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Approach to a patient with rheumatic symptoms

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Patient's evaluation

Clinical examination

No value — Most valuable

Laboratory tests

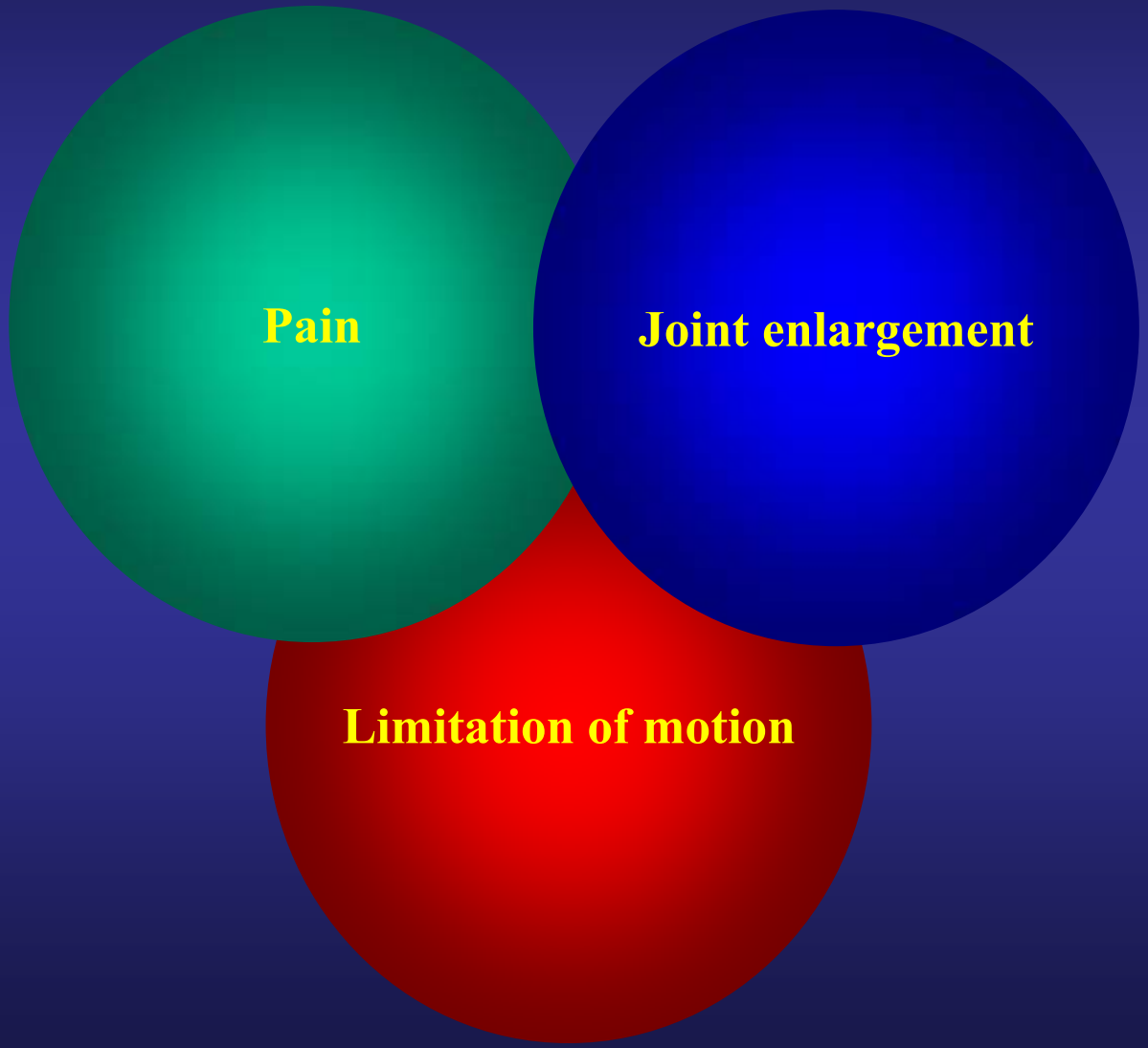
No value — Most valuable

Imaging techniques

No value — Most valuable

Which signs and symptoms are most common in patients with rheumatic conditions?

Most common rheumatic symptoms and signs



How throurough should be the clinical examination of patients with rheumatic symptoms?

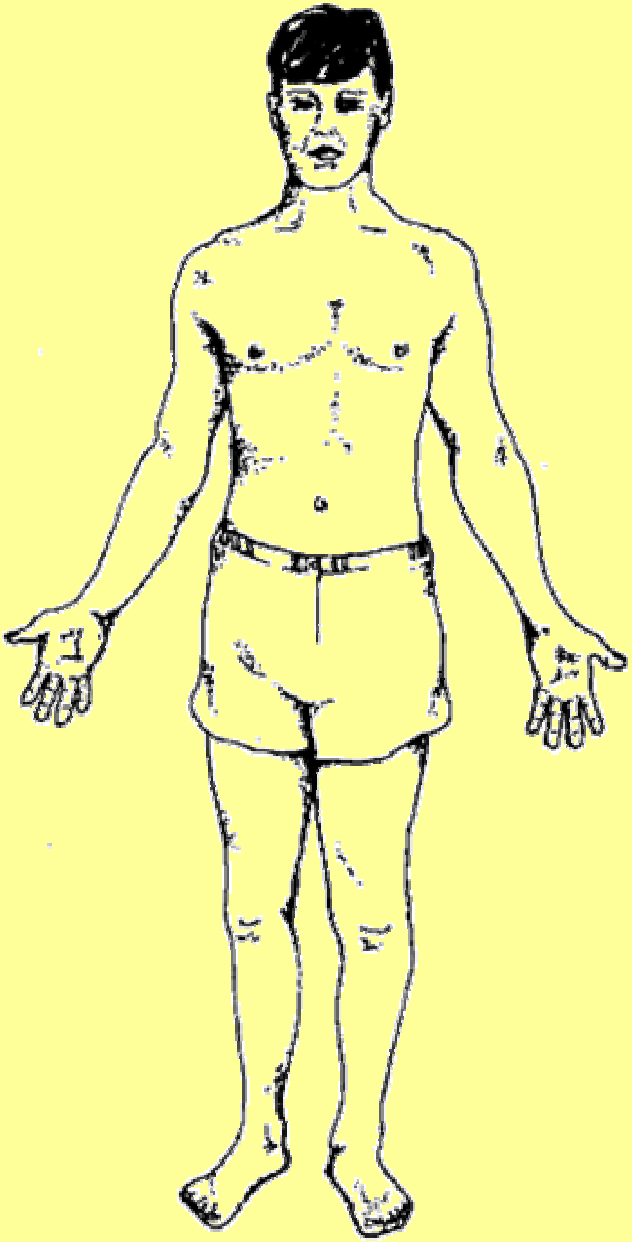

What is GALS?
Gait
Arms
Legs
Spine

Gait

- Observe the patient walking
- Observe the patient turning and walking back
- Look for smoothness and symmetry of leg, pelvis and arm movements
- Look for stride length and the ability to turn quickly

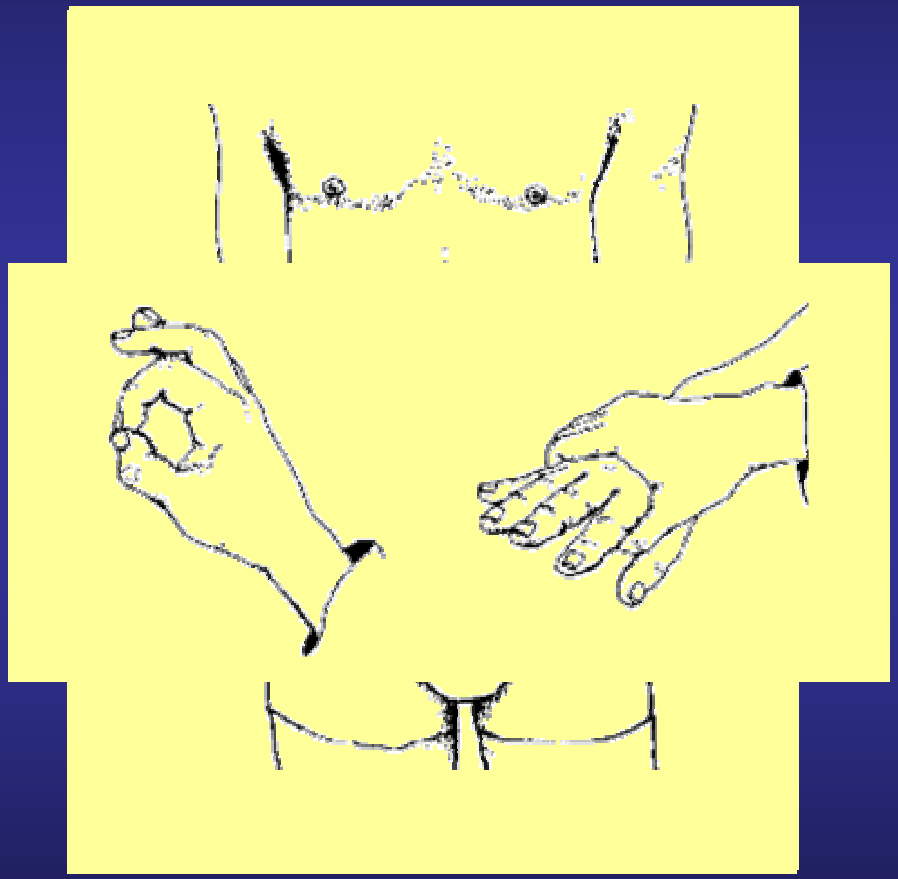
ARMS

Inspection from the front allows assessment of normal girdle muscle bulk and symmetry. After placing both hands down by the side with elbows straight in full extension, the patient should attempt to place both hands behind their head and then push the elbows back, which tests glenohumeral, acromioclavicular, and sterno-clavicular joints



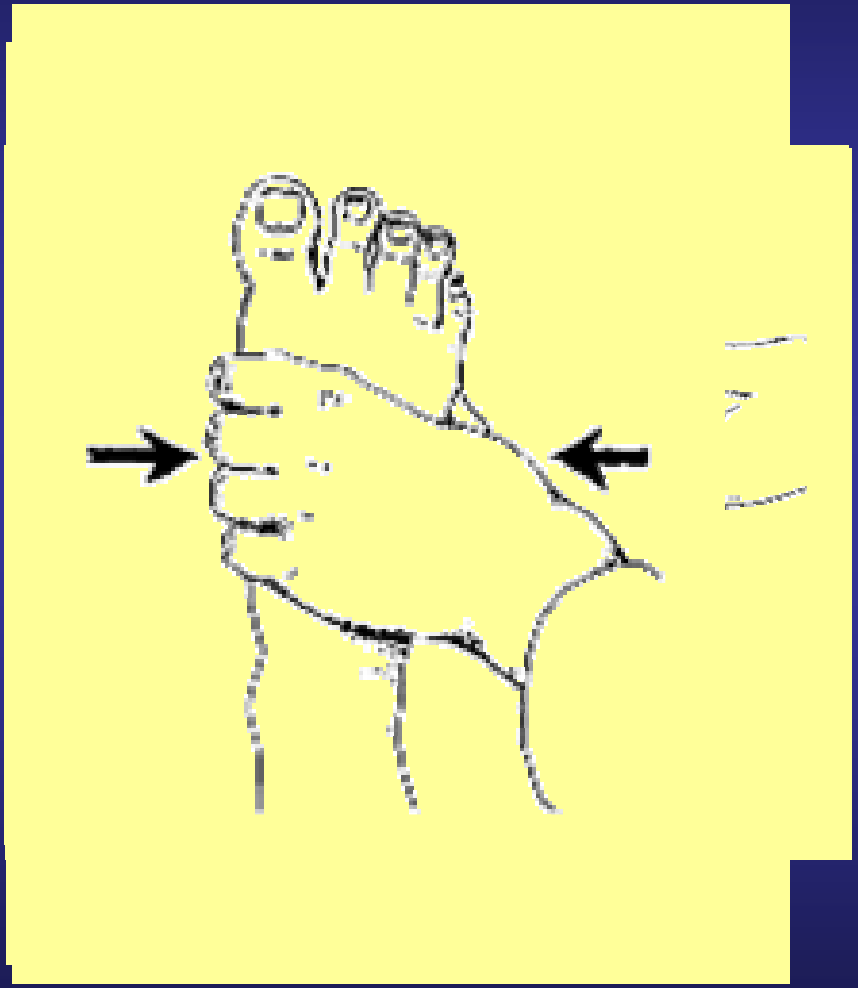
ARMS

Hands should be examined palm down with fingers straight to detect any swelling or deformity. It is important to observe normal supination-/pronation and grip. Place the tip of each finger onto the tip of the thumb in turn to assess normal dexterity and fin precision pinch. Discomfort in response to squeezing across the 2nd to the 5th metacarpal suggests synovitis.



LEGS

Inspect the patient standing and observe knee, hindfoot, midfoot or forefoot deformity. Later examination on the couch should include flexion each hip and knee while supporting the knee to test normal hip and knee flexion and help detect crepitus. Each hip should be passively internally rotated in flexion and the knee carefully examined the presence of fluid by pressing on each patella and palpated for the balloon sign and bulge sign. Squeeze across the metatarsals to detect synovitis. Inspect the soles of the feet for callosities or rashes such as keratoderma blenorrhagica in Reiter' s syndrome.



What should be suspected if redness of the skin covering the joint is present on examination?

Emergencies in rheumatology

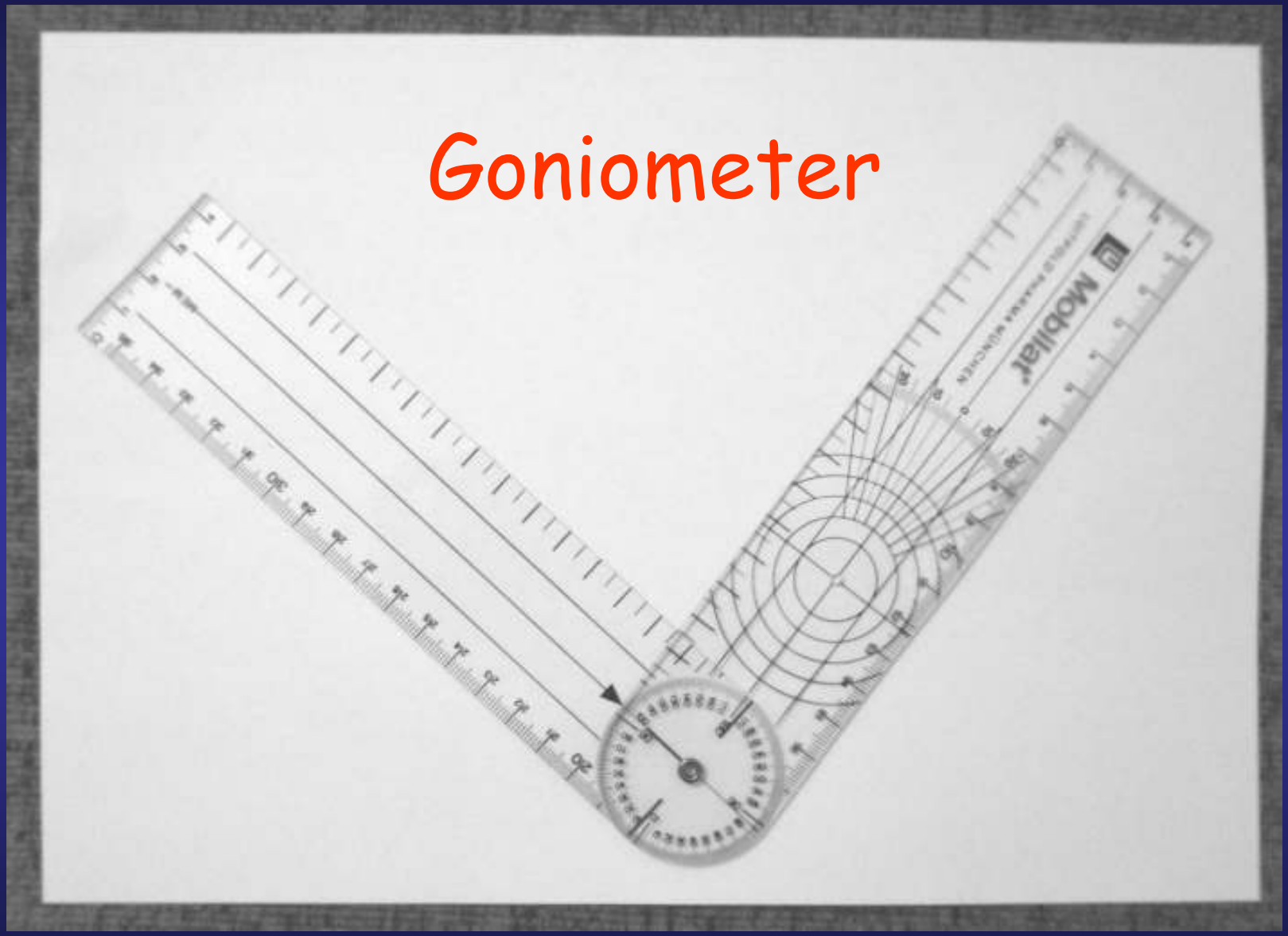
- Open fractures
- Fractures with nerve or vascular compromise
- Cauda equina compression
- Compartment syndrome/vascular compromise
- Joint infection
- Soft tissue infection
- Bone infection
- Temporal arteritis

Joint palpation for tenderness and swelling

examination of the range of motion

To measure or to estimate?

Goniometer



examination of the range of motion

passive or active?

Active ROM examination

- Ask the patient to move each joint through a full range of motion
- Note the degree and type (pain, weakness, etc.) of any limitations
- Note any increased range of motion or instability
- Always compare with the other side
- Proceed to passive range of motion if abnormalities are found

Passive ROM examination

- Ask the patient to relax and allow you to support the extremity to be examined
- Gently move each joint through its full range of motion
- Note the degree and type (pain or mechanical) of any limitation
- If increased range of motion is detected, perform special tests for instability as appropriate
- Always compare with the other side

Specific joint examination (1)

- Fingers - flexion/extension; abduction/adduction
- Thumb - flexion/extension; abduction/adduction; opposition
- Wrist - flexion/extension; radial/ulnar deviation
- Forearm - pronation/supination (function of both elbow and wrist)
- Elbow - flexion/extension
- Shoulder - flexion/extension; internal/external rotation; abduction/adduction (2/3 glenohumeral joint, 1/3 scapulo-thoracic)

Specific joint examination (2)

- Hip - flexion/extension; abduction/adduction; internal/external rotation
- Knee - flexion/extension
- Ankle - flexion (plantarflexion)/extension (dorsiflexion)
- Foot - inversion/eversion
- Toes - flexion/extension
- Spine - flexion/extension; right/left bending; right/left rotation

Snuffbox Tenderness (Scaphoid)

- Identify the "anatomic snuffbox" between the extensor pollicis longus and brevis (extending the thumb makes these structures more prominent)
- Press firmly straight down with your index finger or thumb
- Any tenderness in this area is highly suggestive of scaphoid fracture

Drop Arm Test (Rotator Cuff)

- Start with the patient's arm abducted 90 degrees
- Ask the patient to slowly lower the arm.
- If the rotator cuff (especially the supraspinatus) is torn, the patient will be unable to lower the arm slowly and smoothly.

Impingement Sign (Rotator Cuff)

- Start with the patient's arm relaxed and the shoulder in neutral rotation
- Abduct the arm to 90 degrees
- Significant shoulder pain as the arm is raised suggests an impingement of the rotator cuff against the acromion

Flexor Digitorum Superficialis Test

- Hold the fingers in extension except the finger being tested
- Ask the patient to flex the finger at the proximal interphalangeal joint
- If the patient cannot flex the finger, the flexor digitorum superficialis tendon is cut or non-functional

Flexor Digitorum Profundus Test

- Hold the metacarpophalangeal and proximal interphalangeal joints of the finger being tested in extension
- Ask the patient to flex the finger at the distal interphalangeal joint
- If the patient cannot flex the finger, the flexor digitorum profundus tendon is cut or non-functional

Phalen's Test (Median Nerve)

- Ask the patient to press the backs of the hands together with the wrists fully flexed (backward praying)
- Have the patient hold this position for 60 seconds and then comment on how the hands feel
- Pain, tingling, or other abnormal sensations in the thumb, index, or middle fingers strongly suggest carpal tunnel syndrome

Tinel's Sign (Median Nerve)

- Use your middle finger or a reflex hammer to tap over the carpal tunnel
- Pain, tingling, or electric sensations strongly suggest carpal tunnel syndrome

Thank you for your attention!