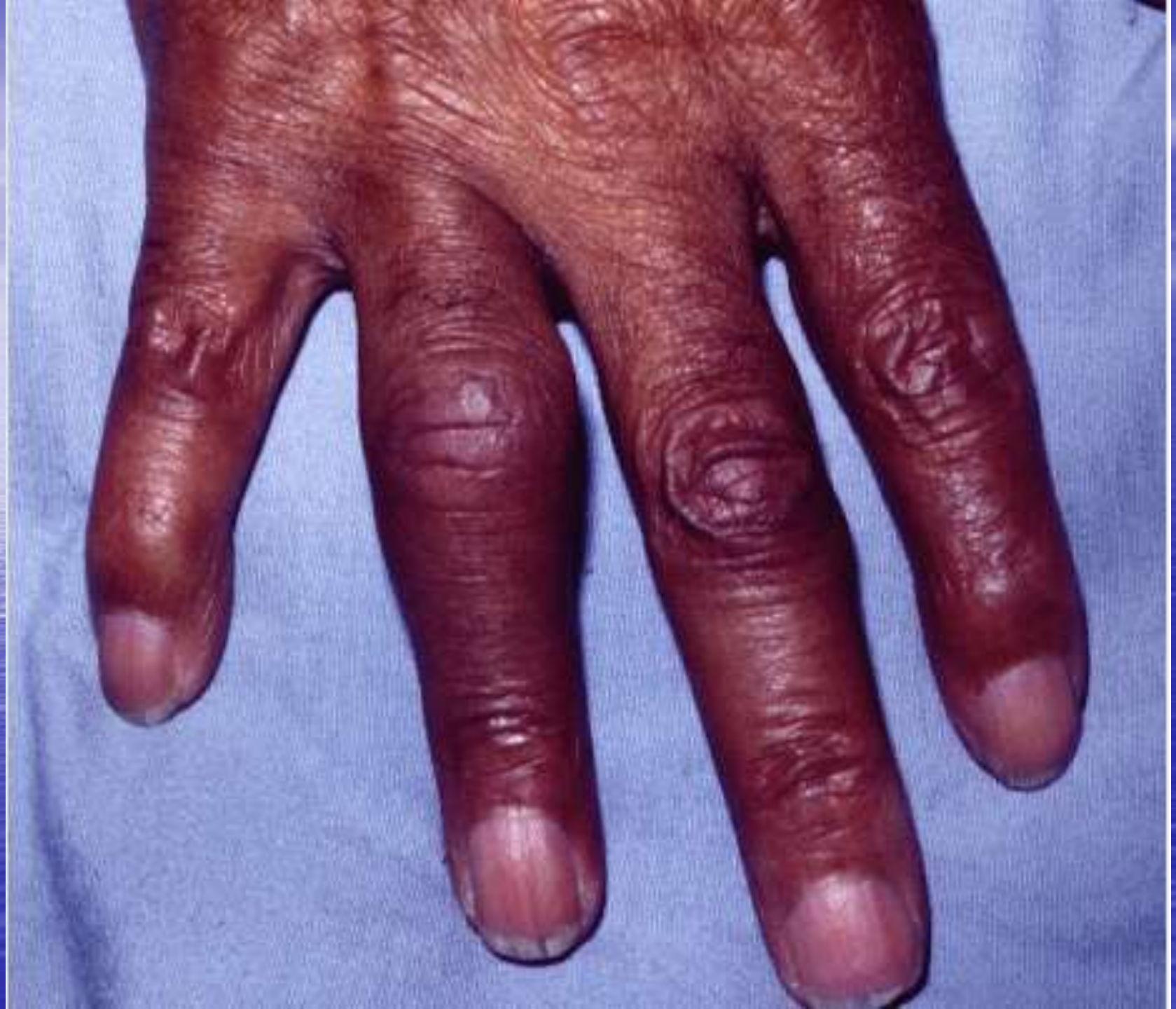


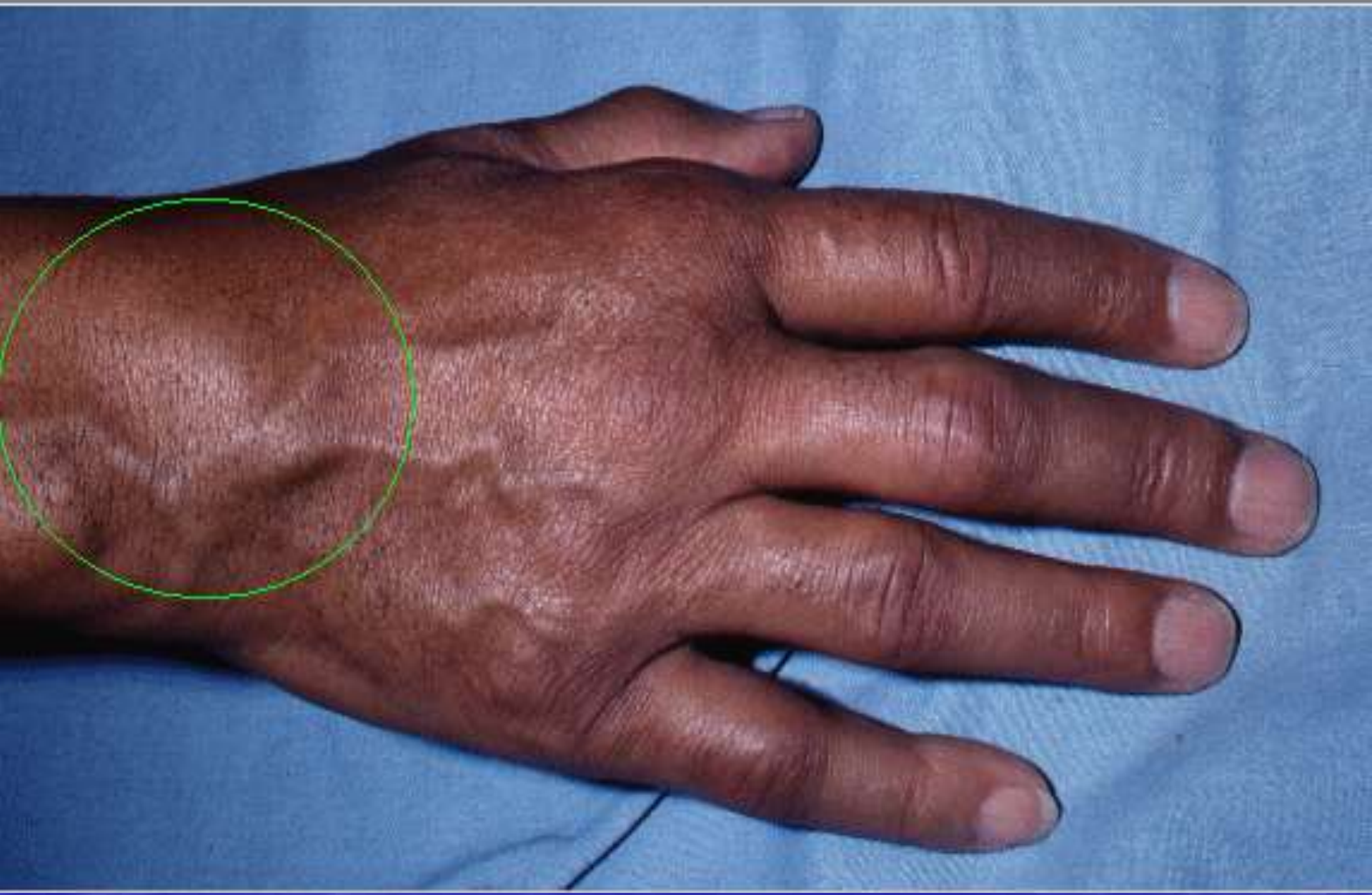
Clinical presentation

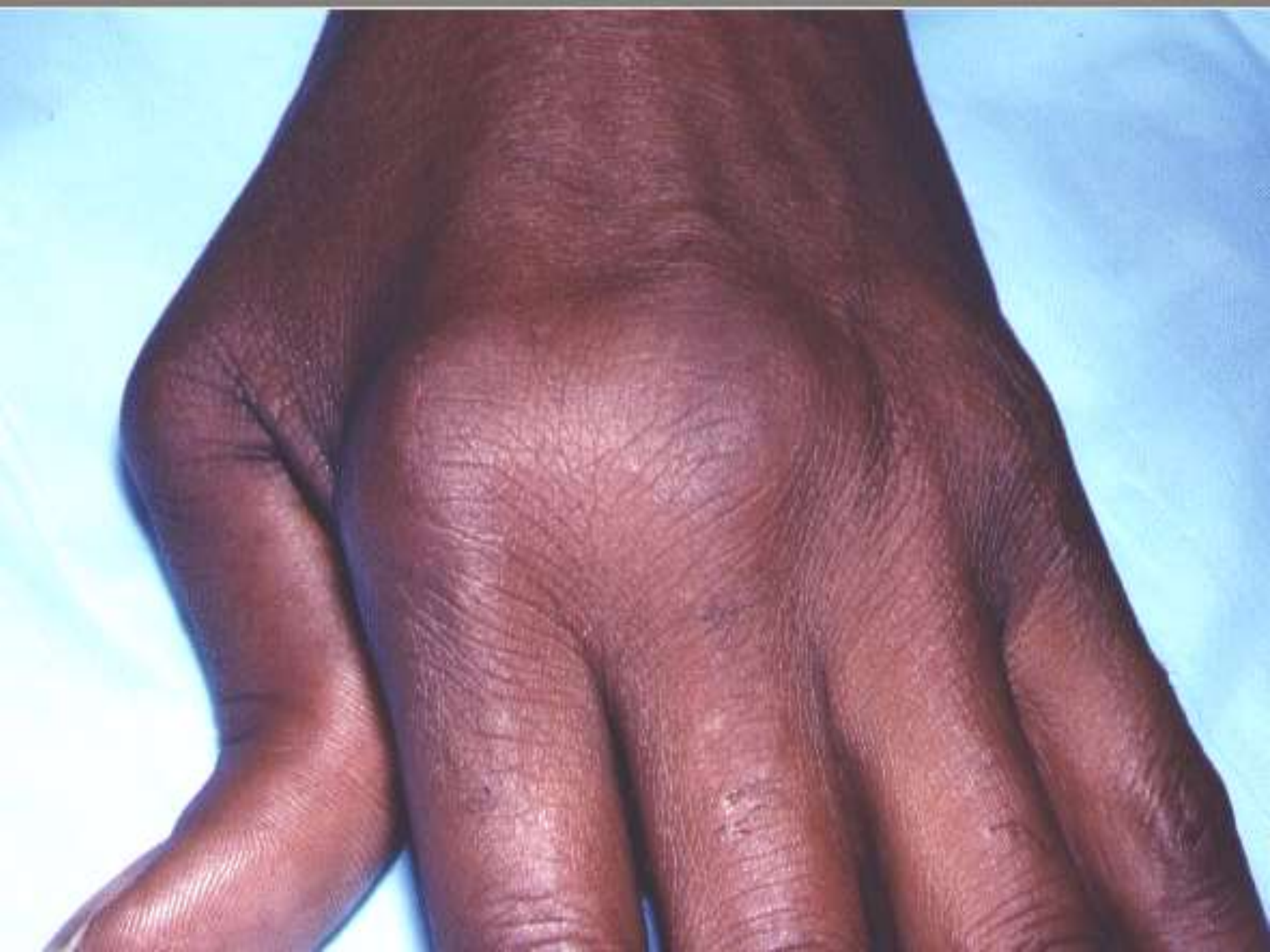
- Usually : insidious onset .
- Starts with symmetrical pain, swelling, and stiffness of multiple joints (MCP's, PIP's, wrists, and MTP'S in feet) .
- Elbows, shoulders, knees are also commonly affected.
- EMS is a common feature for all inflammatory arthropathies.
- EMS > 1 hr is characteristic in RA.

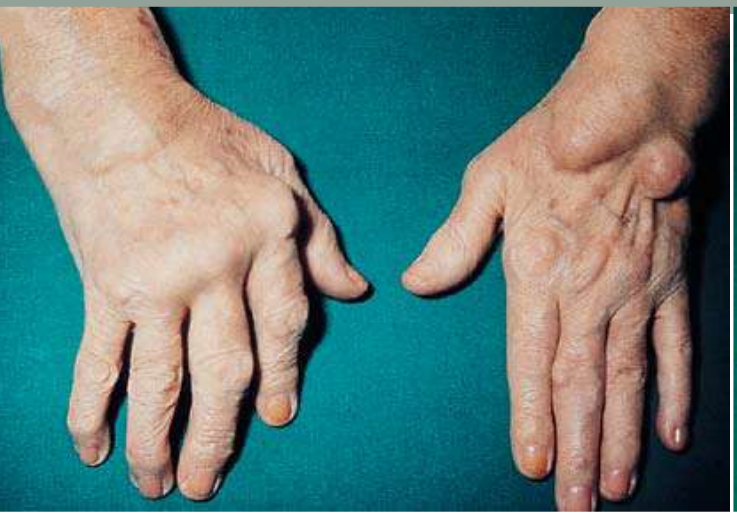
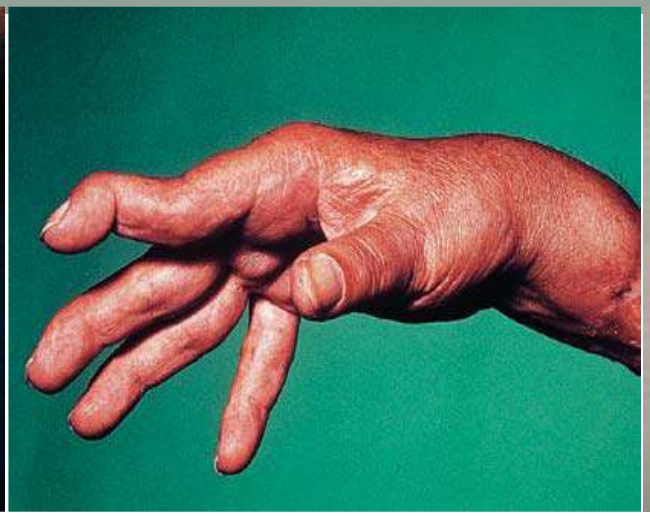
Patterns of progression:

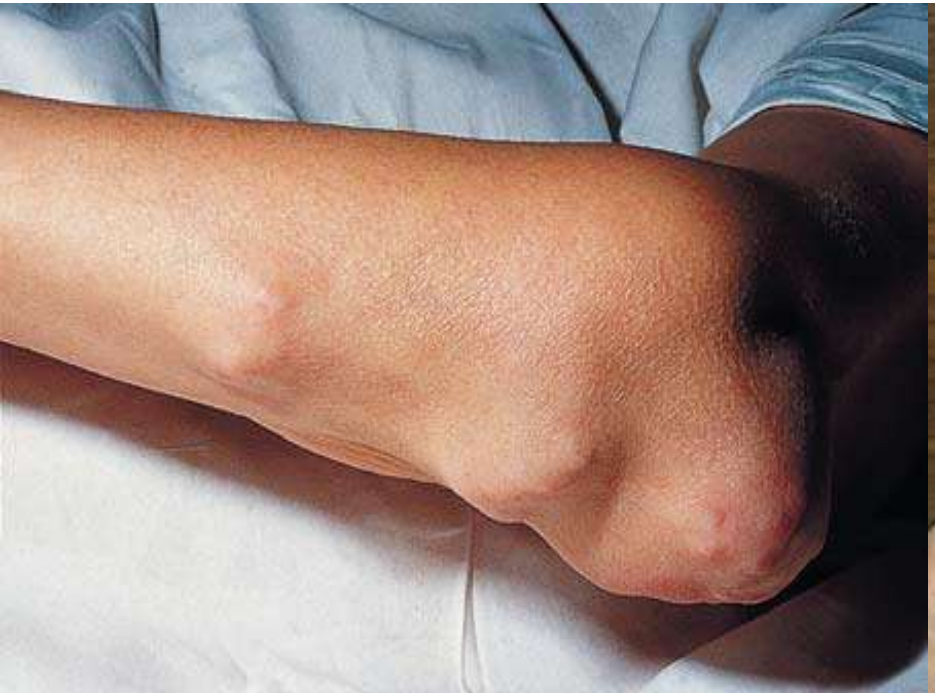
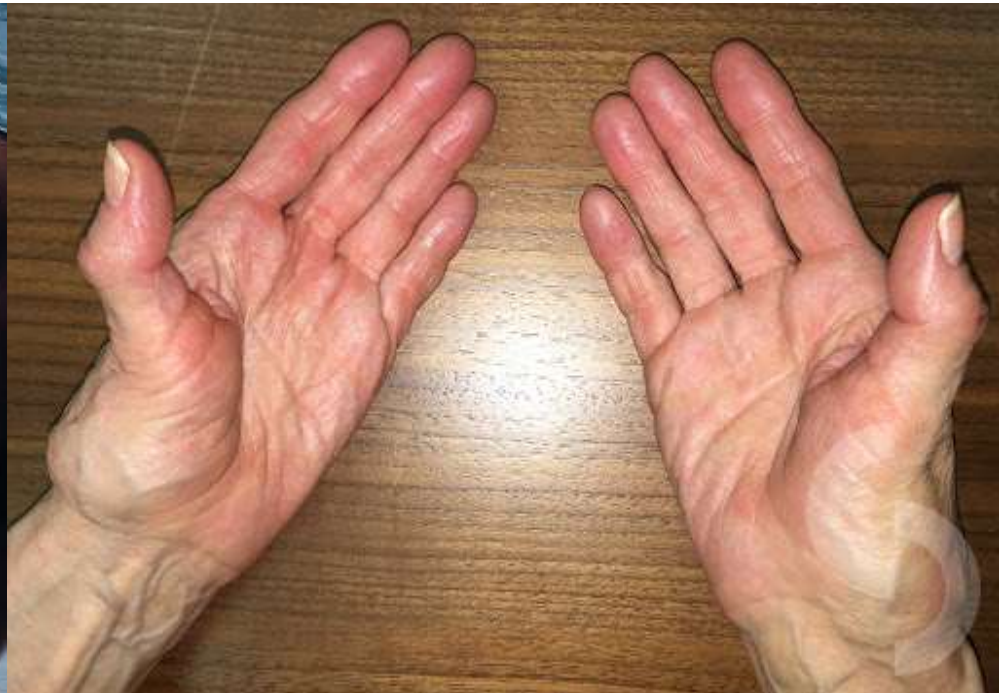
- Most patients have **fluctuating** course over weeks-months.
- **Remission** : rare without DMARDS .
- **Active disease** 10-20% through its course.

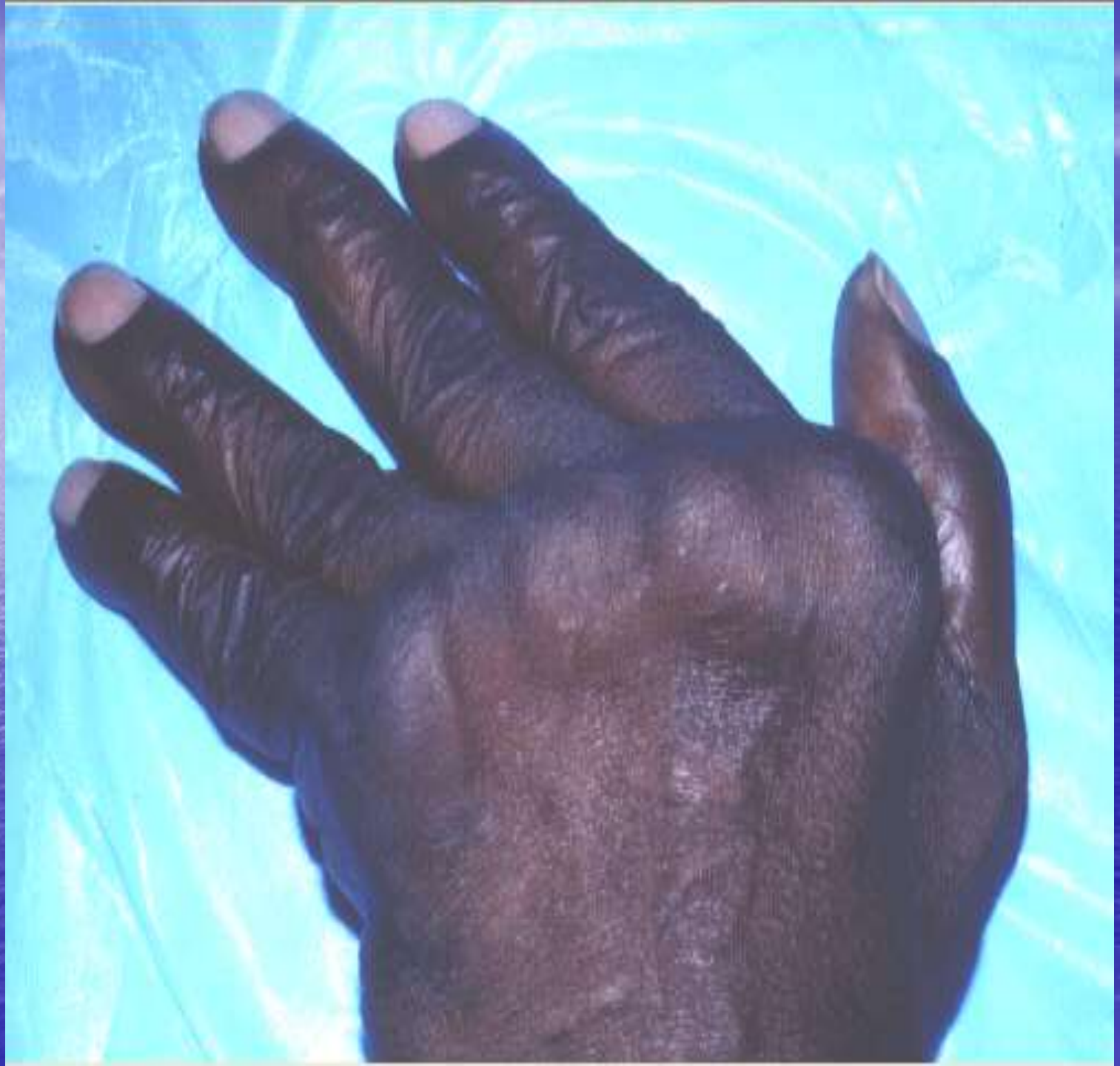


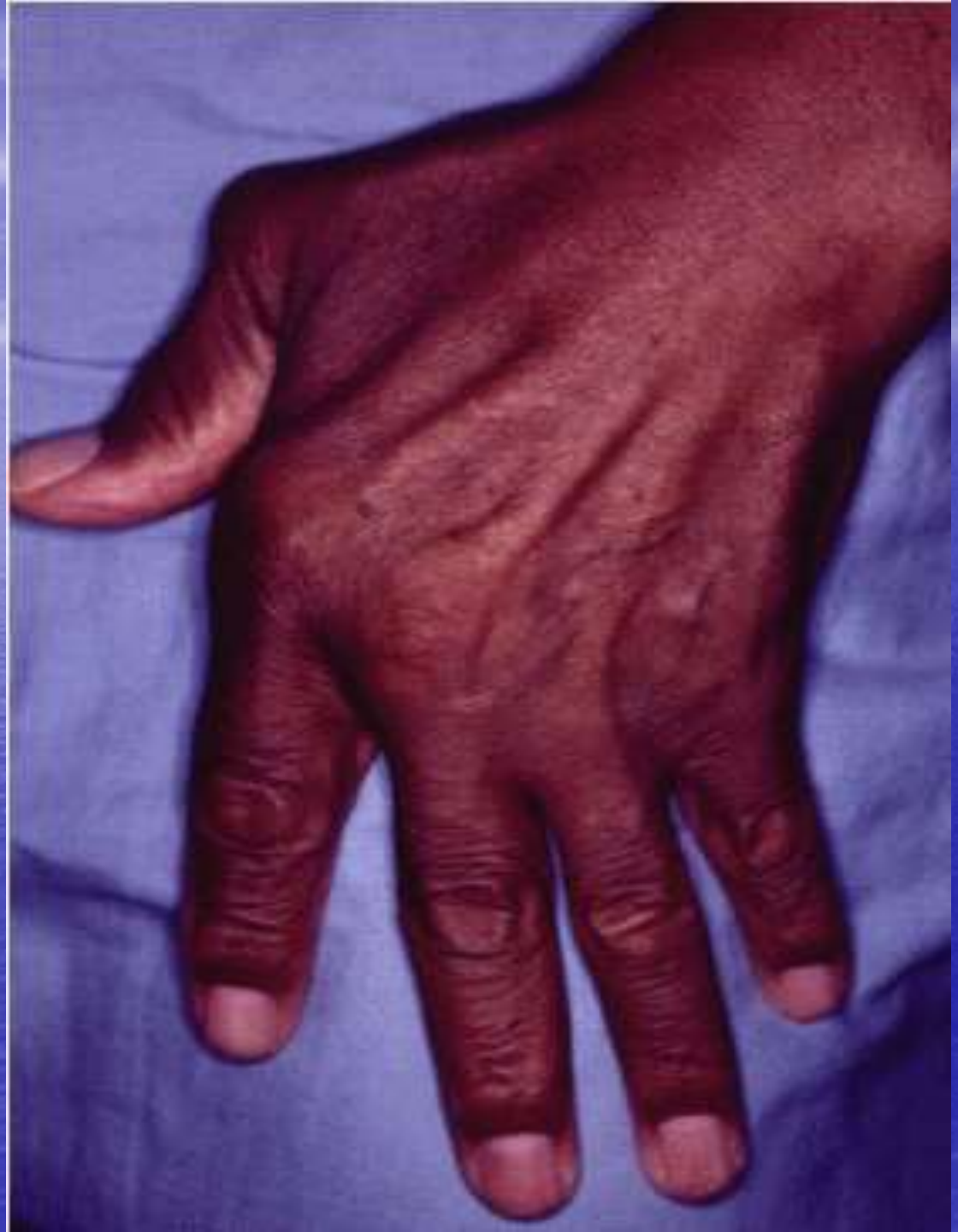


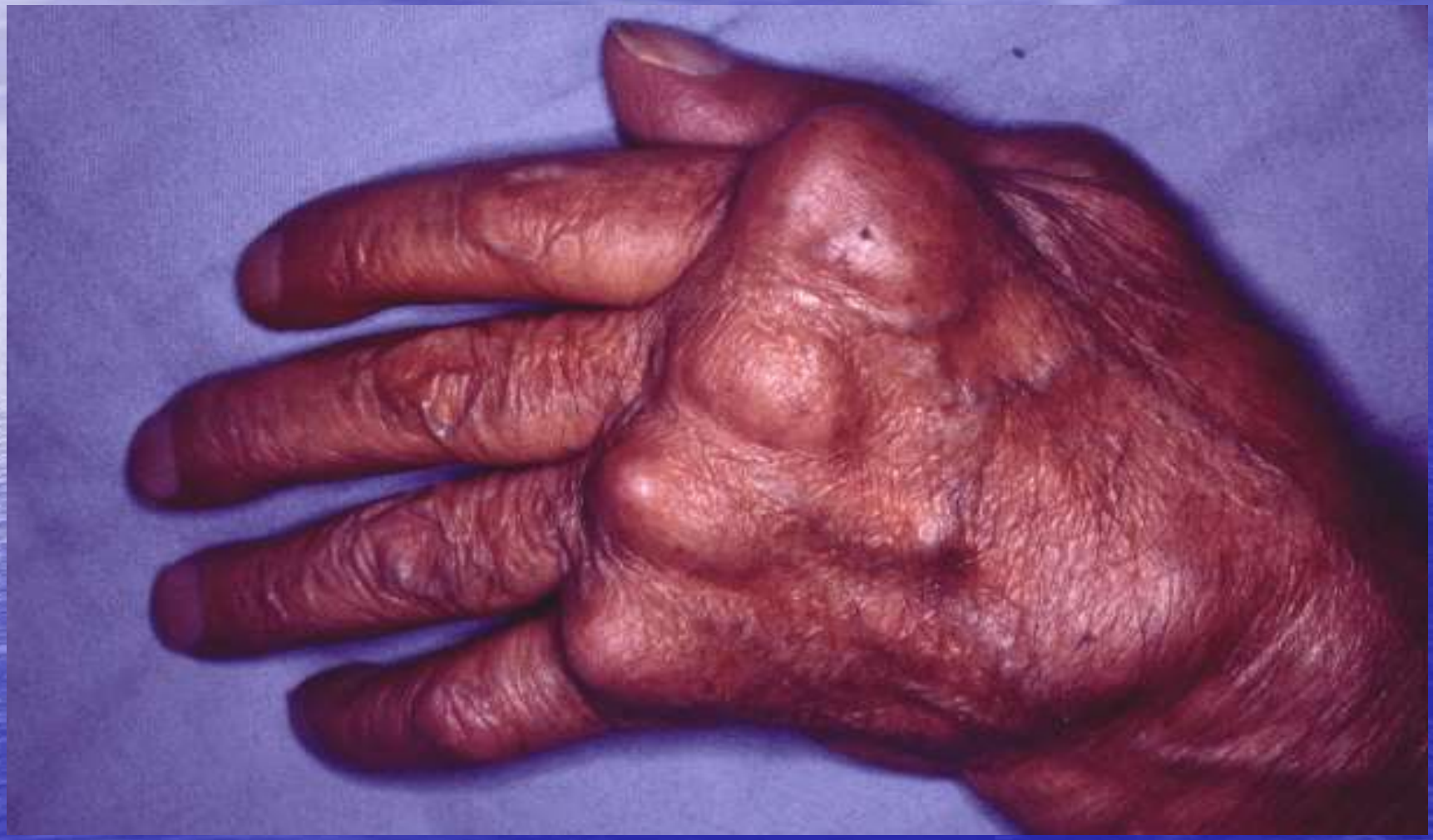


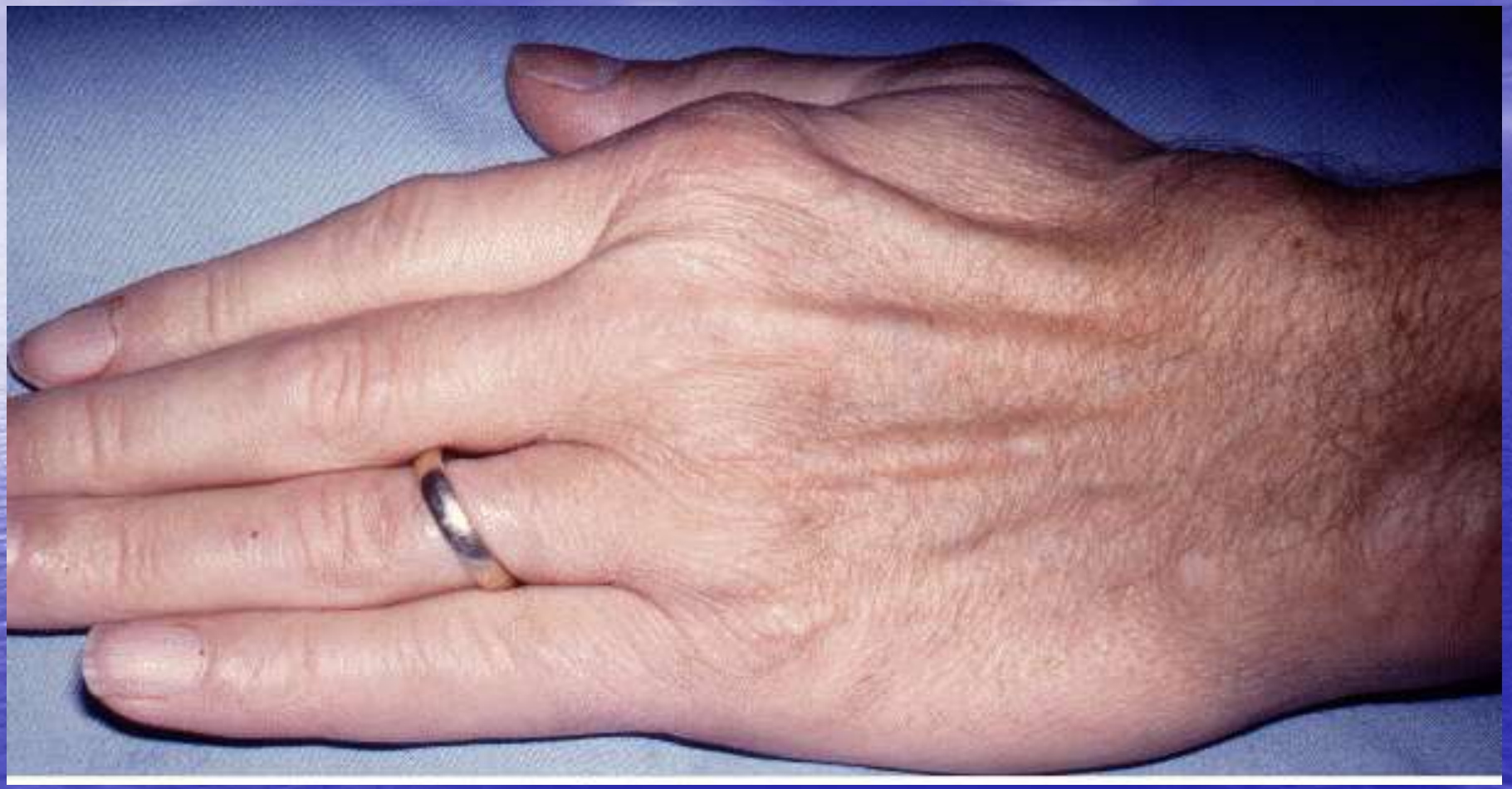



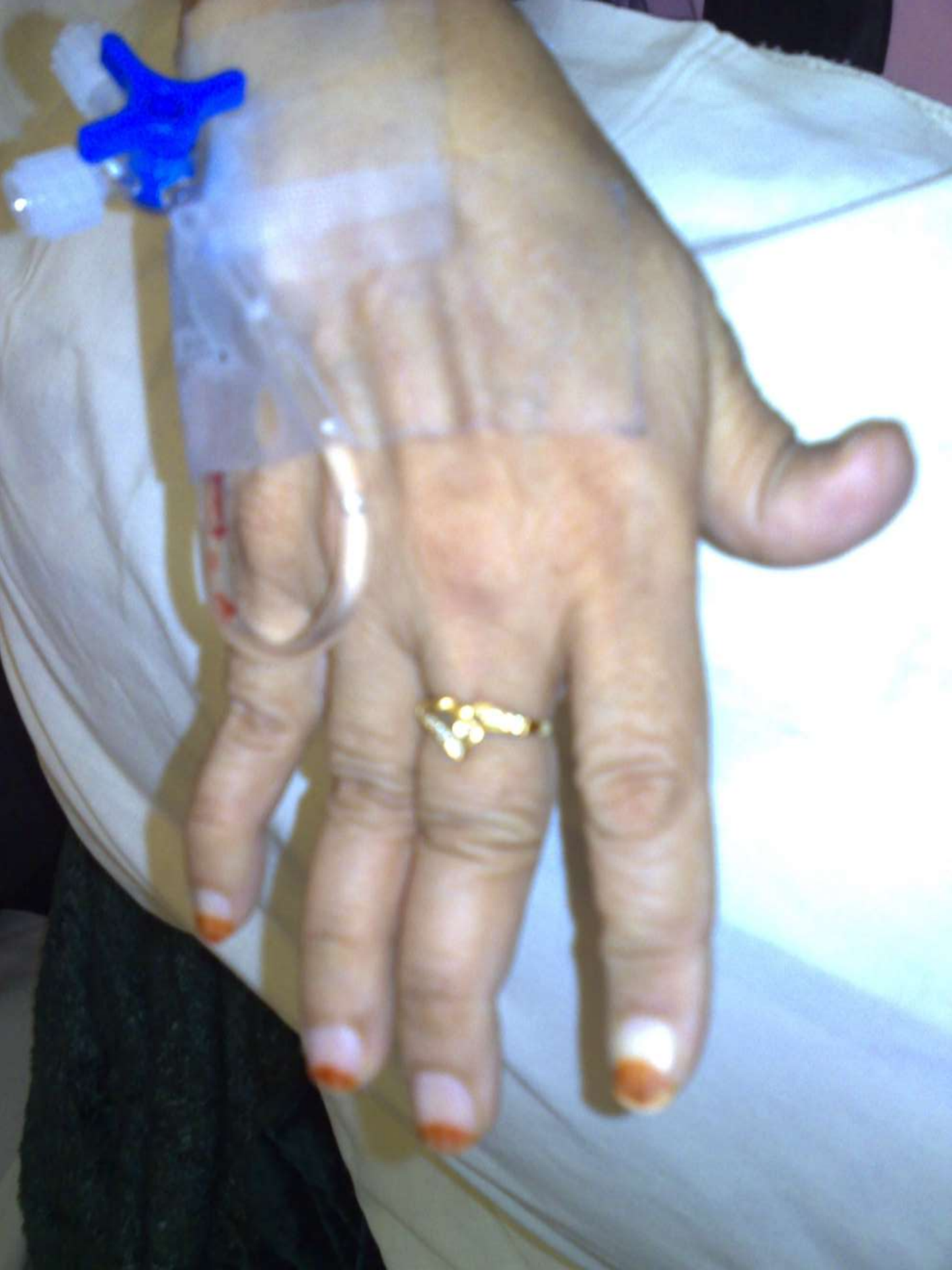



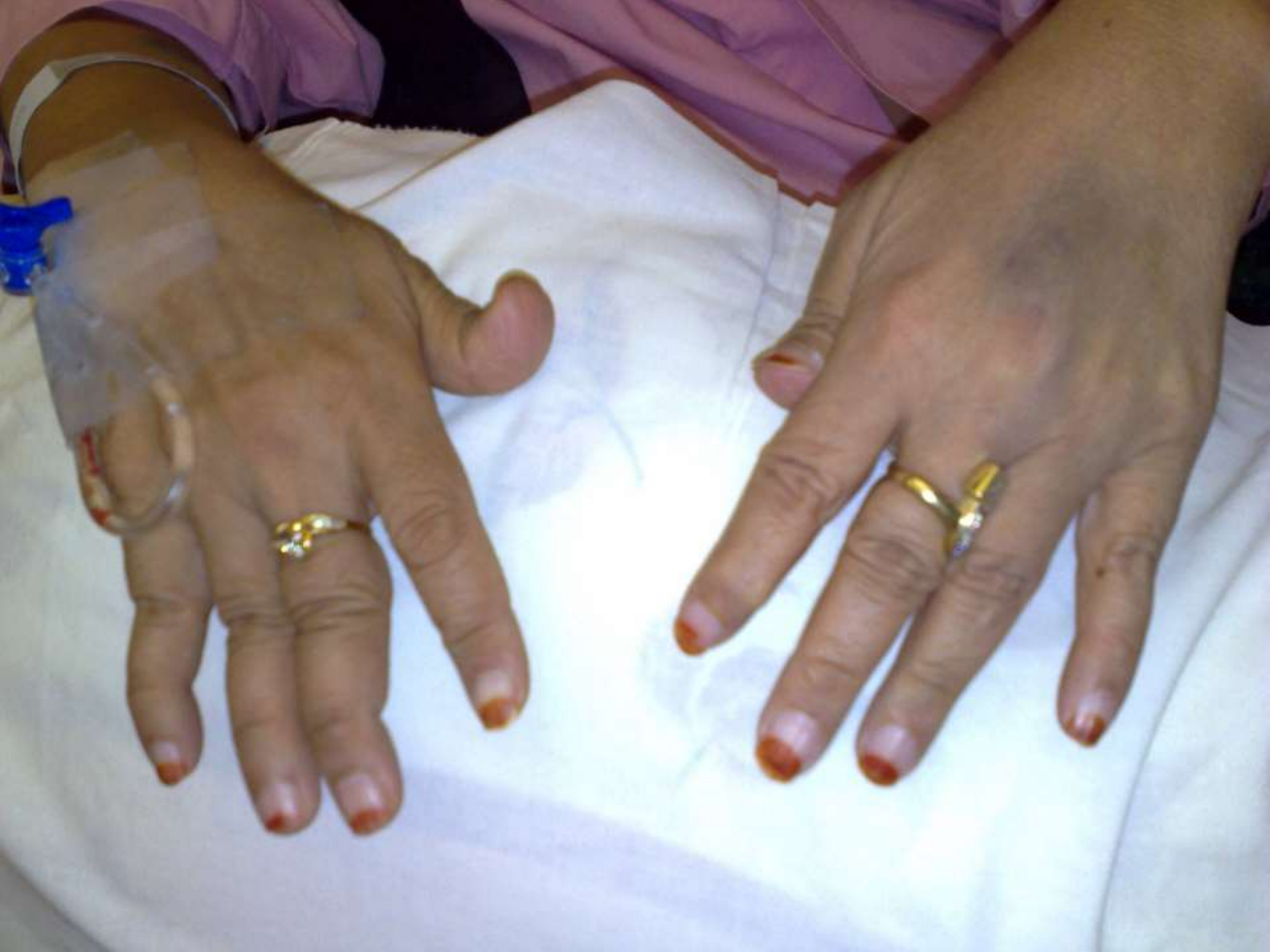


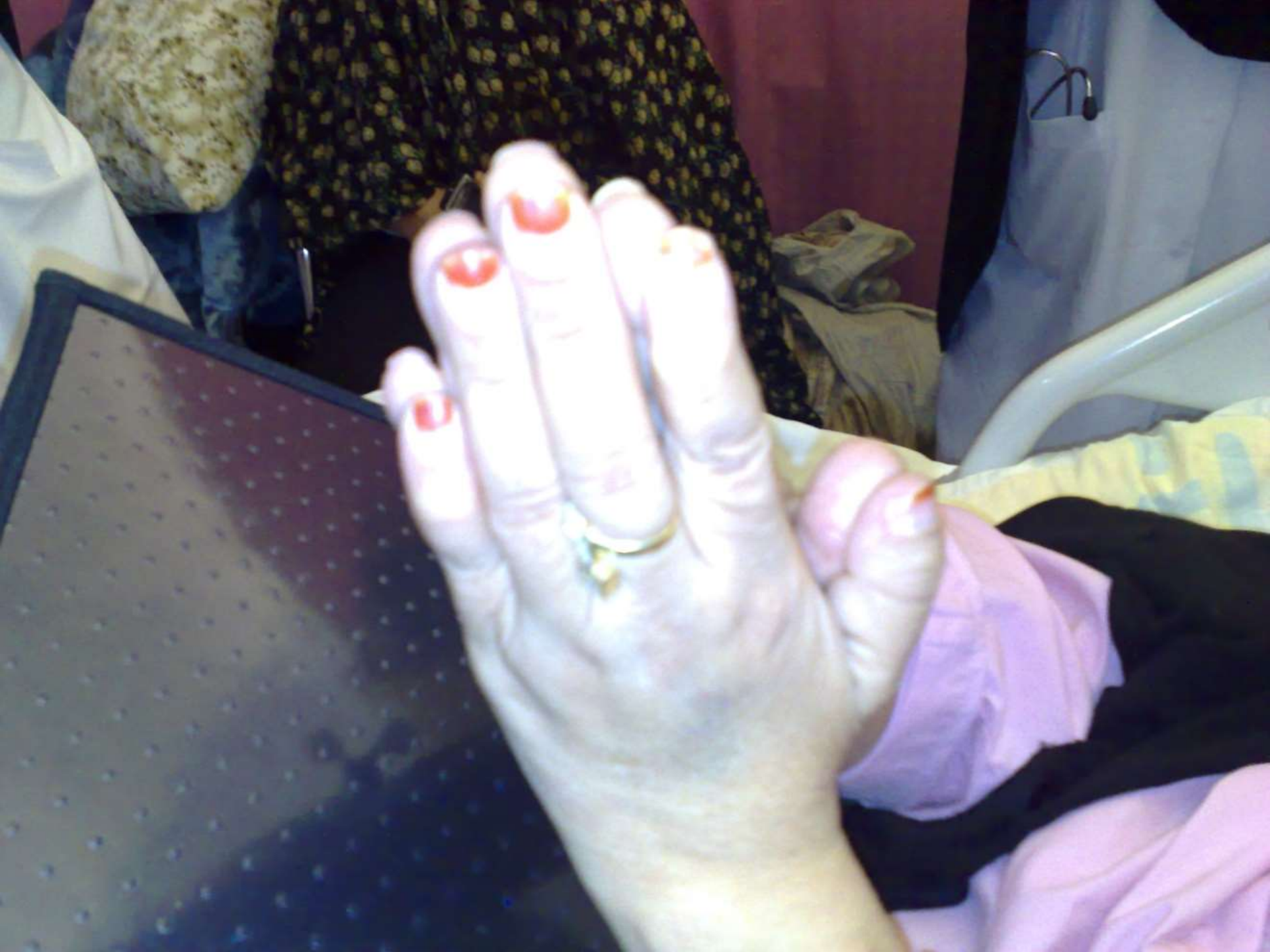


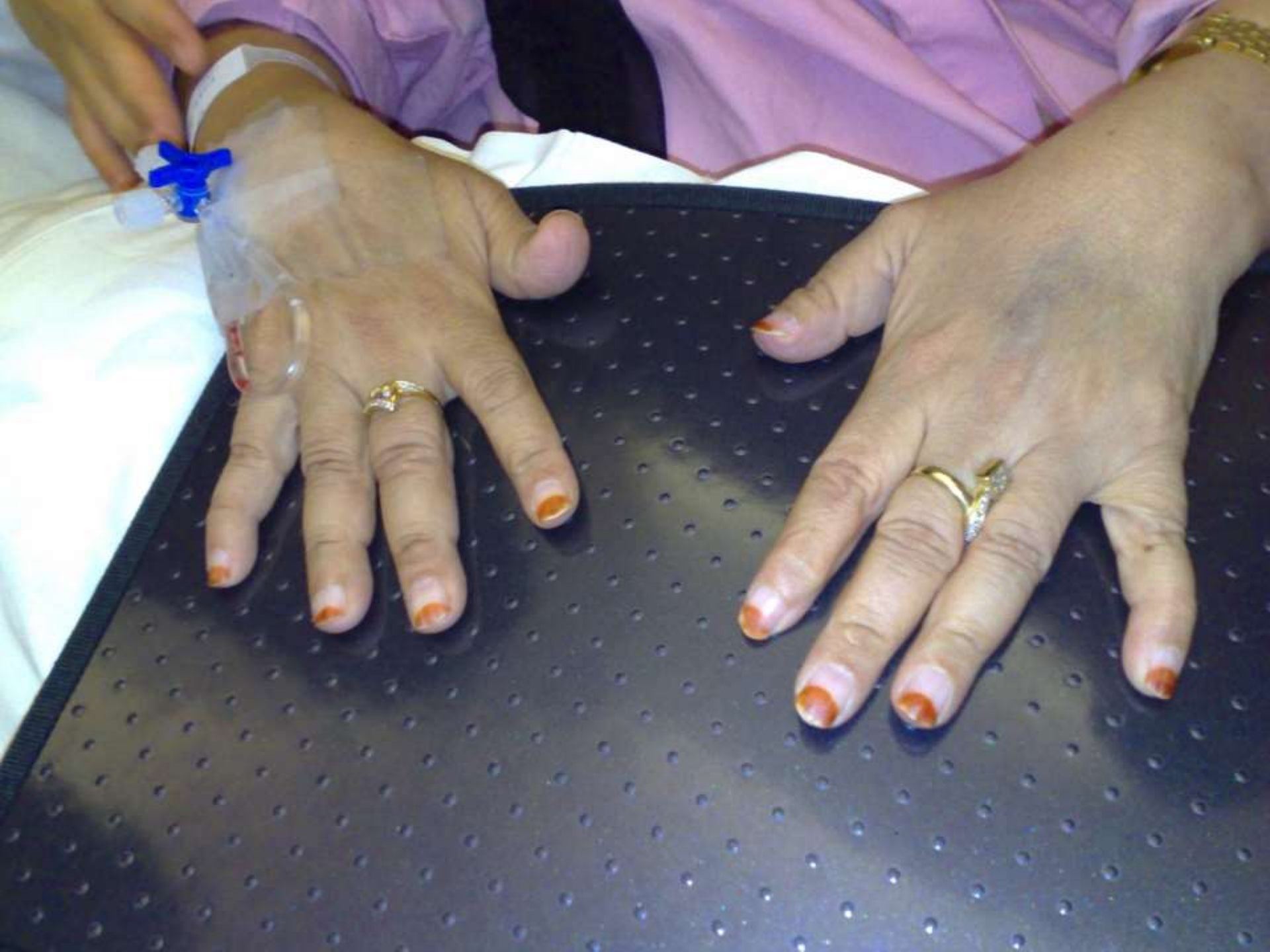








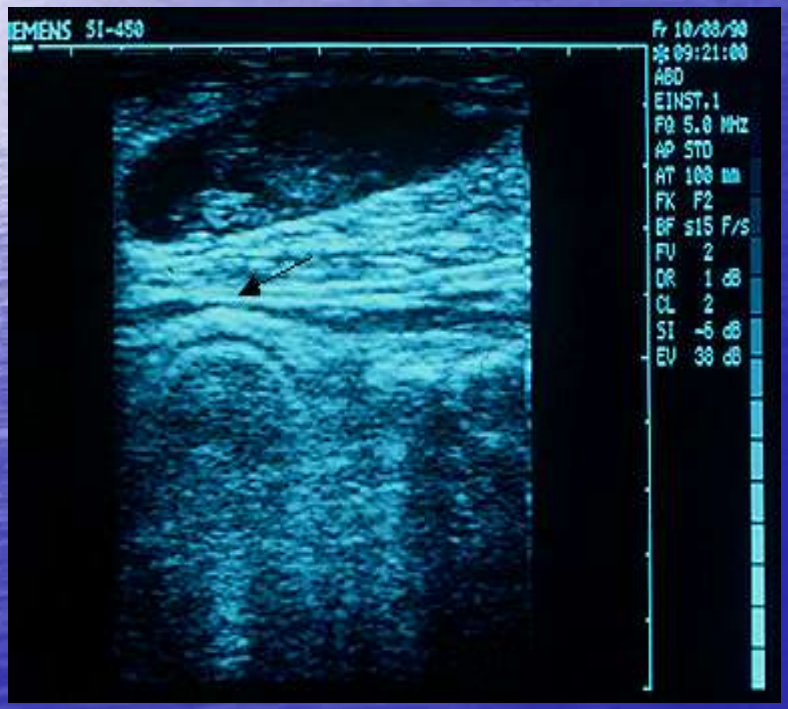


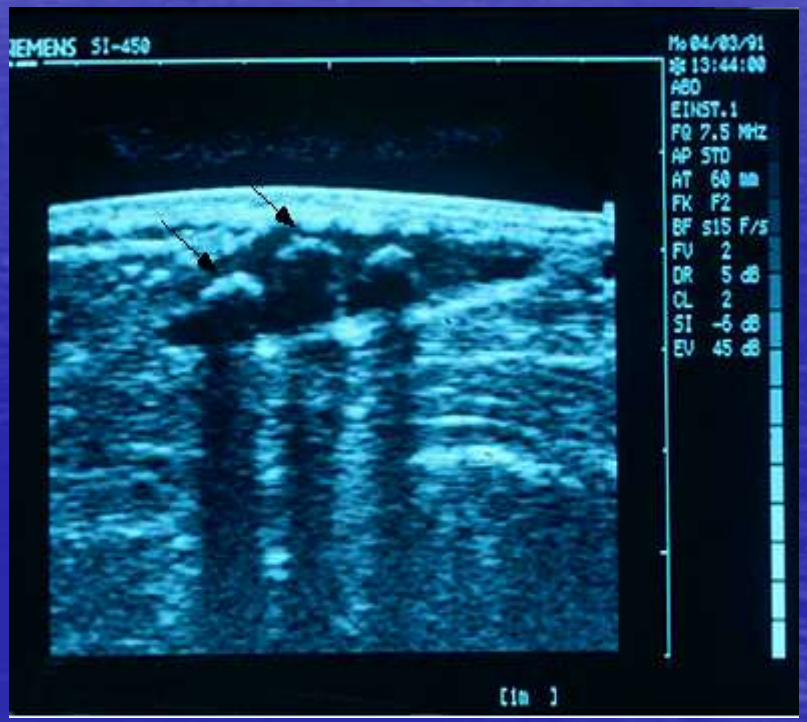


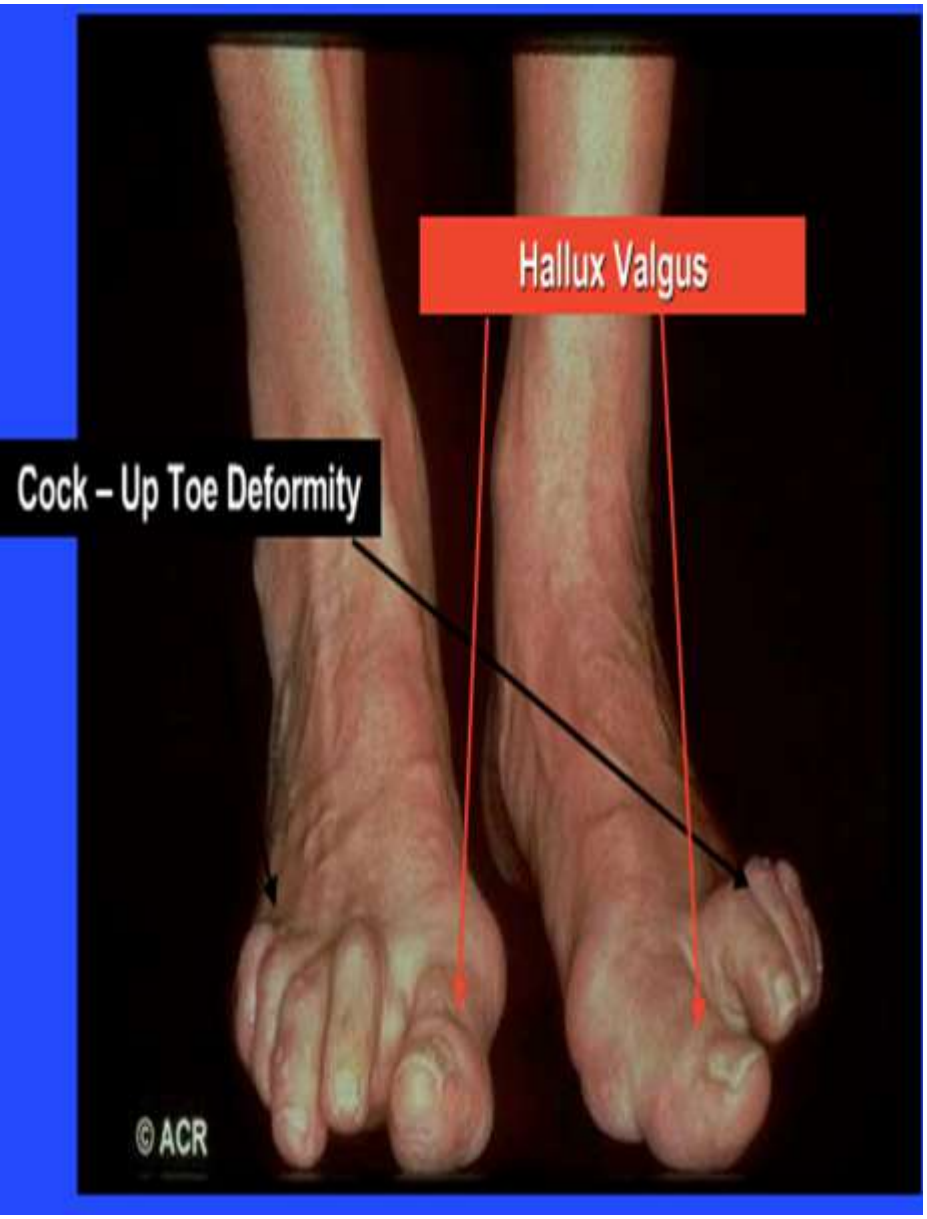
- Knees

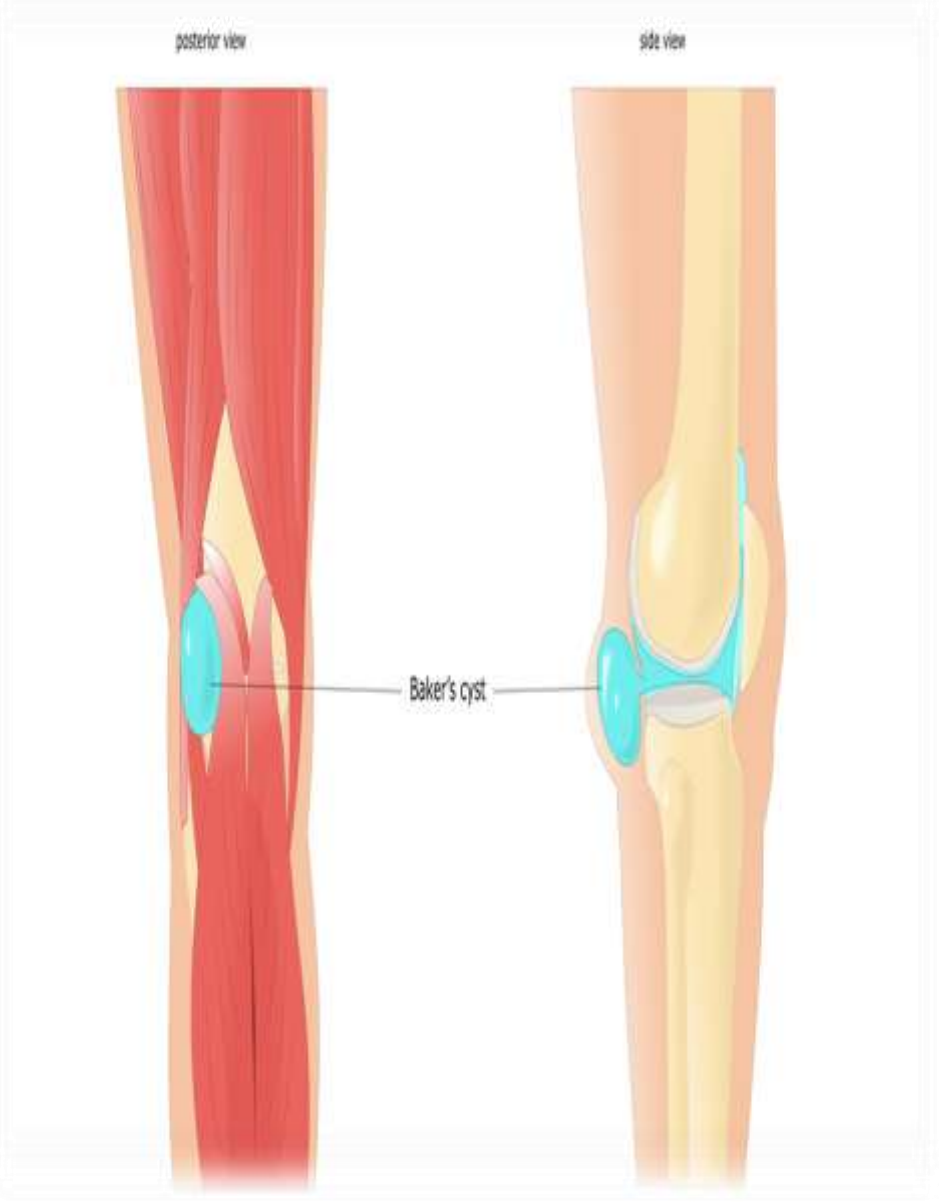
  -arthritis with effusion .

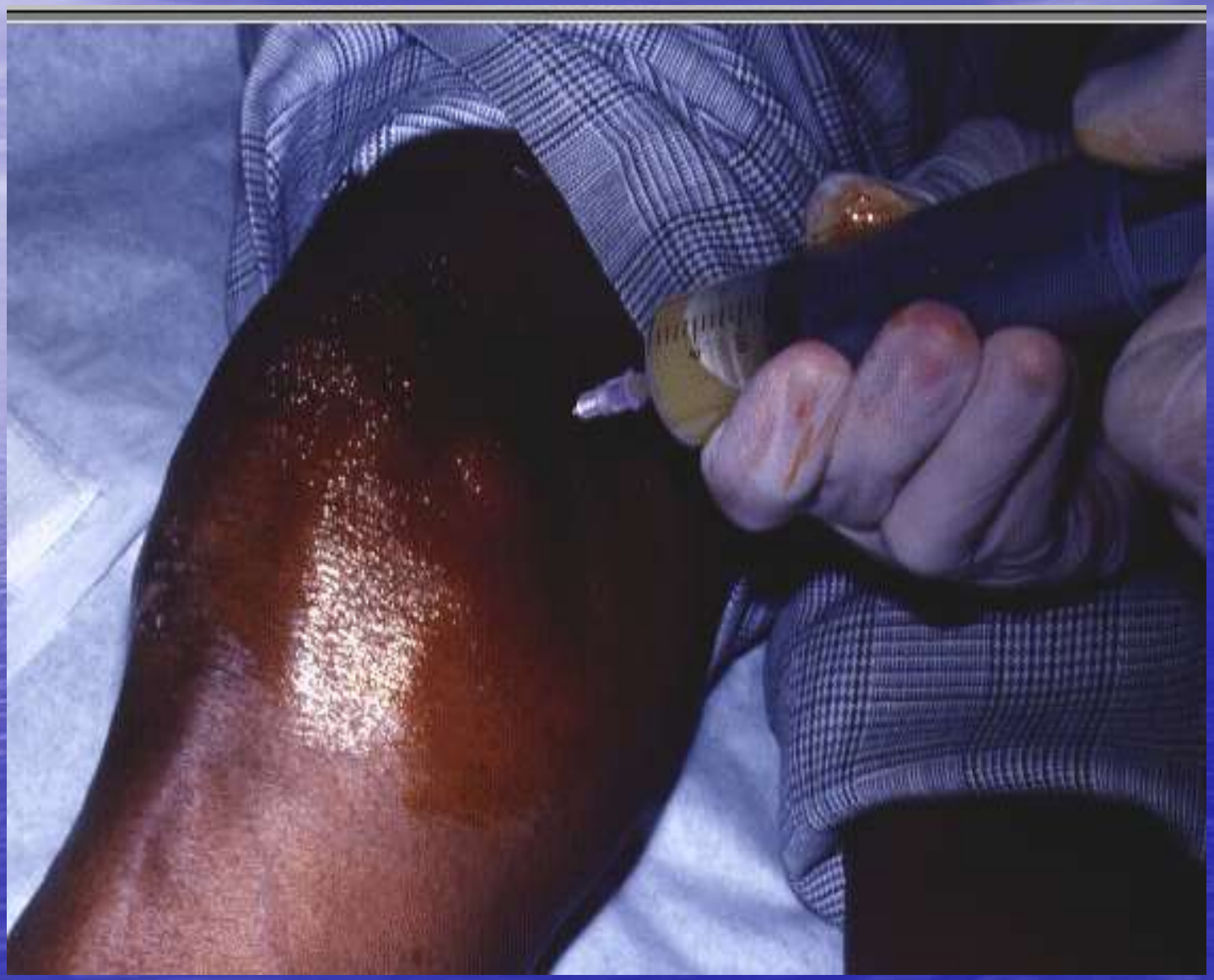
  -Baker's cyst .






Hallux Valgus
Cock – Up Toe Deformity
© ACR


posterior view
side view
Baker's cyst

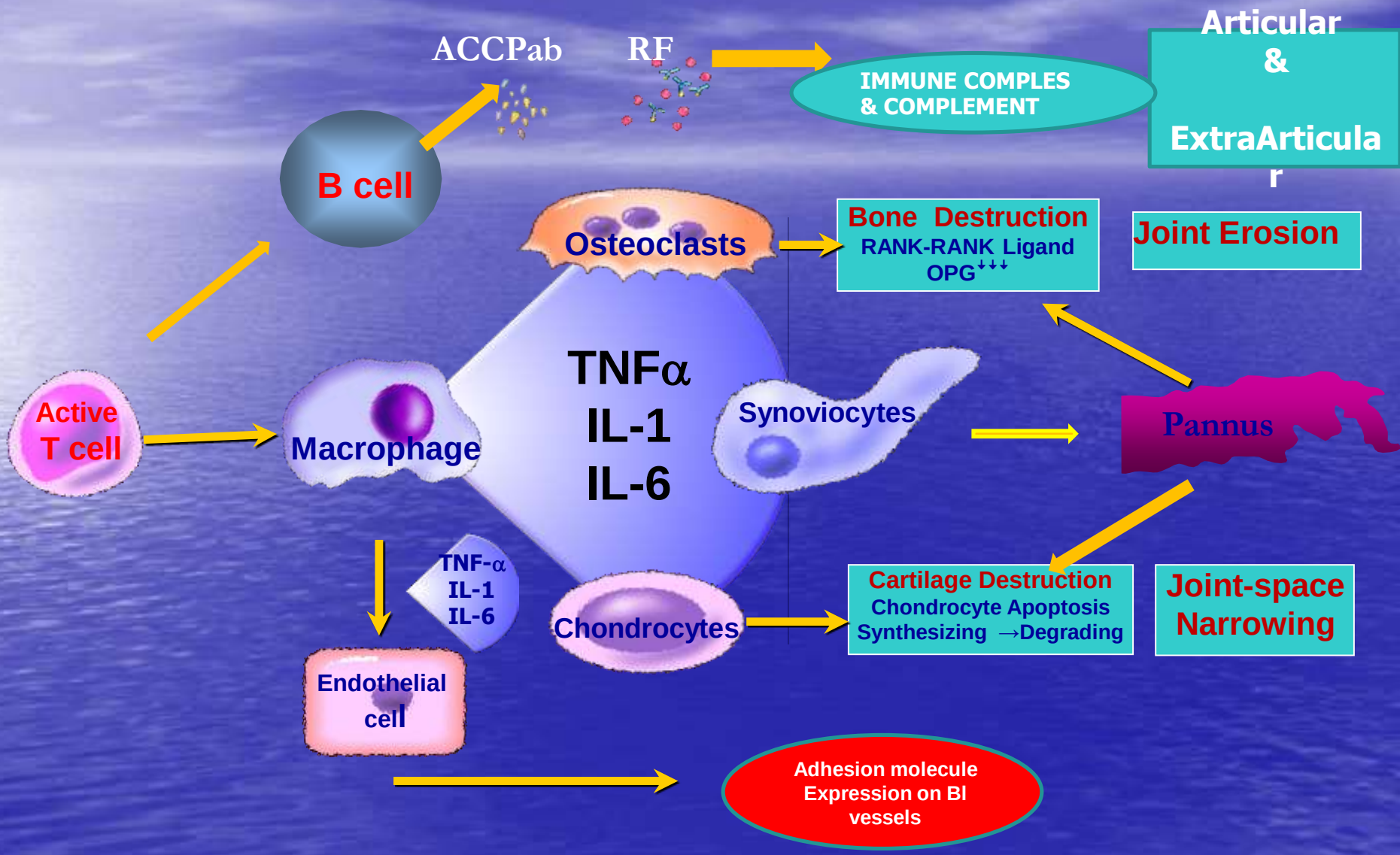


Genetic predisposition:

- **HLA DR4 (Most common in Rh.A)**

HLA DRB1 (bad prognosis) .

RA Pathogenesis & Structural Damage



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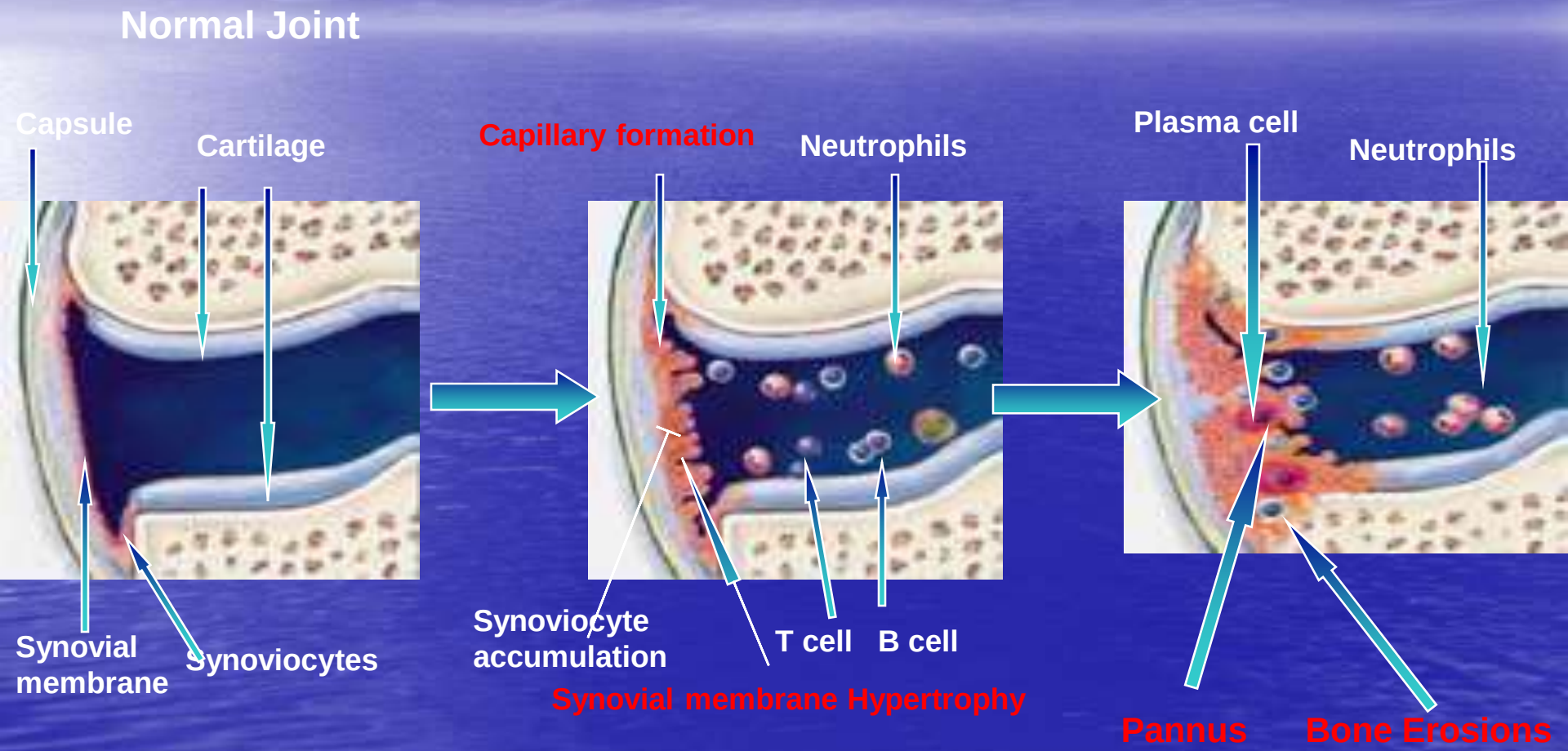
RA Pathogenesis



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Investigations:

- The diagnosis of RA is essentially clinical but investigations are useful in confirming the diagnosis and assessing disease activity.
- Normal levels of ESR and CRP does not exclude the diagnosis.
- ACPA are positive in about 70% of cases and are highly specific for RA.
- RF is also positive in about 70% of cases.
- RF is less specific than ACPA.

Rheumatoid factor:

- Immunoglobulin reactive against Fc portion of IgG.
- Mostly IgM.
- R.F may self associate into large immune complexes→augment arthritis .
- Polyarticular Rh.A , +VE R.F have:

  -more erosions

  -more extra-articular manifestations .

  -worse function.

- Anti-CCP (Anti-citrullin containing peptide)

  -A specific marker for Rh.A.

  -May be a better predictor for progression to erosive joint disease than titers of R.F early in the disease .

Most of the joint damage that results ultimately in disability starts early in the course of the disease .

Prognostic factors

- Poor prognosis with:

1-presence of HLA-DR4 (associated with erosions and extraarticular manifestations

2- high titer RF or anti-ccp ab

3- elevated acute phase reactants (ESR & CRP)

4- Multiple joint involvement (>6)

5- constitutional symptoms (fever, weight loss)

6- radiographic evidence of erosive disease(early)

7- extraarticular disease (diffuse nodules, vasculitis, lung involvement

Assessment of activity

- DAS 28 :
  - Tender joints.
  - Swollen joints.
  - ESR
  - Patient global health (0-100) 0 is best
  - +/- CRP

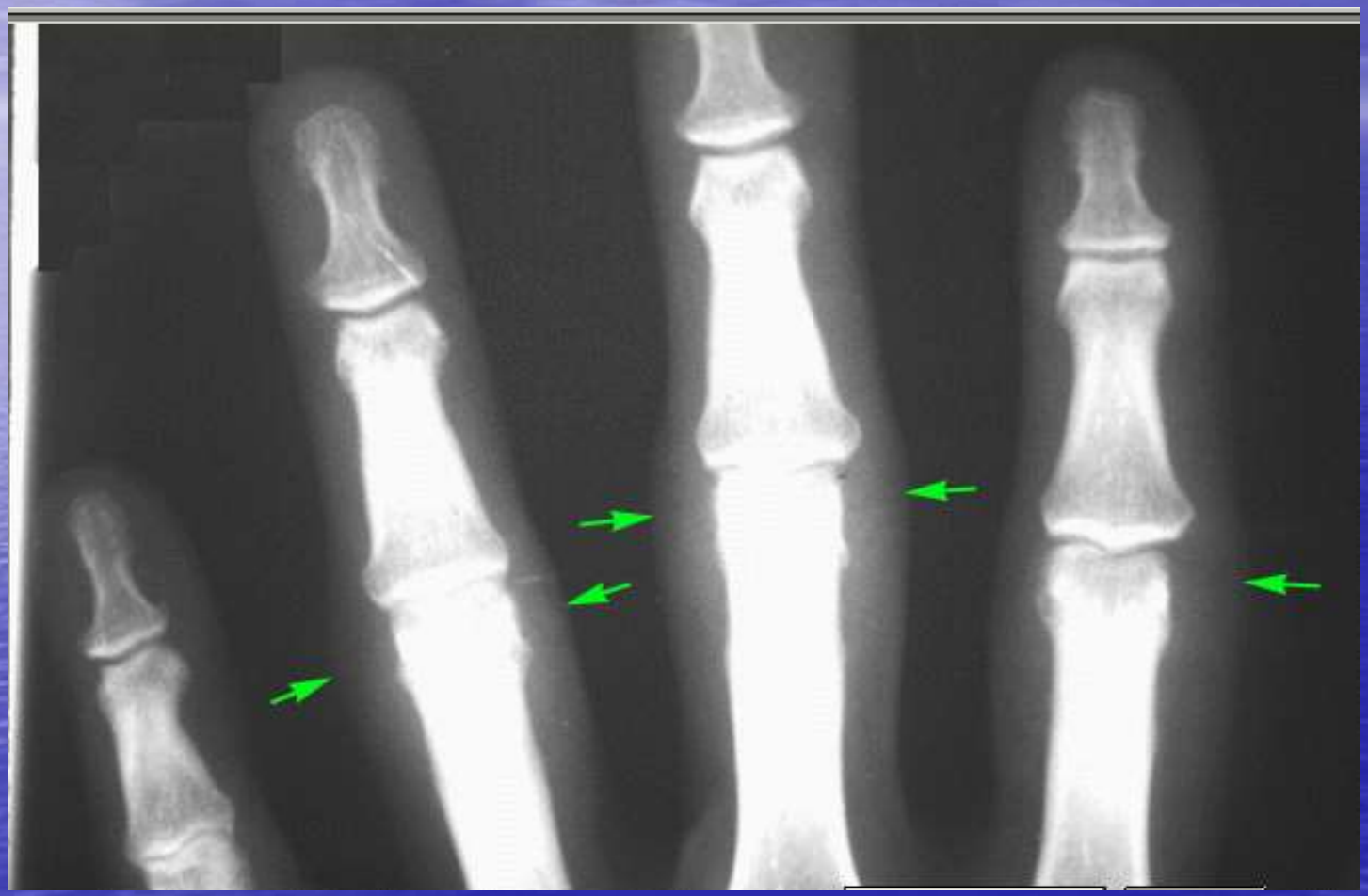
DAS 28

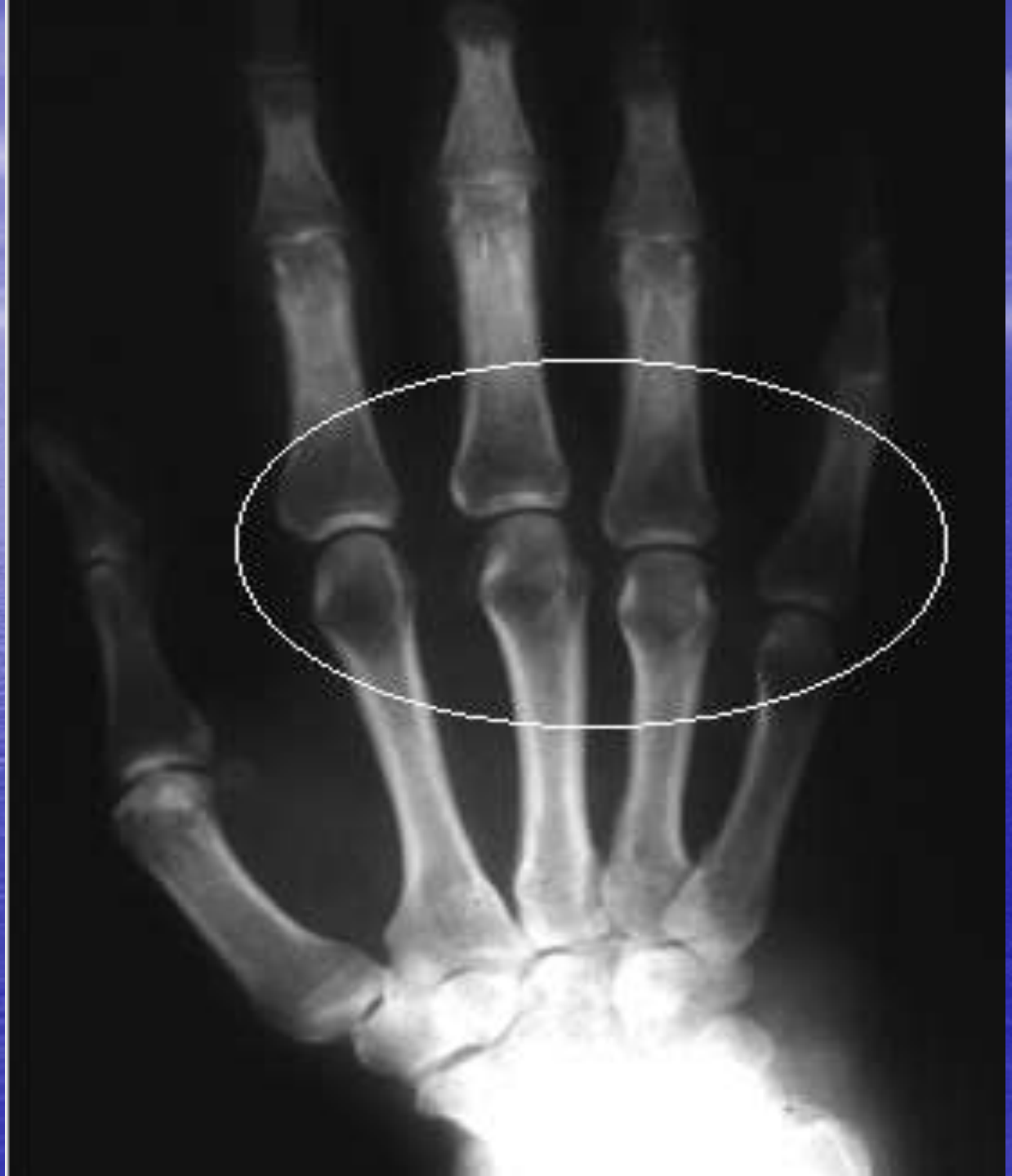
- Less than 2.6 disease remission
- 2.6- 3.2 Low disease activity
- 3.2- 5.1 Moderate disease activity
- Above 5.1 High disease activity

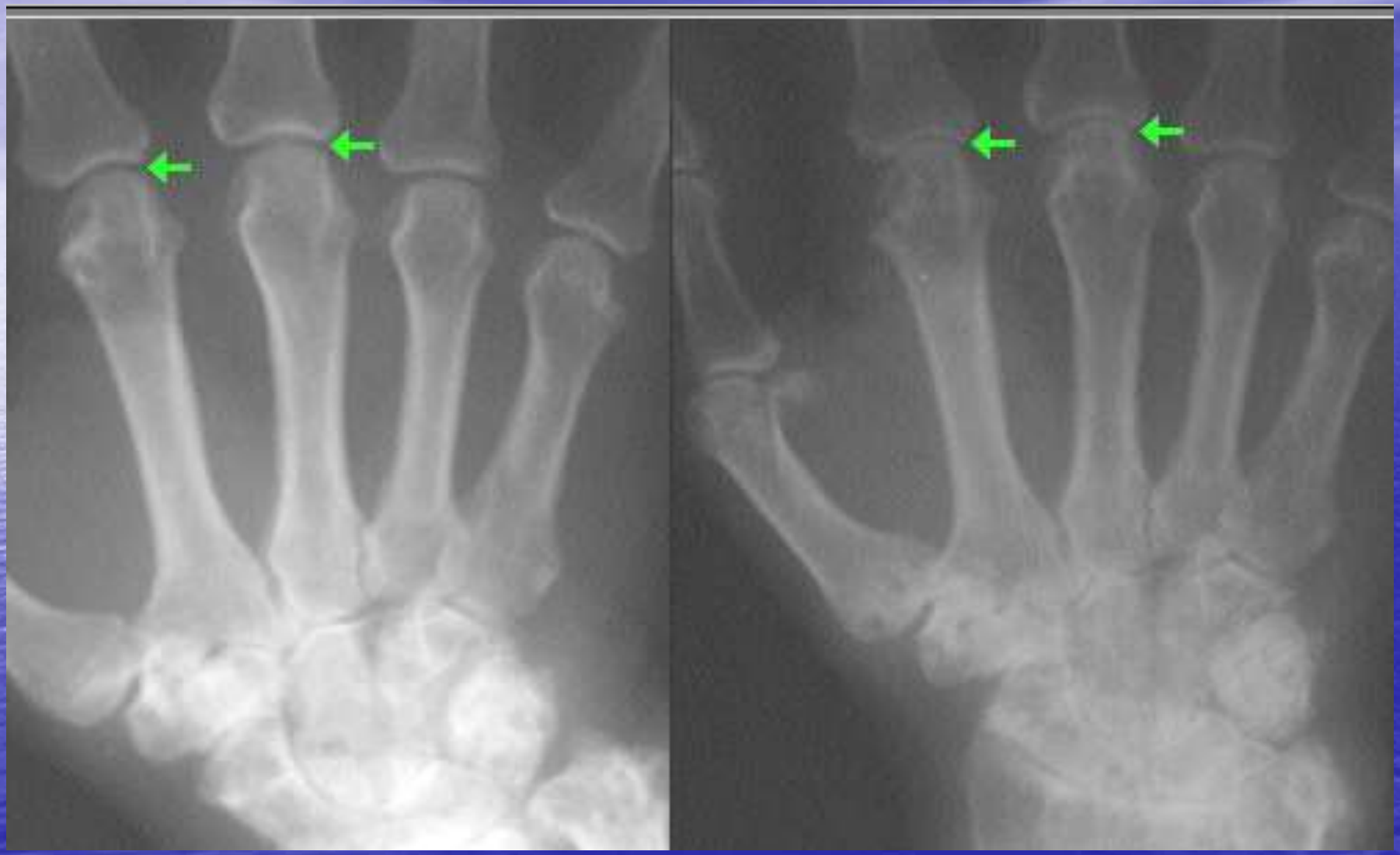
RADIOLOGY

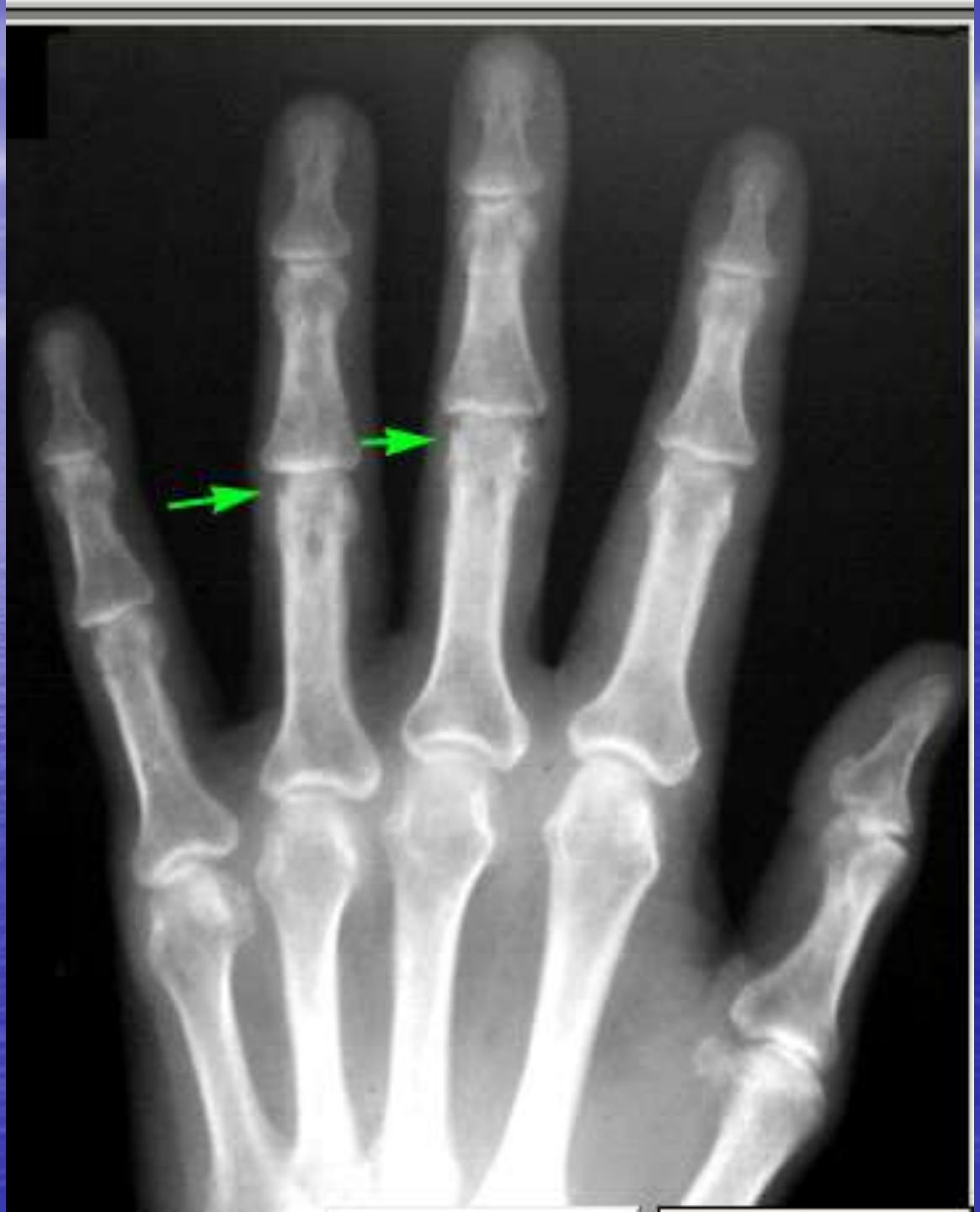
- Soft tissue swelling.
- Peri-articular osteopenia.
- Joint space narrowing**.**
- **joint erosions**.

(X- rays are usually valid for 6-12 months)









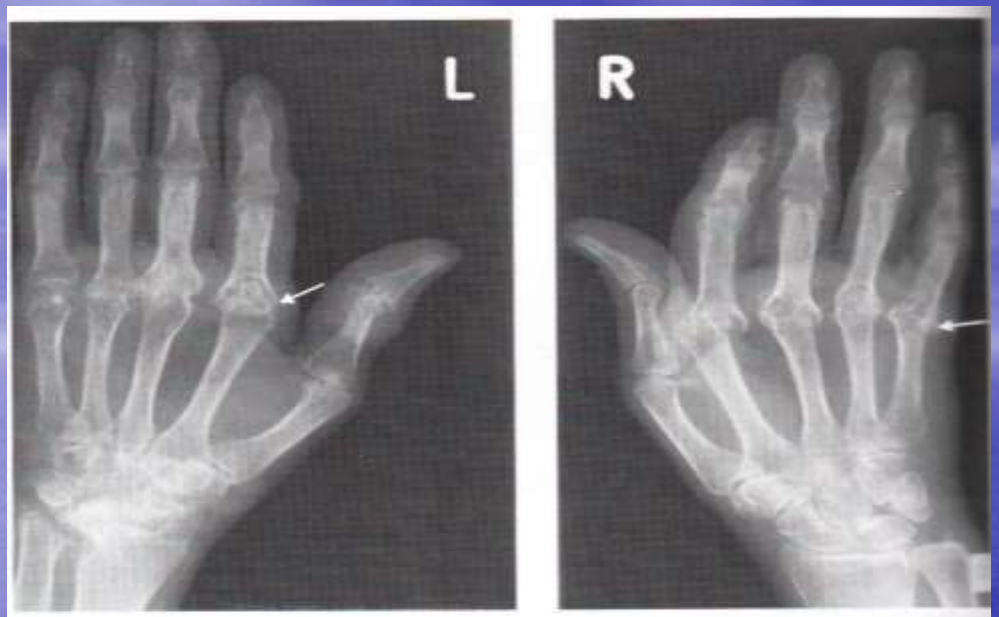
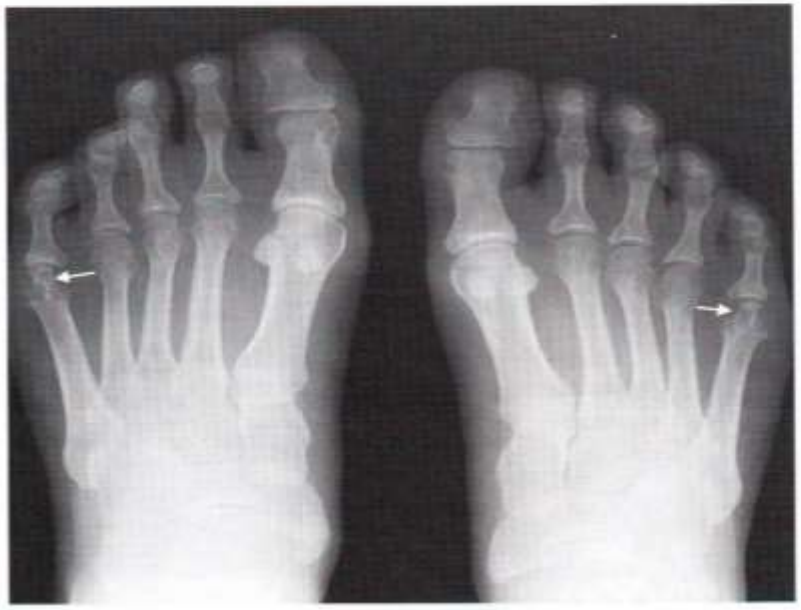
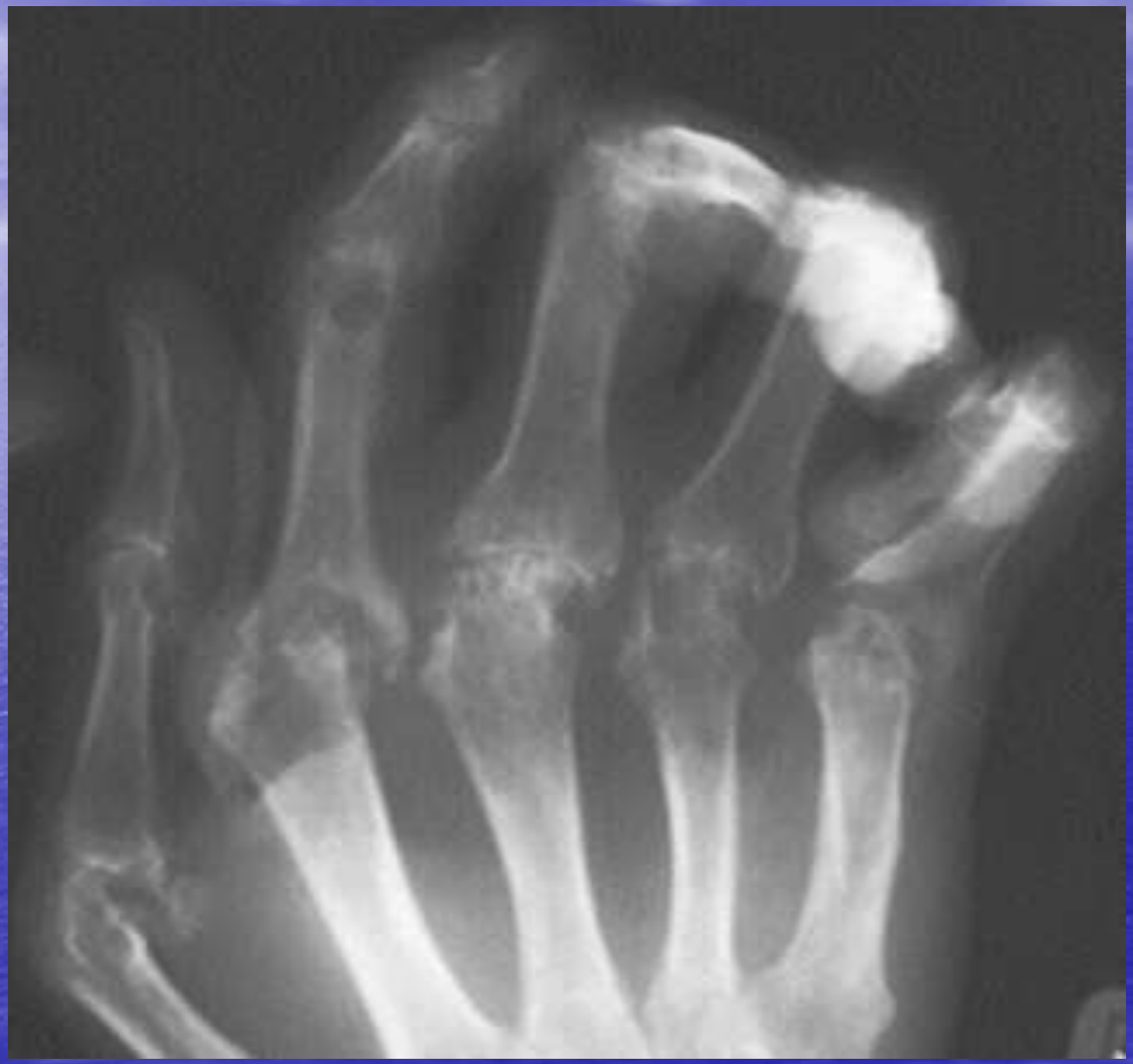


Figure 7.30 Rheumatoid arthritis: erosive changes, predominantly at the metacarpo-phala
(arrows) and wrists.





Management:

- Treatment goals: a)suppress inflammation.
  b)control symptoms.
  c) prevent joint damage.

- This involves a combination of pharmacological and non-pharmacological therapies.

- If RA occurs in women of child-bearing age, additional considerations need to be taken into account.

Therapeutic options

- **Non–pharmacologic and preventive measures .**
- **Pharmacologic options .**
- **Surgery**

- Patient education
- Rest
- Excersize

- **Modifying the risk for thrombosis**

-Rh.A patients have increased risk of CAD → increased morbidity and mortality .

-Avoid smoking .

-Treat hypertension, DM, and dyslipidemia.

Pharmacologic therapy

- **Mainstay of treatment in Rh.A for all patients except those in clinical remission**.
- **Purpose :**

  -Induce remission .

  -Prevent further loss of joint function .

  -Avoid permanent or unacceptable side effects (i.e liver toxicity) .

Pharmacologic therapy (cont.)

- Drug classes
  - analgesics : paracetamol, propoxyphene
    oxycodone (opiates) .
  -NSAID's :
    has analgesic and anti-inflammatory
    effect.
    don't alter disease outcome .

COX-2 INHIBITORS

less (GI side effects / platelet dysfunction) .
increased risk of thrombosis

Pharmacologic therapy (cont.)

- **Corticosteroids**

  - suppresses inflammation .

  - can halt progression of erosive changes.

  -oral /IV/ intra articular .

  -Used in :

    - acute exacerbation of arthritis .

    - bridging effects with DMARD's .

    - rheumatoid vasculitis .

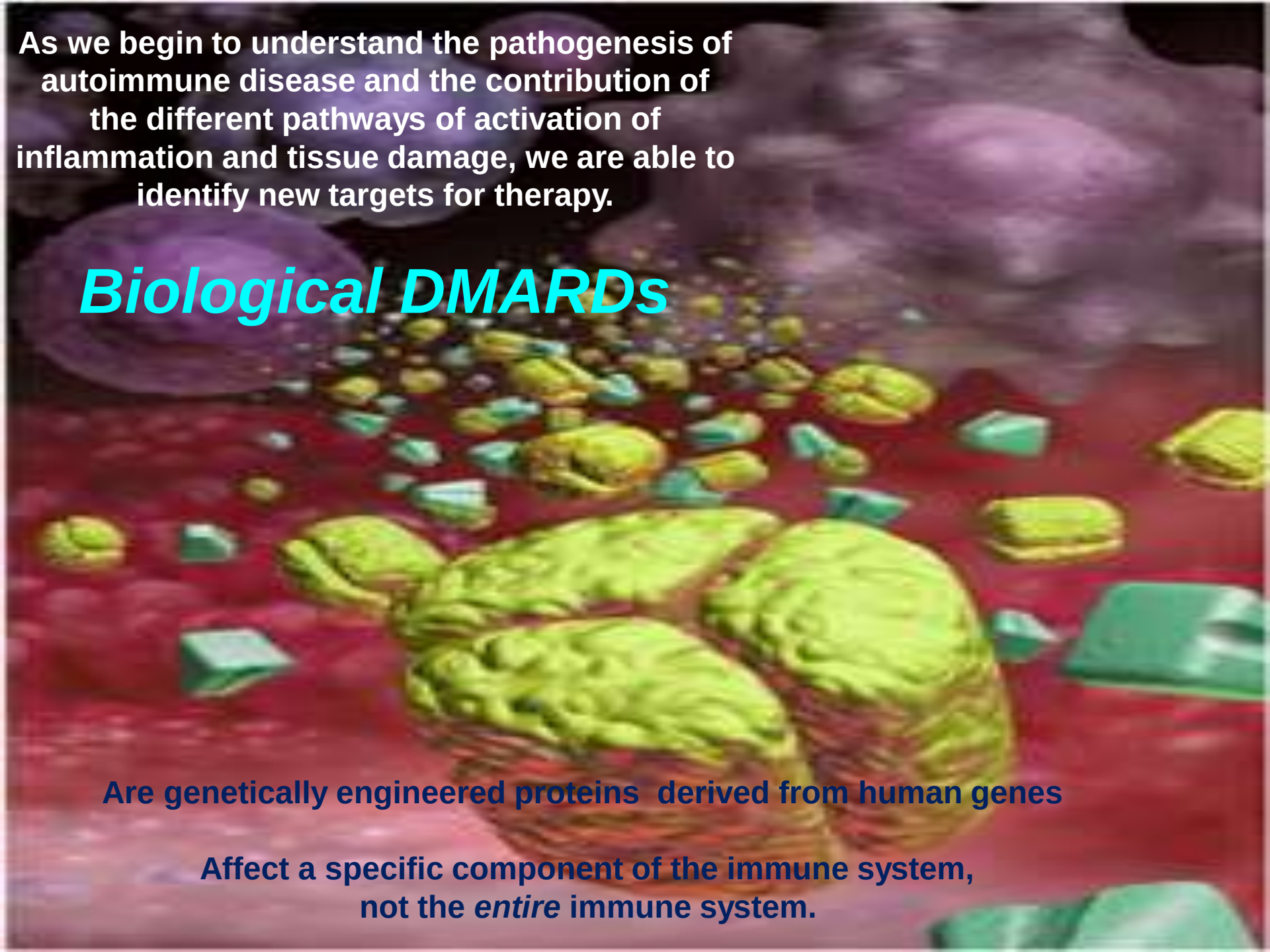
Pharmacologic therapy (cont.)

- **DMARD's**

  -modify outcome of disease .
  -slow to act / long term effect .
  -considerable side effects .
  -needs close monitoring (CBC,LFT,urine proteins ,eye exam.)
  -most used are MTX, SZP, HCC, AZA, GOLD INJ. ,AND CYCLOSPORIN .
  -Shouldn't be stopped even if the patient remits .

- **Combination therapy**

  -combination DMARD'S .
  -DMARD's + anti- TNF Alpha .



As we begin to understand the pathogenesis of autoimmune disease and the contribution of the different pathways of activation of inflammation and tissue damage, we are able to identify new targets for therapy.

Biological DMARDs

Are genetically engineered proteins derived from human genes

Affect a specific component of the immune system, not the *entire* immune system.

Biological DMARDs

Inhibiting the effect of pro-inflammatory *cytokines*

*** TNFα antagonists:**
- Etanercept (Enbrel)
- Infliximab (Remicade)
- Adalimumab (Humira)

*** Interleukin-1 antagonist**
- Anakinra (Kineret)

*** Interleukin-6 antagonis**
- Toclizomab (Actmra)

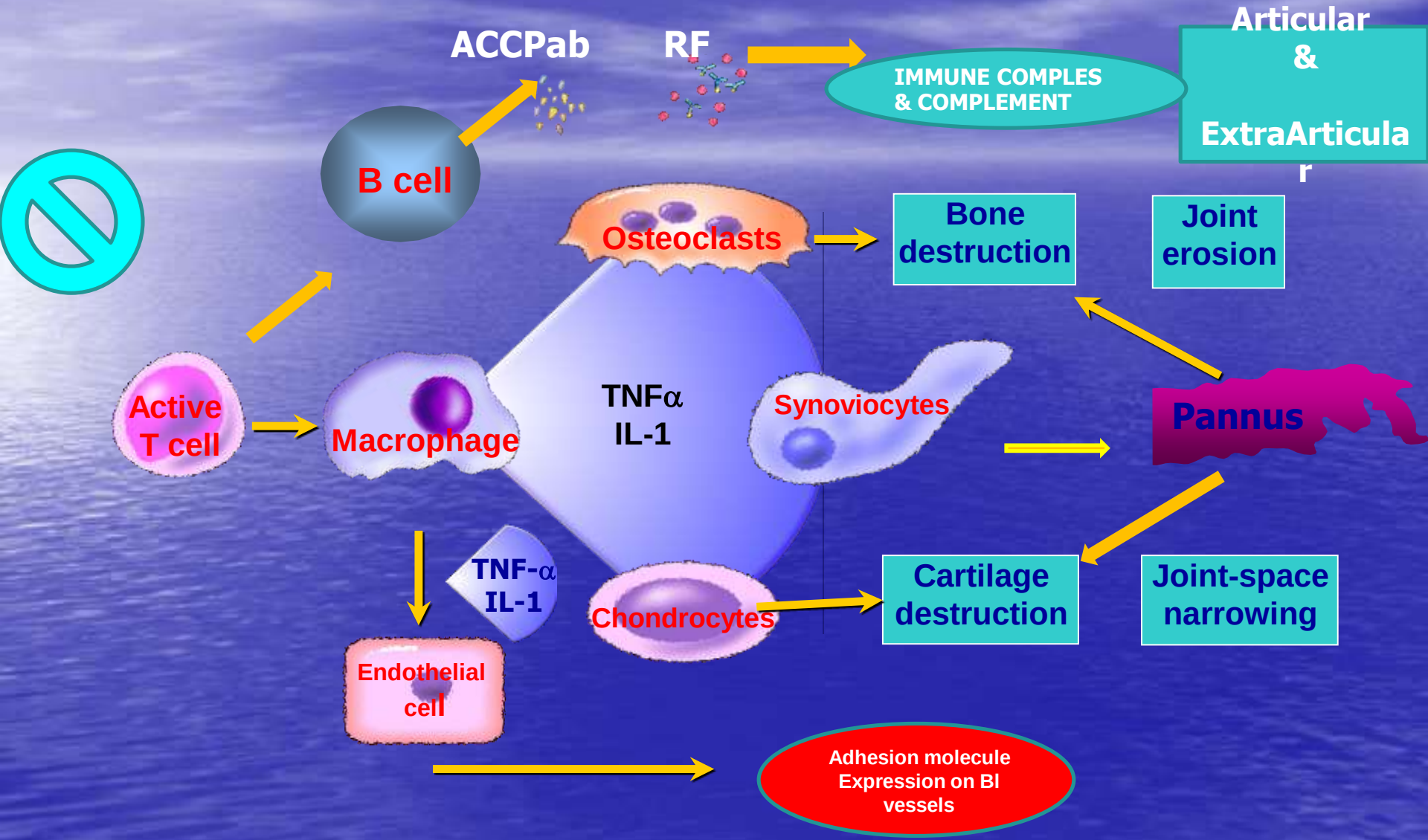
Prevent the interaction between the T cell and (APC)

- **Suppress T-Cell activation**
  - Abatacept (Orencia)

Acting on immune cells such as the B lymphocyte

- **Anti B-Cell monoclonal antibody**
  - Rituximab (Rituxan)

Abatacept & Structural Damage



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Pharmacologic therapy (cont.)

- **Anti-cytokine (anti-TNF alpha)**

  - Infliximab / etanercept /adalimumab (Remicade/ Enbrel / Humira)
  - s/c or IV
  - side effects :
    - Increased risk of infections .
    - Tuberculosis.
    - Autoimmunity
    - Cost .

- **Pregnancy and Rh.A**

  - 70% of patients remit during pregnancy

  -Most DMARD's can be stopped.

  - HCC, and AZA are relatively safe during pregnancy .

SURGERY

USED IN ADVANCED AND DEFORMING RHEUMATOID ARTHRITIS .

- Synovectomy .
- Fusion .
- Excisions .
- JOINT REPLACEMENT (knee, shoulder, hip, elbow, DIP's, PIP's).

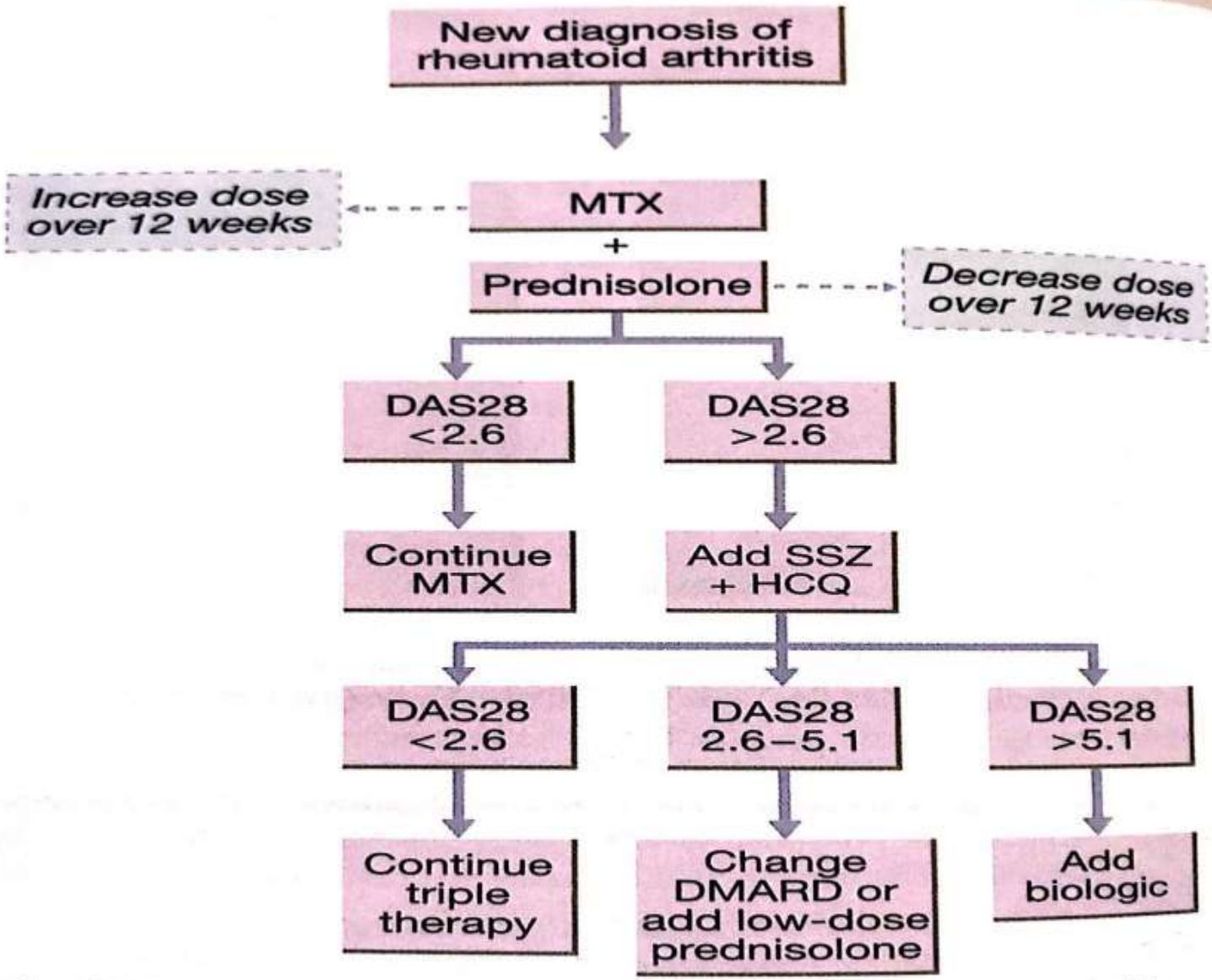
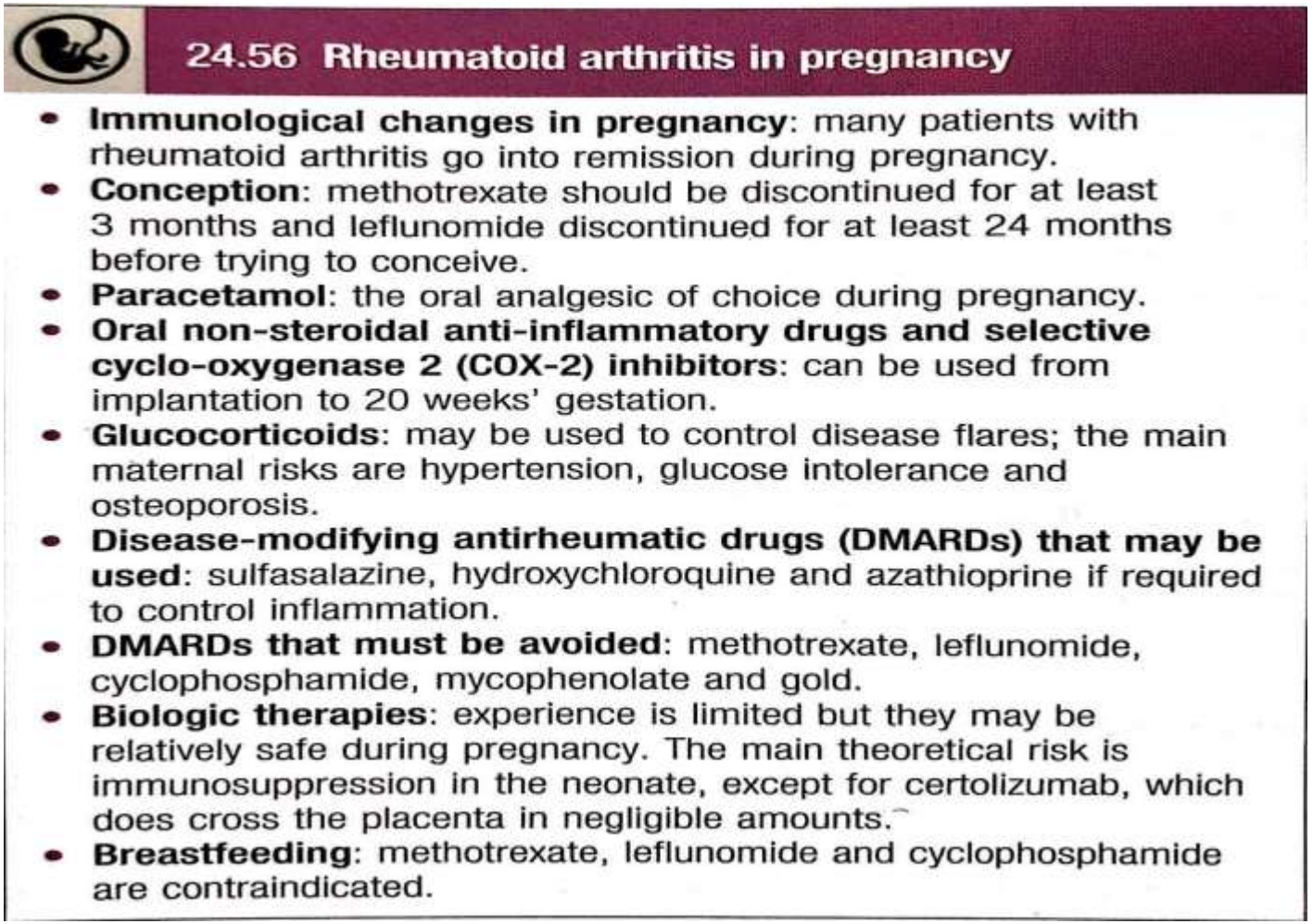


Fig. 24.37 Algorithm for the management of rheumatoid arthritis. (DAS28 = Disease Activity Score 28; DMARD = disease-modifying antirheumatic drug; HCQ = hydroxychloroquine; MTX = methotrexate; SSZ = sulfasalazine)

RA in pregnancy:

- Precautions should be taken with treatment as follows.



24.56 Rheumatoid arthritis in pregnancy

- **Immunological changes in pregnancy**: many patients with rheumatoid arthritis go into remission during pregnancy.
- **Conception**: methotrexate should be discontinued for at least 3 months and leflunomide discontinued for at least 24 months before trying to conceive.
- **Paracetamol**: the oral analgesic of choice during pregnancy.
- **Oral non-steroidal anti-inflammatory drugs and selective cyclo-oxygenase 2 (COX-2) inhibitors**: can be used from implantation to 20 weeks' gestation.
- **Glucocorticoids**: may be used to control disease flares; the main maternal risks are hypertension, glucose intolerance and osteoporosis.
- **Disease-modifying antirheumatic drugs (DMARDs) that may be used**: sulfasalazine, hydroxychloroquine and azathioprine if required to control inflammation.
- **DMARDs that must be avoided**: methotrexate, leflunomide, cyclophosphamide, mycophenolate and gold.
- **Biologic therapies**: experience is limited but they may be relatively safe during pregnancy. The main theoretical risk is immunosuppression in the neonate, except for certolizumab, which does cross the placenta in negligible amounts.
- **Breastfeeding**: methotrexate, leflunomide and cyclophosphamide are contraindicated.

Seronegative arthritis

- Ankylosing spondylitis
- Psoriatic arthritis
- Reactive arthritis
- Enteropathic (IBD-related)arthritis

- A symmetrical, large joint, oligo-arthritis. (Except for psoriatic arthritis).
- Can present with mono-arthritis.
- Axial involvement (SI joint).
- Enthesitis
- Eye/ Lung/ Heart / skin.
- Rheumatoid factor/anti CCP are negative.

SERONEGATIVE SPONDYLOARTHROPATHIES:

A diverse group of genrally inflammatory,systemic autoimmune disease that are negative for Rhematoid factor and ANA (hence called seronegative)

All seronegative spondyloarthropathies share one thing in common: they all share the presence of the HLA-B27 antigen.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THANK YOU

THAT INCLUDES 5 SUBTYPES:

- Ankylosing Spondylitis (AS)
- Reactive Arthritis
- Psoriatic Arthritis
- Arthritis With Inflammatory Bowel (Enteropathic Spondyloarthritis).
- Undifferentiated Spas.

24.59 Features common to spondyloarthropathies

- Asymmetrical inflammatory oligoarthritis (lower > upper limb)
- History of inflammatory back pain
- Sacroiliitis and spinal osteitis
- Enthesitis (e.g. gluteus medius insertion, plantar fascia origin)
- Tendency for familial aggregation
- HLA-B27 association
- Psoriasis (of skin and/or nails)
- Uveitis
- Sterile urethritis and/or prostatitis
- Inflammatory bowel disease
- Aortic root lesions (aortic incompetence, conduction defects)

(HLA = human leucocyte antigen)

EPIDEMIOLOGY OF SPONDYLOARTHROPTHIES

prevalence of spa is 0.6 – 1.9%.

13.6% of all individuals positive for the HLA B27 antigen had a spondyloarthropathy.

the risk for spondylo-arthropathies among HLA-B27–positive persons who have a first-degree relative with ankylosing spondylitis is increased threefold (30% instead of 10%).

ANKYLOSING SPONDYLITIS

Ankylos, derived from the Greek root :

- *Ankylosis*, Refers to a joint that is stiff, fused.
- *Spondylo* refers to vertebra
- *itis* refers to inflammation

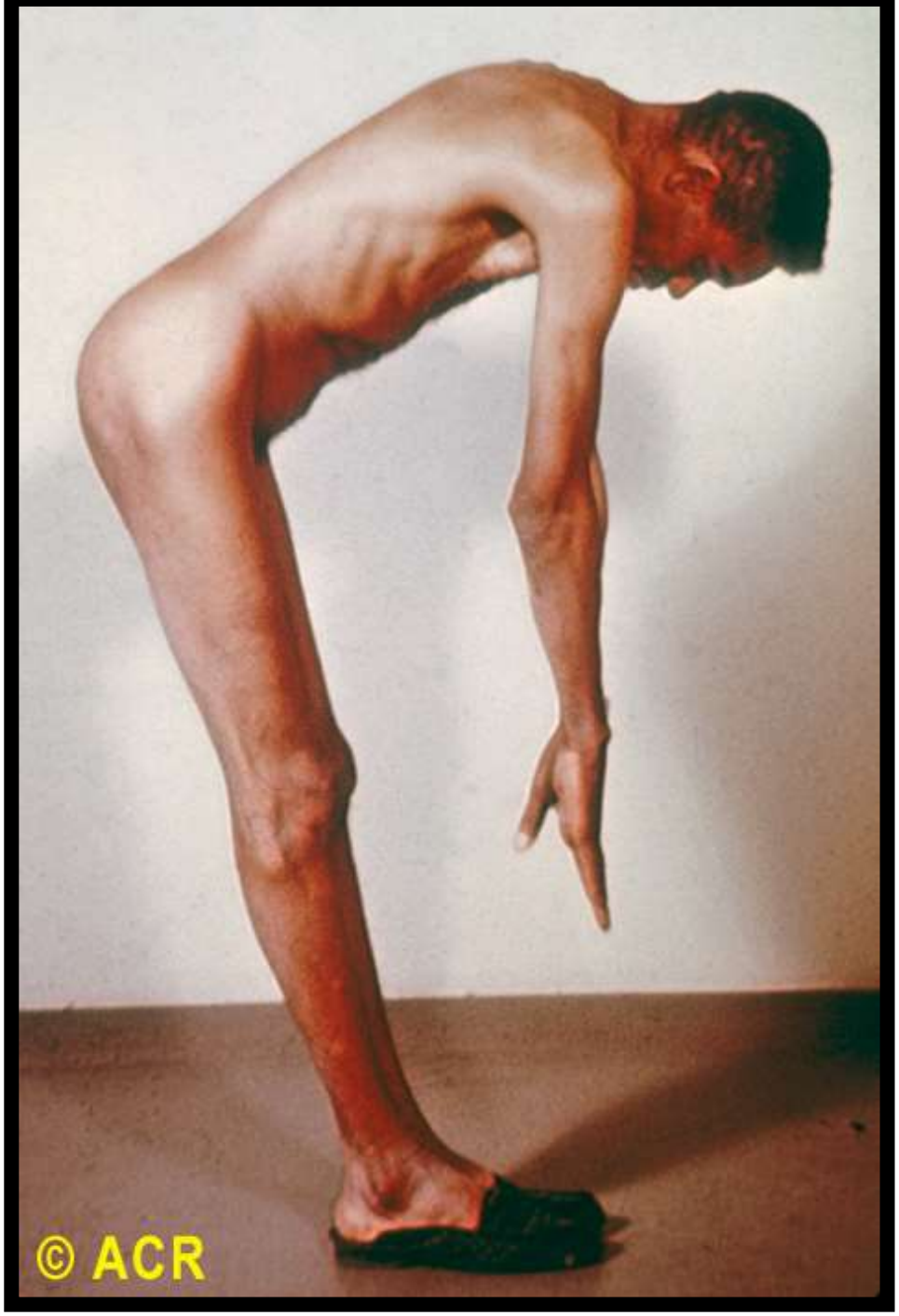
- **most typical and common form of spa.**

Ankylosing spondylitis (AS) is defined by the presence of sacroiliitis on X-ray and other structural changes on spine X-rays, which may eventually progress to bony fusion of the spine.

- **There is a male-to-female ratio of about 3 : 1.**
- **In Europe, more than 90% of those affected are HLA-B27-positive.**
- **Over 75% of patients are able to remain in employment and enjoy a good quality of life.**

AS: A COMPLEX DISEASE

- chronic, systemic, and progressive inflammatory disorder[1,2]
- characterized by involvement of the axial spine[1]
- affects the sacroiliac (si) joints and may also affect peripheral joints, including hips, shoulders, and ankles[1]
- manifests the enthesitis typical of the spondyloarthropathies (spas)[2]
- recurrent back pain and loss of spinal mobility may progress to spinal fusion (ankylosis)[2]
- may affect extra-articular sites[2]



Ankylosing spondylitis: ankylosis, lumbar spine

CLINICAL FEATURES :

✓**The cardinal feature of is inflammatory back pain and early morning stiffness, with low back pain radiating to the buttocks or posterior thighs if the sacroiliac joints are involve**

✓**Symptoms are exacerbated by inactivity and relieved by movement**

✓**Musculoskeletal symptoms may be prominent at entheses, may be episodic and, if persistent, can present as widespread pain and be mistaken for fibromyalgia.**

✓**Fatigue is common.**

✓**History of psoriasis** (current, previous or in a first-degree relative).

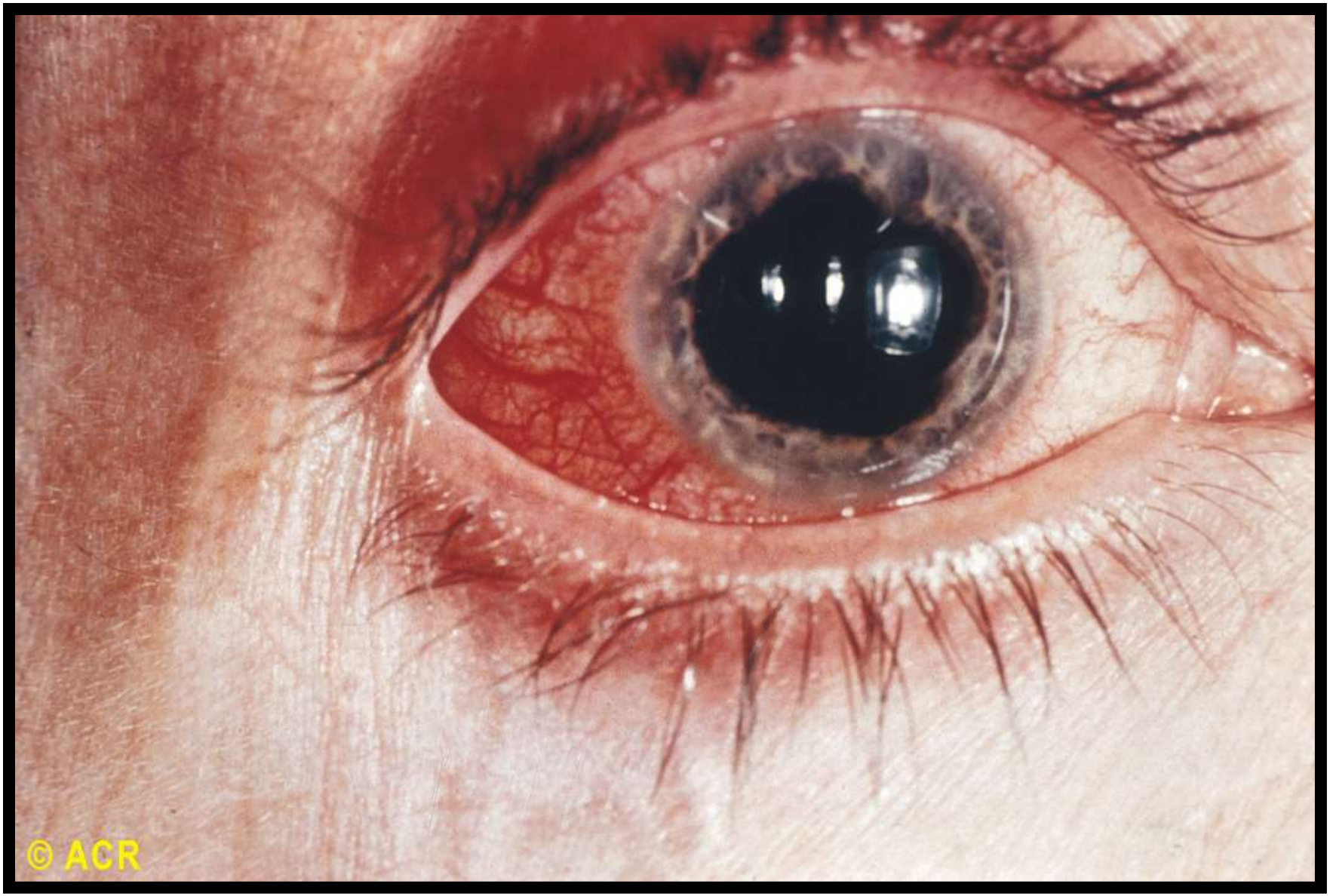
✓**And inflammatory bowel symptoms** (current or previous) are important clues.

✓**Physical signs** include **a reduced range of lumbar spine movements in all directions**, **pain on sacroiliac stressing** and **a high enthesitis** index.

✓**Entheses** that are typically affected include **Achilles**' insertion, **plantar fascia origin**, patellar **ligament entheses, gluteus medius insertion at the greater trochante**r and tendon attachments at **humeral epicondyles**.

24.61 Extra-articular features of axial spondyloarthritis and ankylosing spondylitis

- Fatigue, anaemia
- Anterior uveitis (25%)
- Prostatitis (80% of men) and sterile urethritis
- Inflammatory bowel disease (up to 50% have IBD lesions)
- Osteoporosis
- Cardiovascular disease (aortic valve disease 20%)
- Amyloidosis (rare)
- Atypical upper lobe pulmonary fibrosis (very rare)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DIAGNOSES:

Modified New York Criteria (1984):

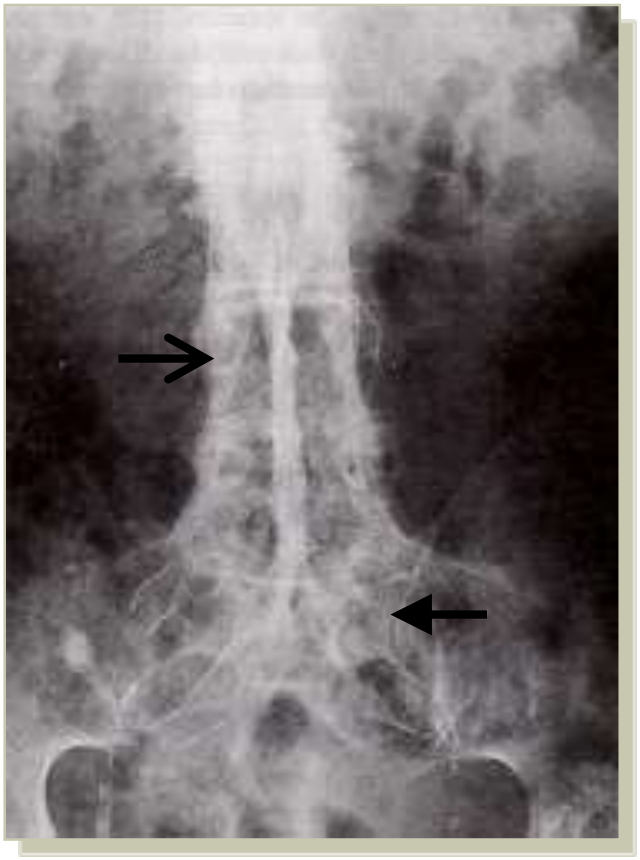
Criteria components

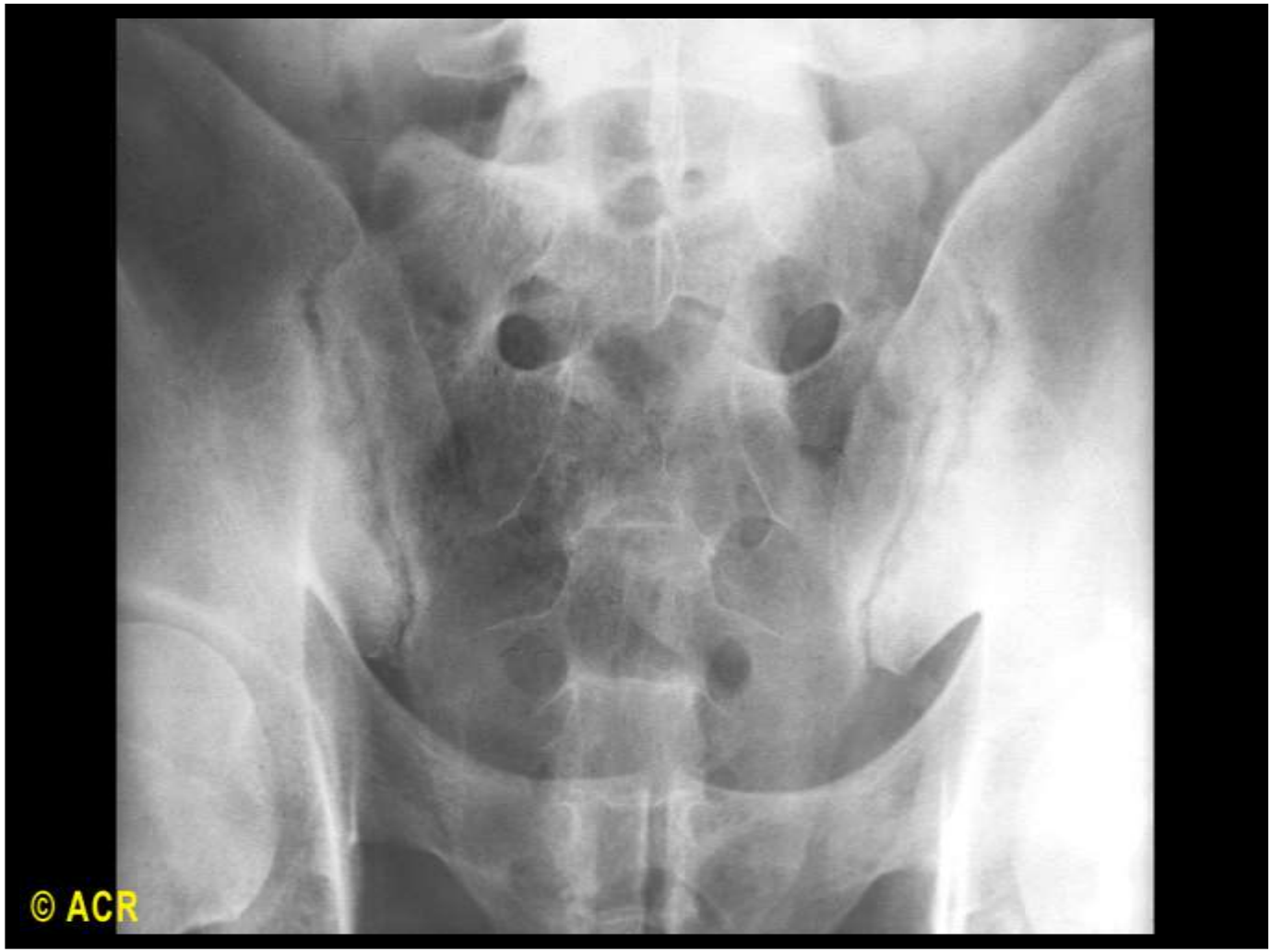
1. Low back pain of at least 3 months' duration that improved by exercise and was not relieved by rest
2. Limited lumbar spinal motion in sagittal (sideways) and frontal (forward and backward) planes.
3. Chest expansion decreased relative to normal values for sex and age.
4. Bilateral sacroiliitis grade 2–4 or unilateral sacroiliitis grade 3 or 4

- Definite ankylosing spondylitis if criterion 4 and any one of the other criteria is fulfilled

RADIOLOGICAL FINDINGS IN AS

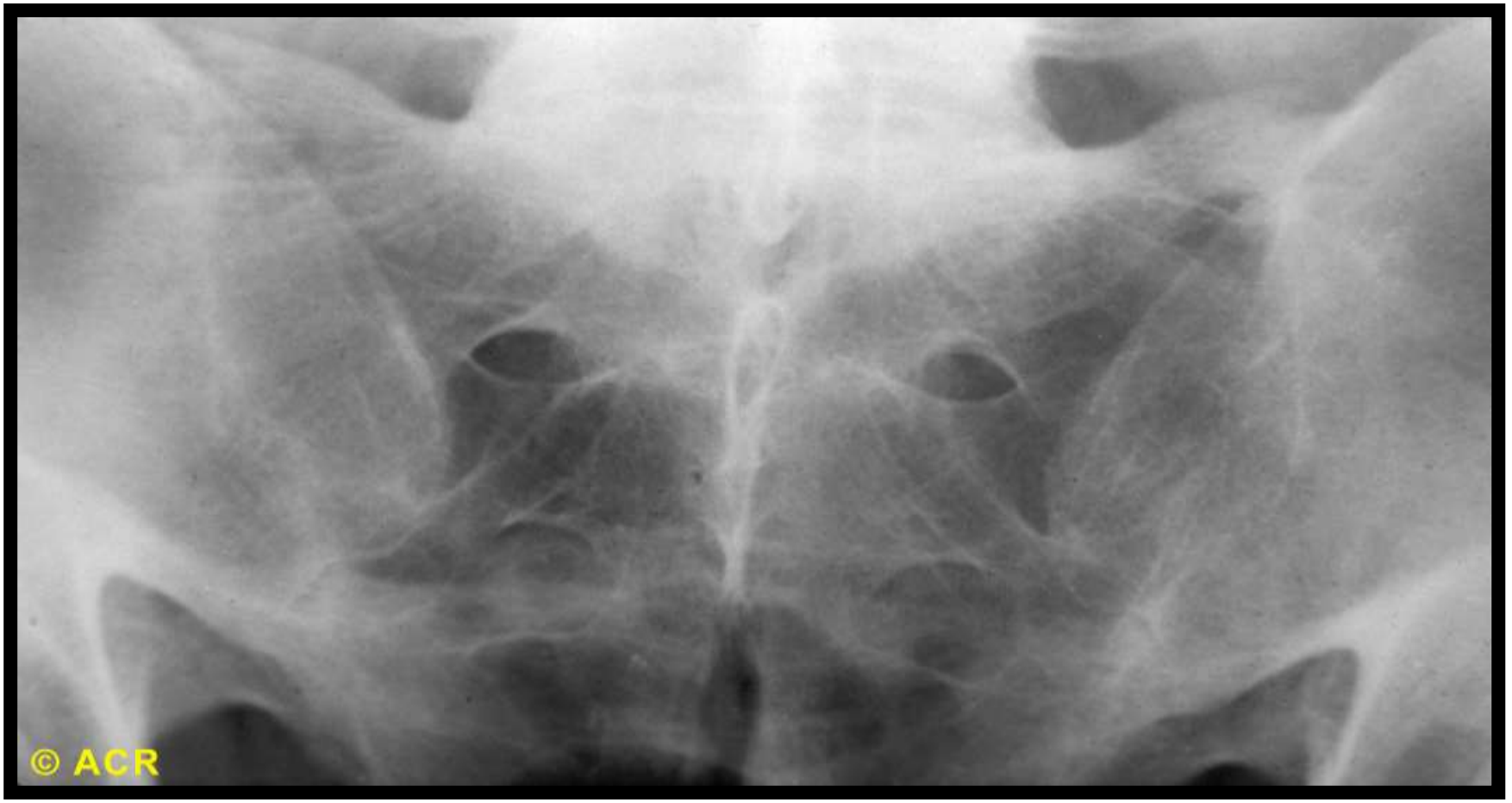
- **Early:**
  - **Sacroiliitis (closed arrow):**
    - **Erosions**
    - **Sclerosis**
- **Late:**
  - **Vertebra (open arrow):**
    - **Syndesmophytes**
    - **Calcification of ligaments (tramline appearance)**
    - **Squaring of vertebrae due to erosions of their corners.**





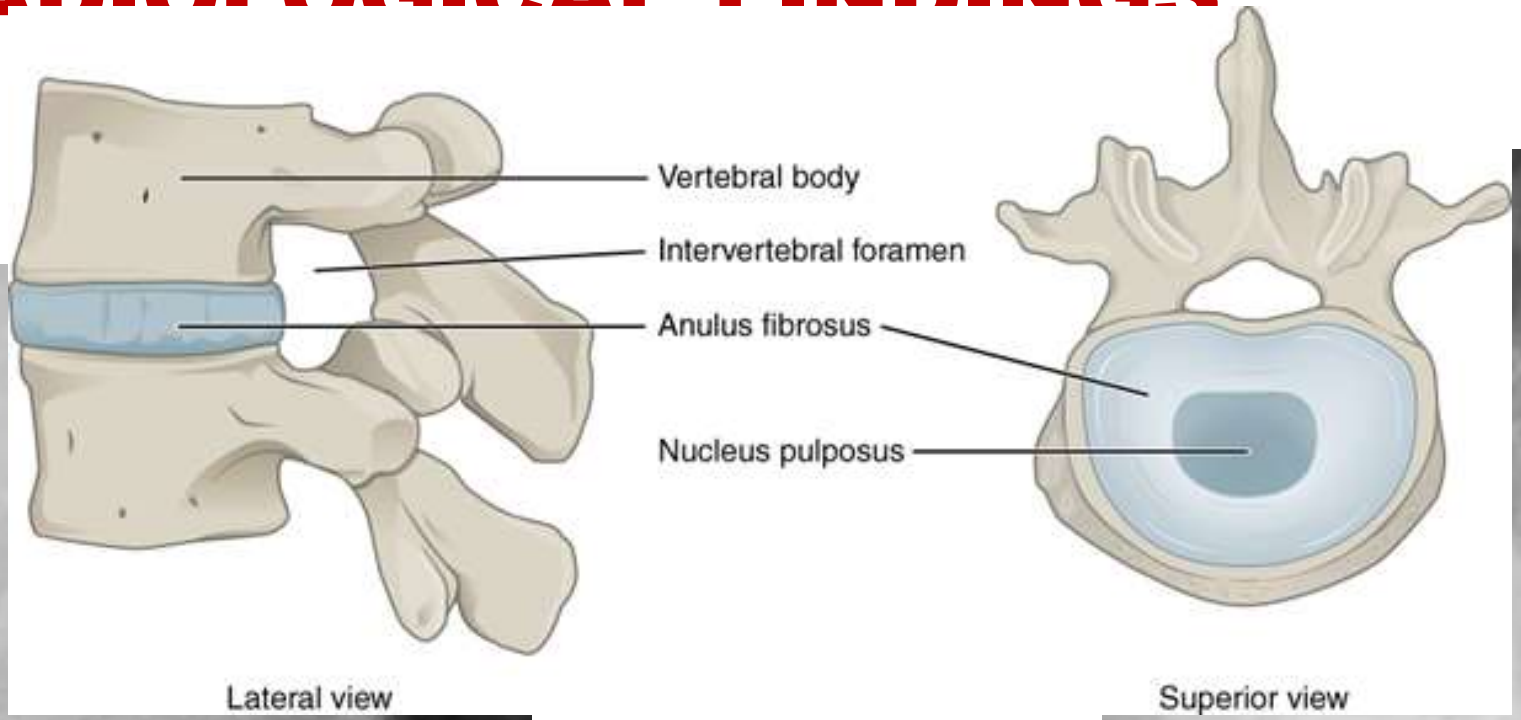
ANKYLOSING SPONDYLITIS: EARLY SACROILIITIS (RADIOGRAPH)

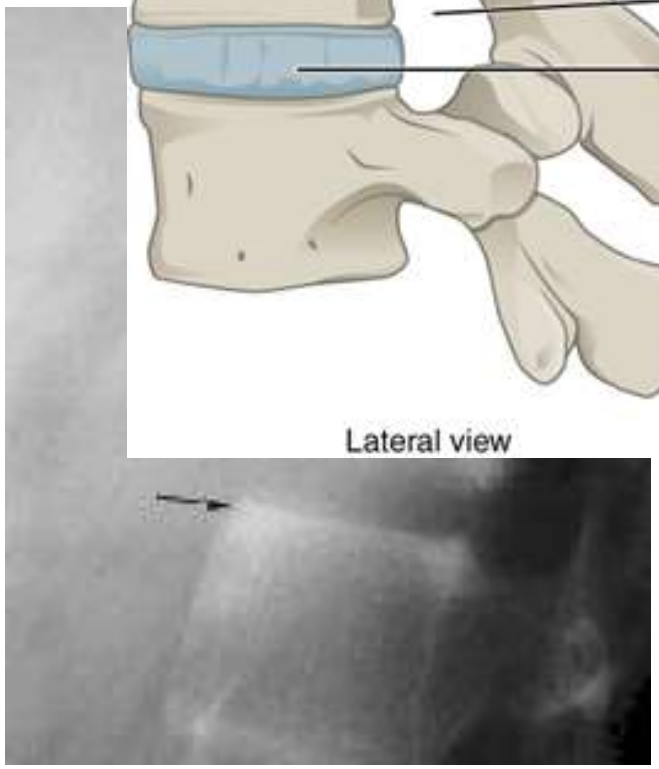
In AS, X-rays of the sacroiliac joint show irregularity and loss of cortical margins, widening of the joint space and subsequently sclerosis, joint space narrowing and fusion



Ankylosing spondylitis: advanced sacroiliitis (radiograph)
The sacroiliac joints are almost completely obliterated..
A moderate degree of osteopenia is present.

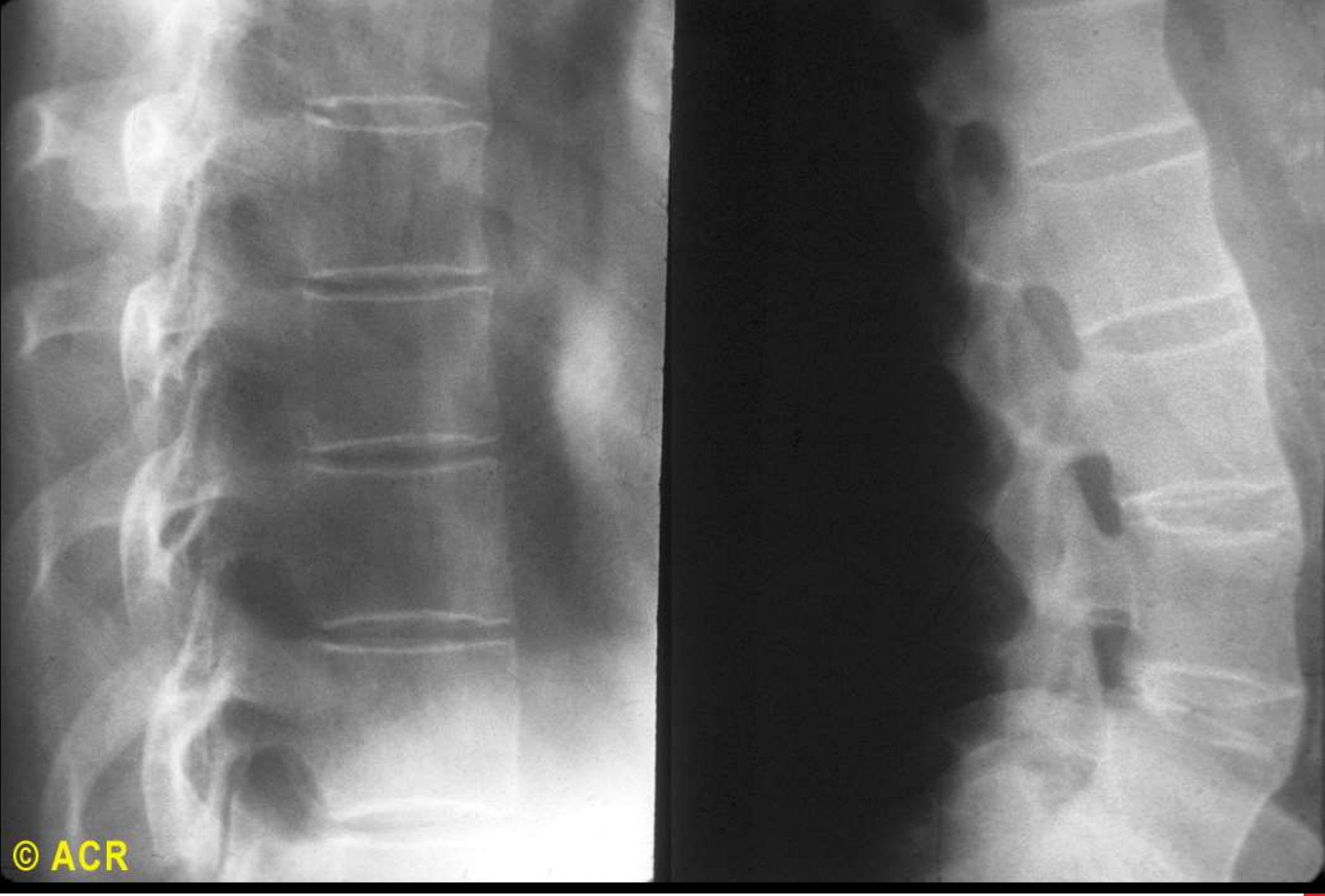
RADIOLOGICAL FINDINGS





Lateral radiograph shows anterior corner erosions at the T12 and L1 vertebral bodies

Vertebral body squaring. Lateral radiograph shows squaring of L3 and L4 vertebral bodiesand lumbar facet joint fusion.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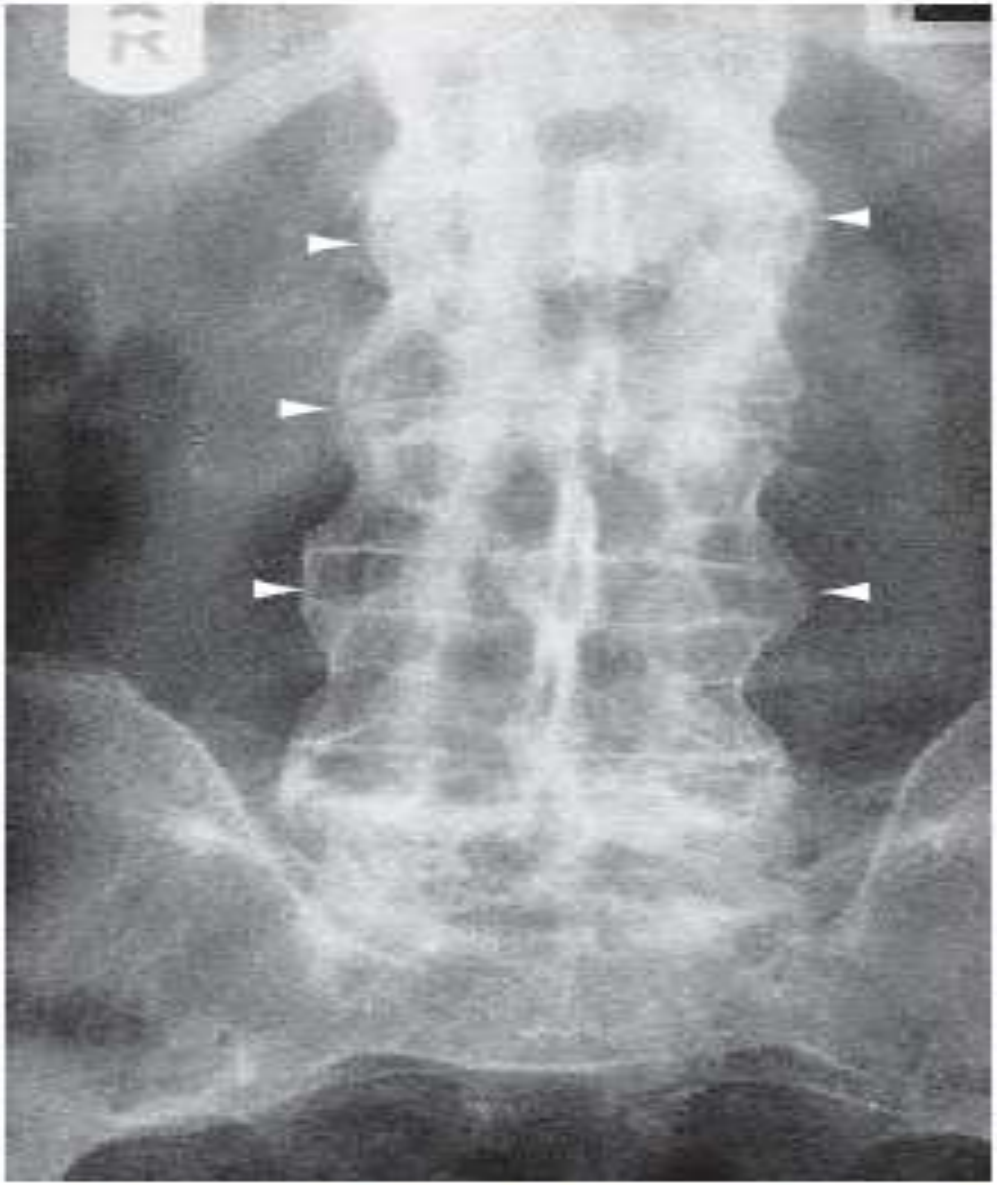


Fig. 24.41 'Bamboo' spine of advanced ankylosing spondylitis. Note the symmetrical marginal syndesmophytes (arrows), sacroiliac joint fusion and generalised osteopenia.

LABORATORY FINDINGS

no diagnostic test:

- HLA-B27 gene (90%)
- high ESR,CRP
- mild normocytic normochromic anemia
- -ve RF,ANA
- synovial fluid similar to other inflammatory arthritis.
- pulmonary functions: low vc, high frc

MANAGEMENT

The aims of management :

- ❖To relieve pain and stiffness.
- ❖Maintain a maximal range of skeletal mobility.
- ❖ Avoid the development of deformities.

MANAGEMENT :

- There are four types of medications commonly used to treat ankylosing spondylitis:
  - Nonsteroidal anti-inflammatory drugs (NSAIDs)
  - biologics agents .
  - steroids .
  - Disease-modifying antirheumatic drugs (DMARDs).

✓Nonsteroidal anti-inflammatory drugs (NSAIDs)

- **NSAIDs are often the first line of defense against ankylosing spondylitis pain. NSAIDs is a broad category of medications that includes:**
- **Over the counter NSAIDs, such as aspirin, ibuprofen, and naproxen.**
- **Prescriptions NSAIDs,**
- **COX-2 inhibitors,**

✓ Biologics agents :

Biologic medications suppress immune system activity, thereby decreasing ankylosing spondylitis disease activity and symptoms. In some people, biologic drugs called TNF-inhibitors (TNF-blockers) as well as certain interleukin (IL) inhibitors appear to do one or more of the following:

there are six FDA-approved biologic medications for ankylosing spondylitis:

- Etanercept (Enbrel)
- Infliximab (Remicade)
- Adalimumab (Humira)
- Golimumab (Simponi)
- Certolizumab (Cimzia)
- Secukinumab (Cosentyx)

✓Steroids:

Steroids may be used to control painful eye symptoms or injected into painful joints. Oral steroids, such as oral prednisone, are rarely used to treatment AS or other spondyloarthropathies.

✓ Disease-modifying antirheumatic drugs (DMARDs)

DMARDs, such as methotrexate and sulfasalazine, may be prescribed to people whose ankylosing spondylitis causes peripheral joint pain, such as pain in the knees, hips or ankles.

Psoriatic Arthritis

-Psoriatic arthritis is an *inflammatory arthritis* associated with *psoriasis*. This can vary in severity. Patients may have a mild stiffening and soreness in the joint or the joint can be completely destroyed in a condition called *arthritis mutilans*.

It occurs in 10-20% of patients with psoriasis and usually occurs within 10 years of developing the skin changes. It typically affects people in middle age but can occur at any age.

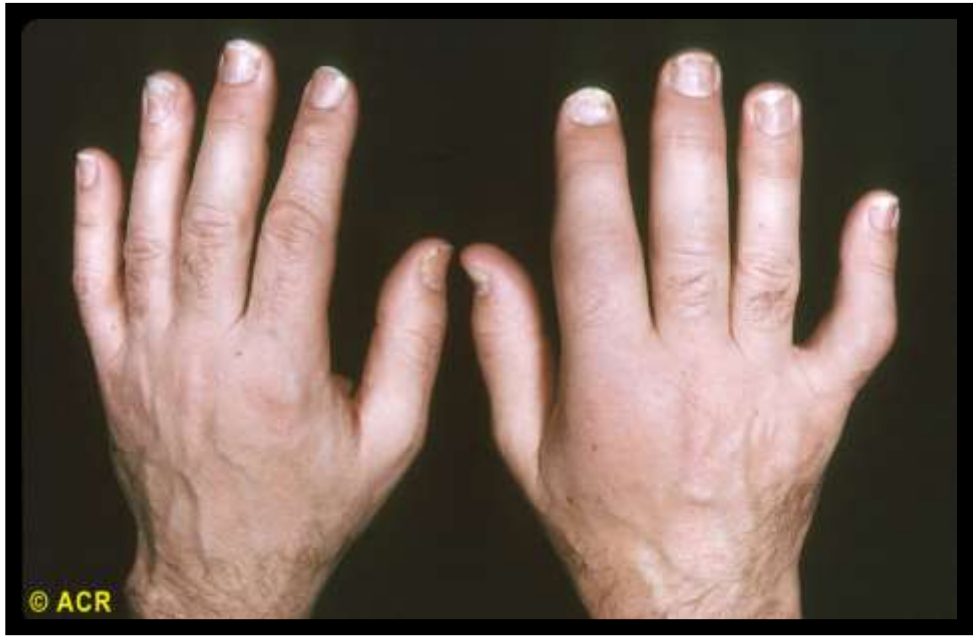
-It is part of the "*seronegative spondyloarthropathy*" group of conditions.

PATTERNS

The condition does not have a single pattern of affected joints in the same way as osteoarthritis or rheumatoid. There are several recognised patterns:

SYMMETRICAL POLYARTHRITIS

presents similarly to rheumatoid arthritis and is more common in women. The hands, wrists, ankles and DIP joints are affected. The MCP joints are less commonly affected (unlike rheumatoid).



ASYMMETRICAL INFLAMMATORY MONO-/OLIGOARTHRITIS

-Affecting mainly the digits (fingers and toes) and feet. Pauciarthritis describes when the arthritis only affects a few joints.

SPONDYLITIC PATTERN

-Is more common in men. It presents with:

Back stiffness

Sacroiliitis

Atlanto-axial joint involvement

-Other areas can be affected:

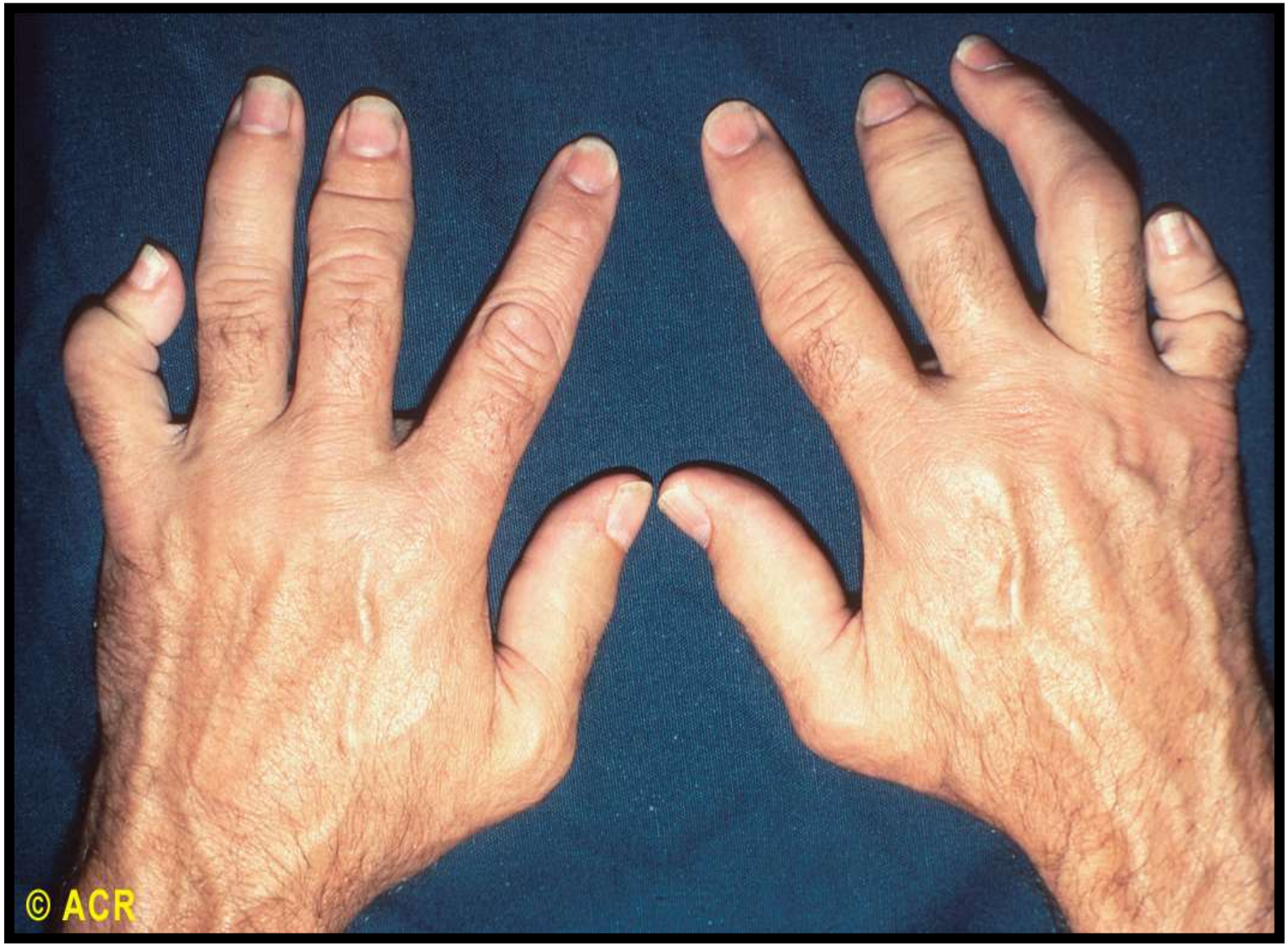
Spine

Achilles tendon

Plantar fascia

ARTHRITIS MUTILANS

This is the most severe form of psoriatic arthritis. This occurs in the *phalanxes*. There is *osteolysis* (destruction) of the bones around the joints in the digits. This leads to progressive shortening of the digit. The skin then folds as the digit shortens giving an appearance that is often called a "*telescopic finger*".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SIGNS

-Plaques of psoriasis on the skin

-Pitting of the nails

-*Onycholysis* (separation of the nail from the nail bed)

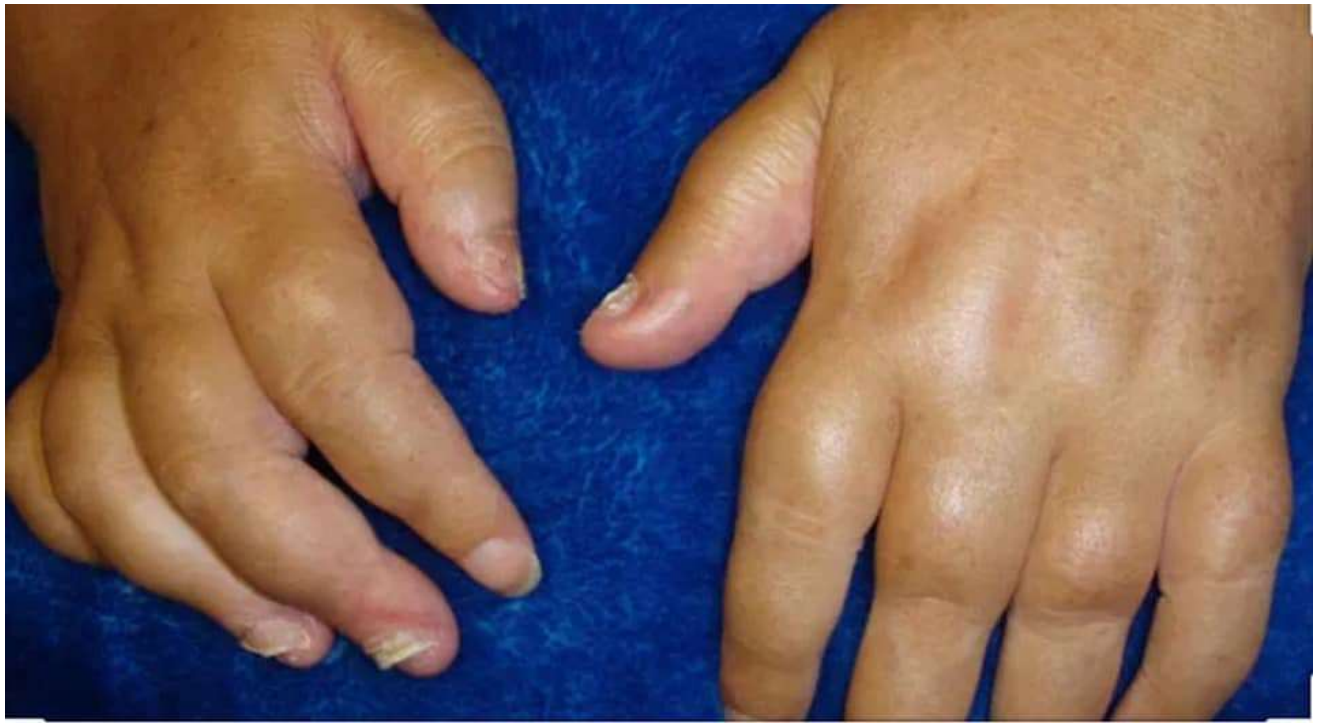
-*Dactylitis* (inflammation of the full finger)

-*Enthesitis* (inflammation of the entheses, which are the points of insertion of tendons into bone)

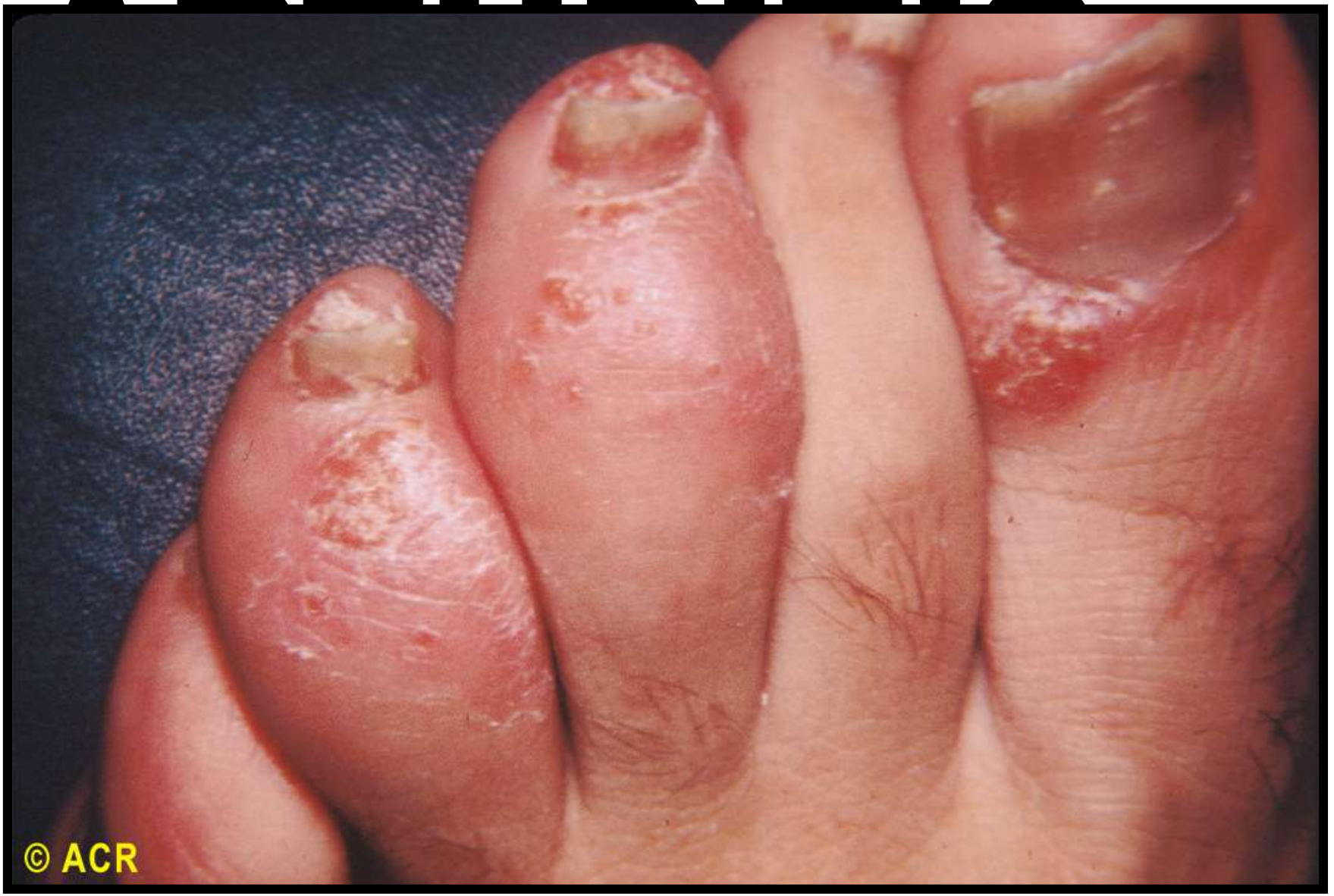
EXTRA-ARTICULAR MANIFESTATIONS

ocular: uveitis, conjunctivitis
gastrointestinal: inflammatory bowel disease
cardiac: rhythm disturbances (e.g. bundle branch block)
urogenital: urethritis, prostatitis, balanitis, cervicitis, vaginitis

FINGERS SAUSAGES



PSORIATIC



PITTING NAIL

HOW PSA IS DIAGNOSED

unfortunately, there is no definitive diagnostic test for psa. the diagnosis is made mostly by observations andclinicaly

imaging tests

x-rays. plain x-rays can help pinpoint changes in the joints that occur in psoriatic arthritis but not in other arthritic conditions.

RADIOGRAPHIC FEATURES

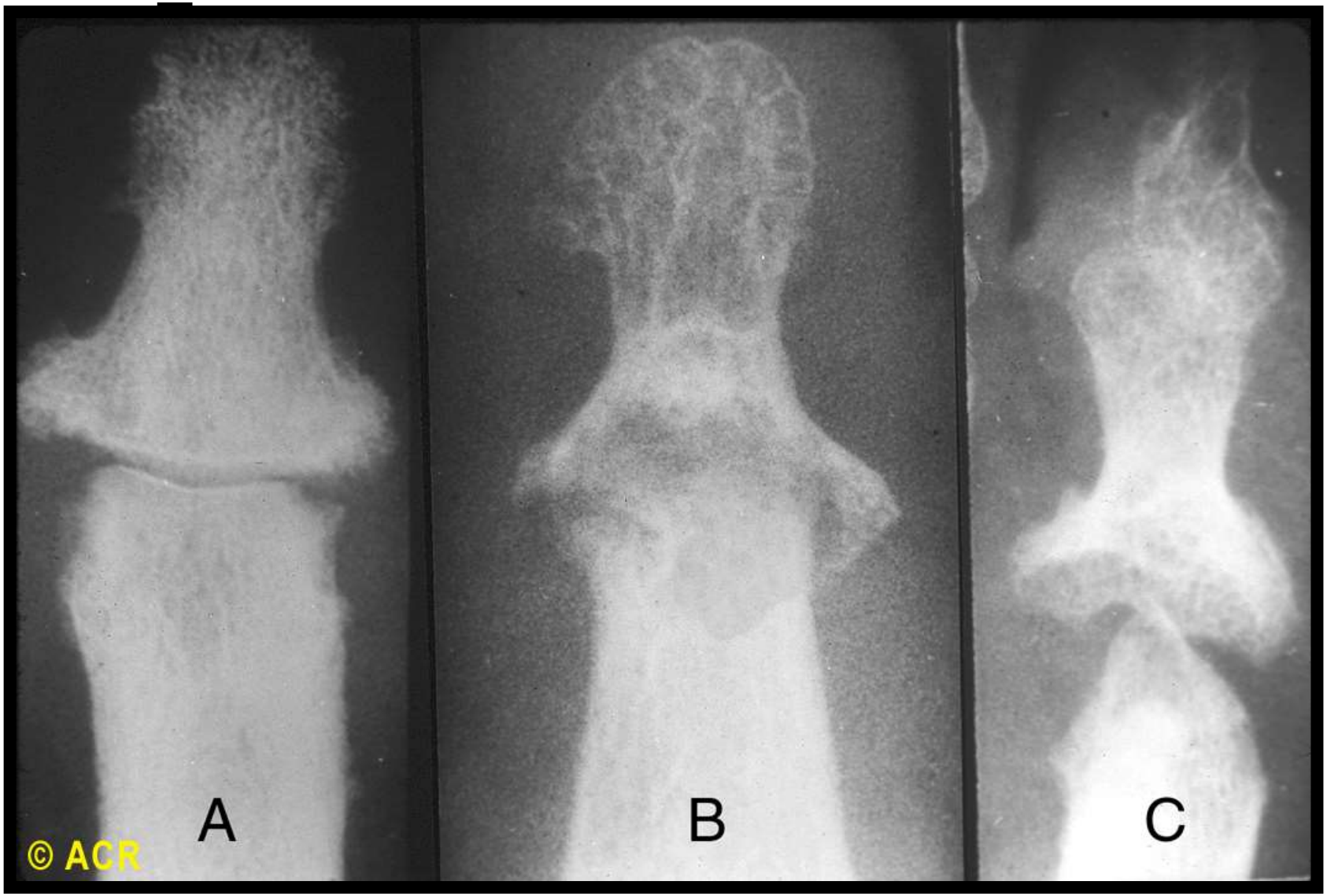
- *Periostitis* is inflammation of the *periosteum* causing a thickened and irregular outline of the bone

- *Ankylosis* is where bones joining together causing joint stiffening

- *Osteolysis* is destruction of bone

- *Dactylitis* is inflammation of the whole digit and appears on the xray as soft tissue swelling

- *Pencil-in-cup* appearance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TREATMENT

no cure exists for psoriatic arthritis, so treatment focuses on controlling inflammation in your affected joints to prevent joint pain and disability.

NSAIDS: mild arthritis and no skin findings

METHOTREXATE: severe arthritis and real skin findings

TNF-A INHIBITORS: nonresponsive to methotrexate

STEROIDS: no… steroids bad and lead to flare of psoriasis

REACTIVE ARTHRITIS

Is a sterile synovitis which occurs following an infection

AETIOLOGY

- salmonella , shigella, yersina enterocolitica

- N S U : - chlamydia trachomatis

- urea plasma urealyticum

-bacterial antigen or bacterial DNA have been found in the inflamed synovium of affected joint

Repeated infection don't necessarily produce reactive arthritis

CLINICAL FEATURES

- Arthritis –acute , lowerlimb , asymmetrical
- Enthesitis – plantar fascitis or achills tendonitis
- Sacroilities or spondylitis

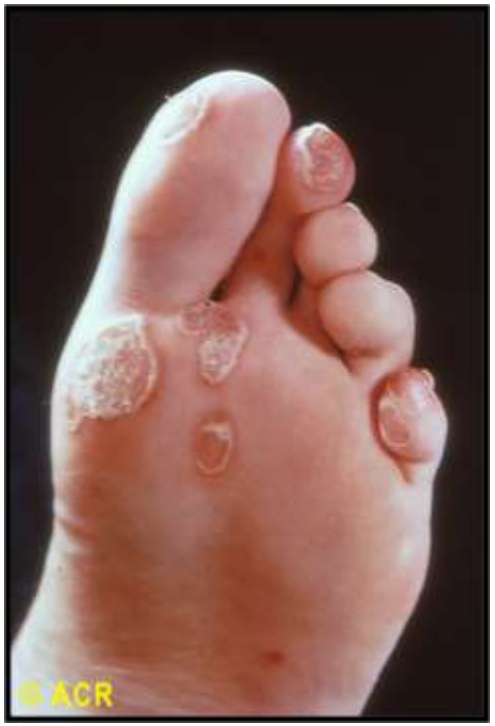
-bilateral conjunctivitis 30%

-circinate balanitis : painless superficial ulceration of the glan`s penis. heal without scarring

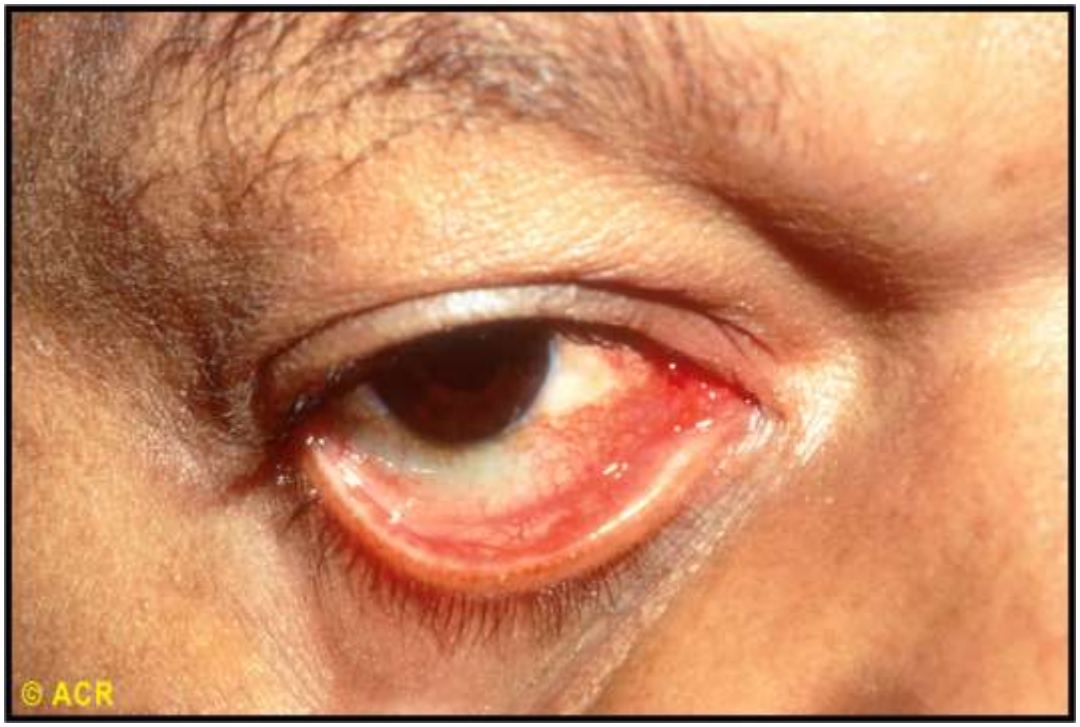
-keratoderma blenorrhagica :skinof feet and hand's painles red and raised plaques and pustules

-Acute anterior uveitis

KERATODERMA BLENNORRHAGICA



CONJUNCTIVITIS



TREATMENT

-antibiotic (cultures should be taken and any infection treated)

-NSAIDs

-local injection

-sulfasalazin or MTX

-Anti TNF (infliximab, adalimumab ,etanercept)

ENTEROPATHIC ARTHRITIS

I B D

-peripheral arthritis

-axial involvement

PERIPHERAL ARTHRITIS

- 17-20%

Age 25-44

Clinical: - pauci articular

- Asymmetric
- Mono arthritis
- Migratory and transient
  - parallels the activity of bowel involvement (IBD)

AXIAL

5-12%

M : F 3:1

B 27: 33-70%

EXTRA-ARTICULAR

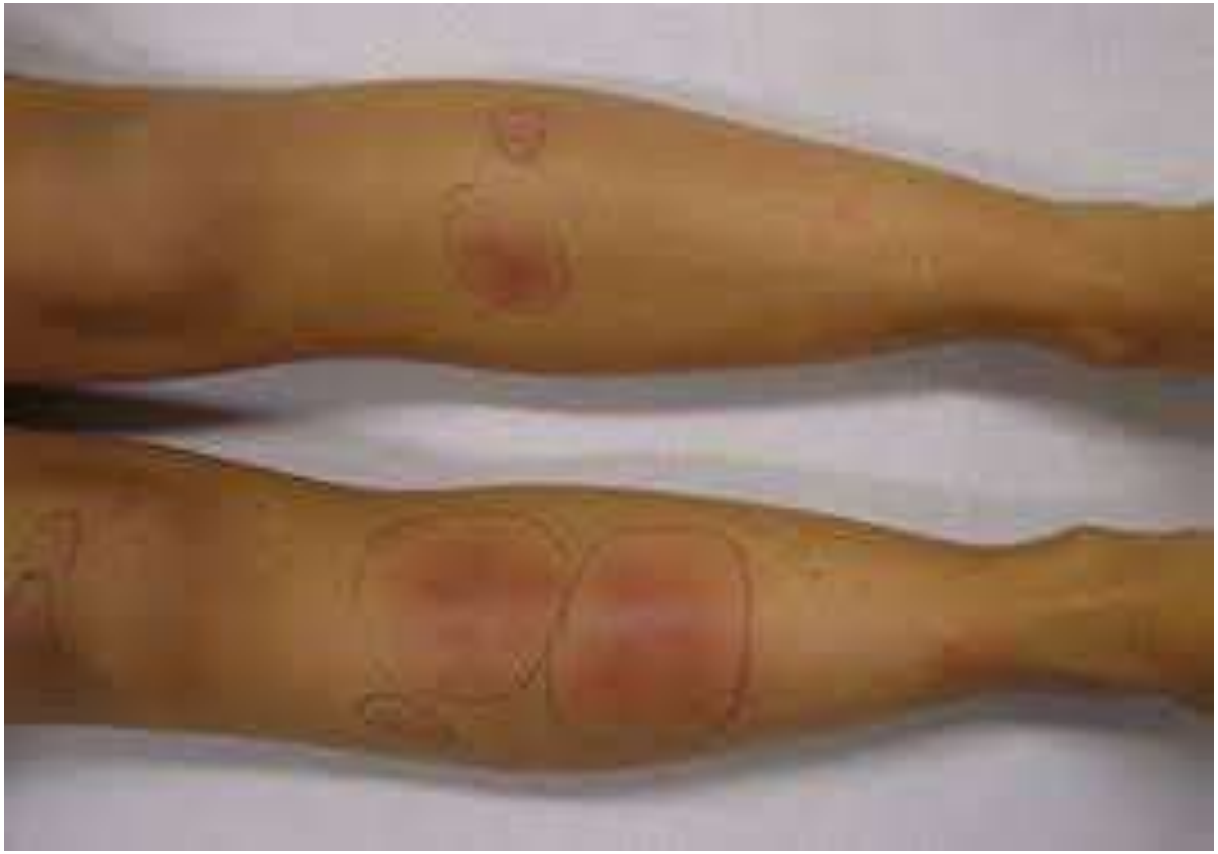
-erythema nodosum

-pyoderma gangrenosum

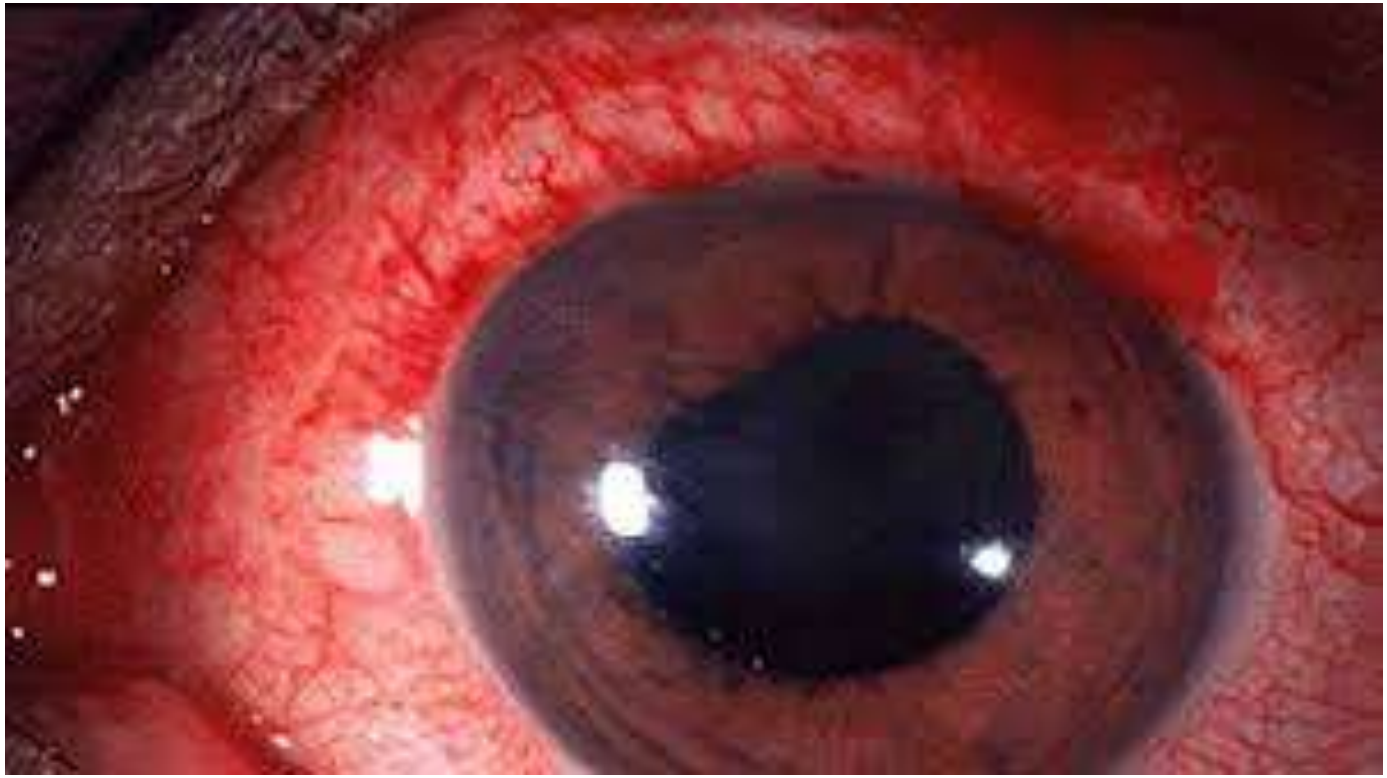
-anterior uveitis

-amyloidosis

ERYTHEMA NODOSUM



ANTERIOR UVEITIS



THERAPY

- NSAID'S
- Corticoidsteroid's
- Sulphasalazine
- Anti TNF

THANK YOU