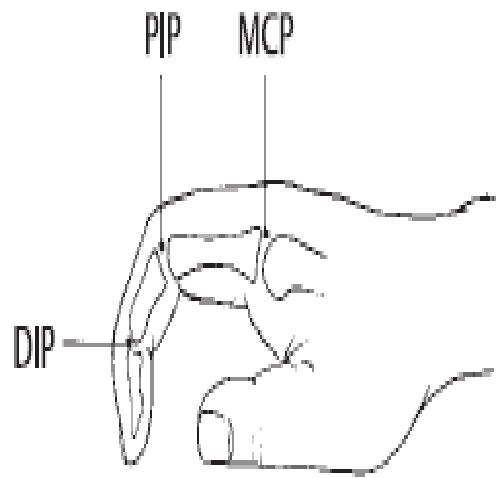


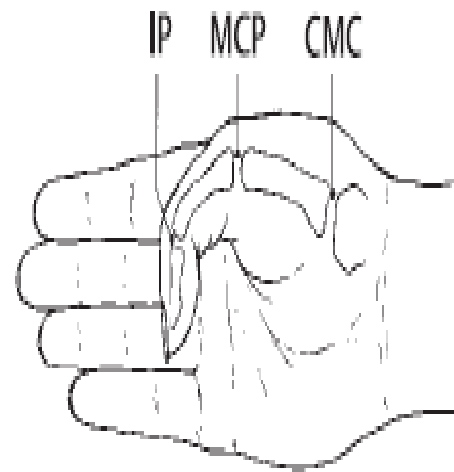
Hand examination

DR MOHAMMADREZA MOHARRAMI

Finger joints



c



d

DIP = distal interphalangeal joint,

PIP = proximal interphalangeal joint,

MCP = metacarpophalangeal joint,

IP = interphalangeal joint (of the thumb),

CMC = carpometacarpal joint

Hand examination

- 1- Introduce yourself to the patient.
- 2- Explain the procedure to the patient.
- 3- Ask patient to roll up his/her sleeves and Place both arms out in front, elbows bent 90°, palms down, fingers straight on the below.
- 4- Examine patient in good light and warm surrounding.

Inspection

- ▶ a- Compare the two sides.
- ▶ b- Look for the normal contour of the joints.
- ▶ c- Compare the joints and overlying structures (skin, muscle, tendon) on each side.
- ▶ d- Stretch of skin (fattening of skin creases), nails for pitting, splinter hemorrhage ,clubbing and periungual erythema.
- ▶ e- Look for :
 - ▶ Redness
 - ▶ Rash
 - ▶ Scars
 - ▶ Swelling
 - ▶ Deformity
 - ▶ Wasting in palmer and dorsal side



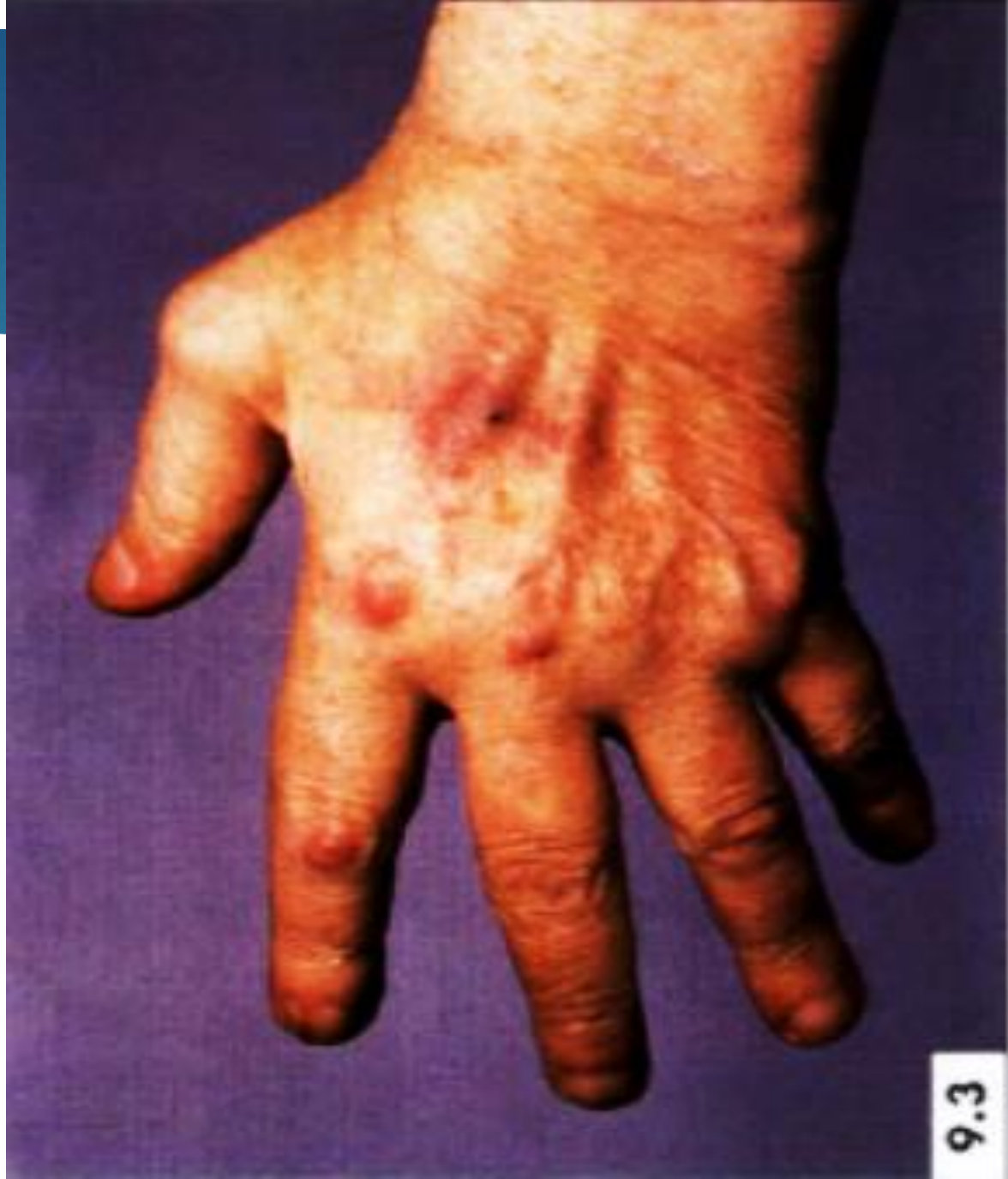
PSORIASIS RASH







<http://dermis.net>



C



periungual erythema

SPLINTER HEMOORRAGE



CLUBBING



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Disorders

Causes of finger clubbing

Lung disease

- Pyogenic (abscess, bronchiectasis, empyema)
- Bronchogenic carcinoma
- Fibrosing alveolitis

Heart disease

- Cyanotic congenital heart disease
- Subacute bacterial endocarditis

Gastrointestinal

- Cirrhosis
- Ulcerative colitis
- Crohn's disease

Idiopathic/congenital

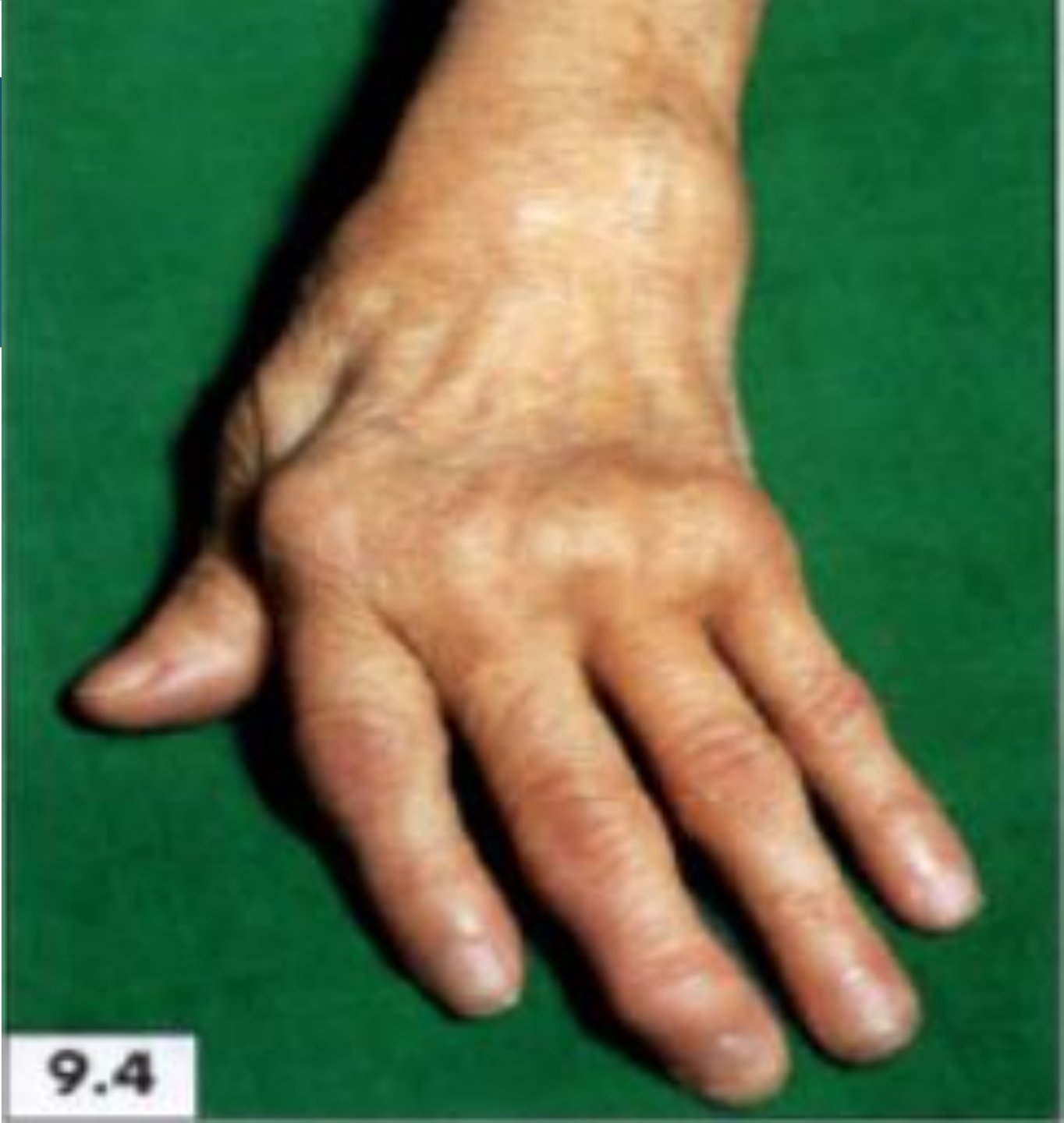


CLUBBING

Early swelling







9.4



9.5



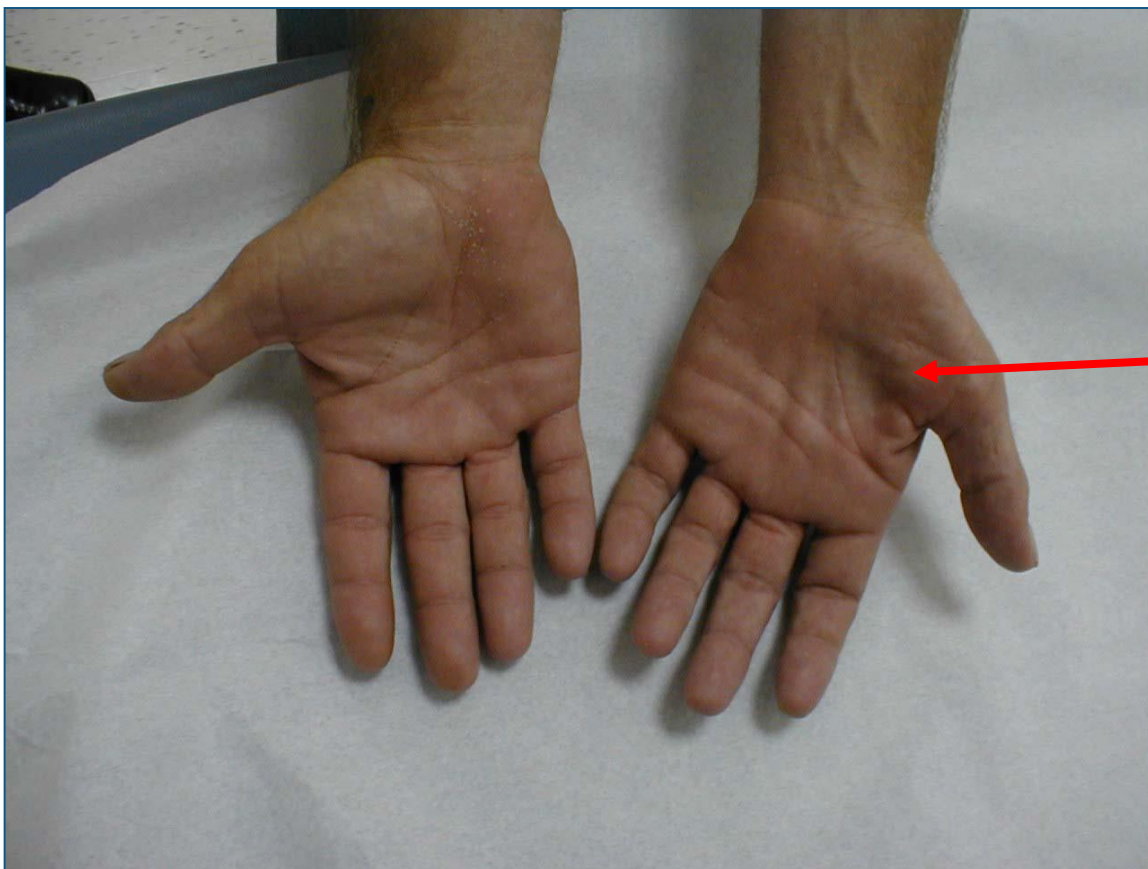






9.6

Muscle wasting



Muscle wasting







Palpation

- ▶ Examine each major joint.
- ▶ a- Palpate for looking for changes in temperature using the back of the hand over the joints and compare with opposite side and dorsum of the fore arm.

Compare temperature



PALPATION OF WRIST JOINT

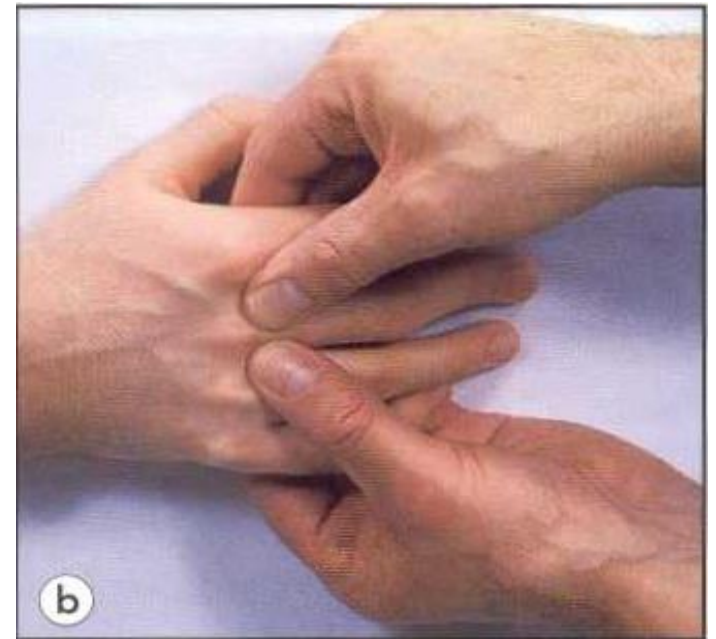
- ▶ b-Encircle patient wrist using both hands support the patient wrist with finger pads of both your index fingers and use your thumb pads to palpate tenderness and fluctuating swelling over wrist .

▶ PALPATION OF WRIST JOINT



PALPATION OF MCP JOINTS

- ▶ **C-** Use finger pads of both your index fingers and use your thumb pads to palpate tenderness and fluctuating swelling over metacarpophalangeal joints.



- ▶ 4-palpate for tenderness and fluctuation in PIP and DIP joints by using your left thumb and index fingers in a vertical plane and your right index and thumb in horizontal plane .



Active range of Motion

Compare both sides.

Ask the patient to move each joint through a full range of motion and note the degree and type (pain, weakness) of any limitations or any increased range of motion .

a- Fingers: flexion/extension; abduction/adduction .

b-metacarpophalangeal joints: flexion and extension.

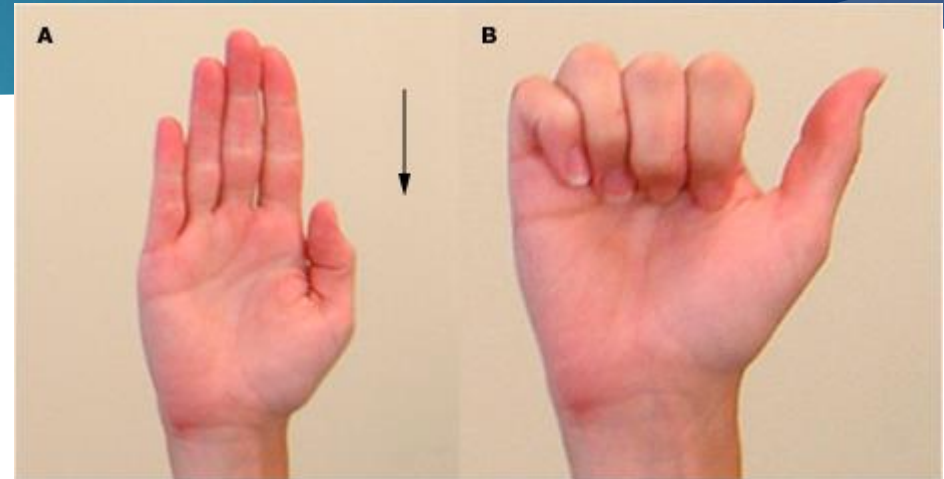
c-Thumb: flexion/extension; abduction/adduction; opposition

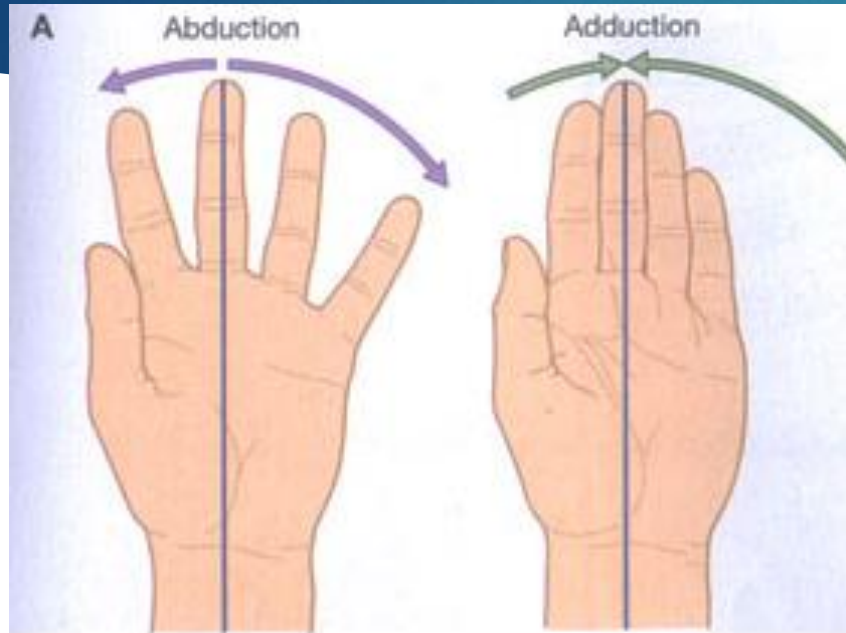
d-Wrist: flexion/extension; radial/ulnar deviation .

LIMITATION OF FINGER FLEXION



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THUMB



passive range of motion

- ▶ Confirm range of movement and assess for end of movement tenderness
- ▶ Fingers - flexion/extension.
- ▶ Metacarpophalangeal joints flexion and extension.
- ▶ Wrist - flexion/extension.

special tests

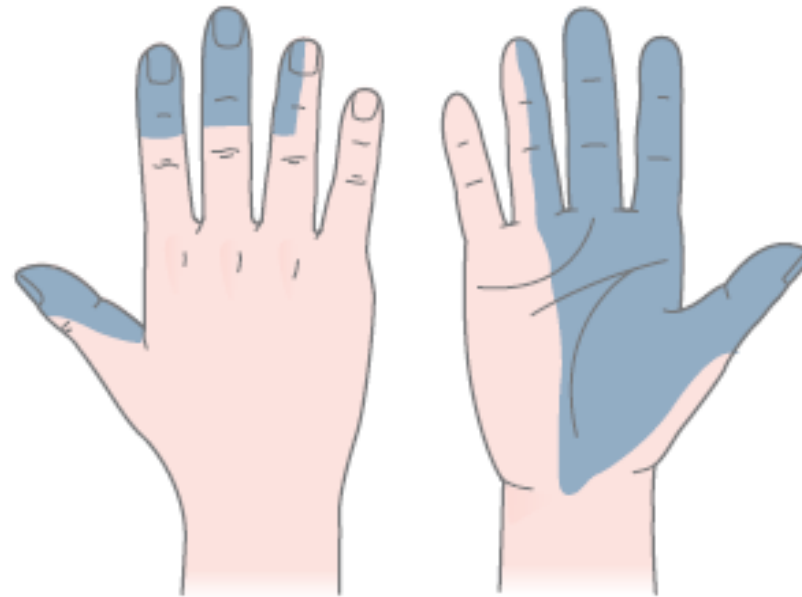
- ▶ Phalen's Test (Median Nerve)
- ▶ Ask the patient to press the back of the hands together with the wrists fully flexed.
- ▶ Have the patient hold this position for 60 seconds and then ask patient to comment on how the hands feel.
- ▶ (Pain, tingling, or other abnormal sensations in the thumb, index, 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 ask patient to comment on how the hands feel.
- ▶ (Pain, tingling, or electric sensations strongly suggest carpal tunnel syndrome)



Figure 10.30. Phalen's test. This position is kept for about 1 minute; paresthesia in the median nerve distribution suggests carpal tunnel syndrome.



Median nerve
distribution of
paraesthesias in the
right hand



- ▶ Cover & thank the patient

WRONG



DIAGRAM FOR RECORDING JOINT DISEASE ACTIVITY

