


Internal Medicine (Physical Examination)

Examination of the Locomotor system and of the Peripheral Vessels - extremities

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Examination of the LOCOMOTOR SYSTEM AND THE PERIPHERAL VESSELS - extremities

- CHANGES OF THE SKIN
- EXAMINATION OF THE LOCOMOTOR SYSTEM
 - Joints
 - Spine
- EXAMINATION OF THE PERIPHERAL VESSELS
 - Arteries
 - Veins
 - Lymphatic vessels

Examination of the PERIPHERAL VESSELS - arteries

- **Upper extremities**
 - A. radialis (radial artery) always
 - A. radialis (radial artery)
 - A. ulnaris (ulnar artery)
 - A. brachialis (brachial artery)
 - A. axilaris (axillary artery)
- **Lower extremities**
 - All of them always
 - A. femoralis (femoral artery)
 - A. poplitea (popliteal artery)
 - A. tibialis posterior (posterior tibial artery)
 - A. dorsalis pedis (dorsalis pedis artery)

Examination of the PERIPHERAL VESSELS - arteries

- Cyanosis – ischaemic disease of the lower extremities (ischaemic peripheral vascular disease)



Examination of the PERIPHERAL VESSELS - arteries



Examination of the PERIPHERAL VESSELS - arteries

- Raynaud's disease (spasm of small arteries, often with rheumatic or immunologic diseases)



Examination of the PERIPHERAL VESSELS - veins (varices)



Examination of the PERIPHERAL VESSELS - veins

Varices – varicosity (primary or secondary after deep venous thrombosis)



Examination of the PERIPHERAL VESSELS - veins

Phlebectases (venectases) – „small broomlets“ – only a cosmetic defect



Examination of the PERIPHERAL VESSELS - veins

- Post-phlebotrombotic or post-phlebitic syndrome (after repeated deep venous phlebotrombosis or phlebitis)



Examination of the PERIPHERAL VESSELS - ulcers

**Veins
(medial part)**



**Arteries
(lateral part)**



Examination of the PERIPHERAL VESSELS

– veins + arteries

- Phlegmasia cerulea dolens (acute massive phlebotrombosis of v. femoralis)



Examination of the PERIPHERAL VESSELS

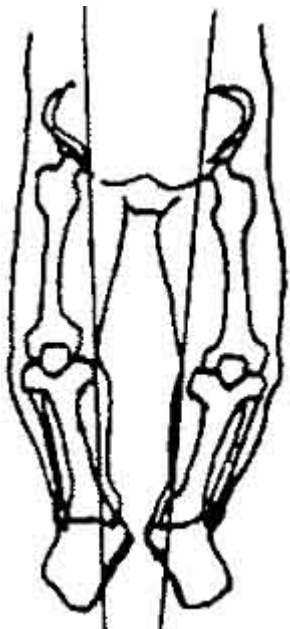
– lymphatic vessels

Non-pitting oedema, (primary or secondary deficiency)



Examination of the JOINTS

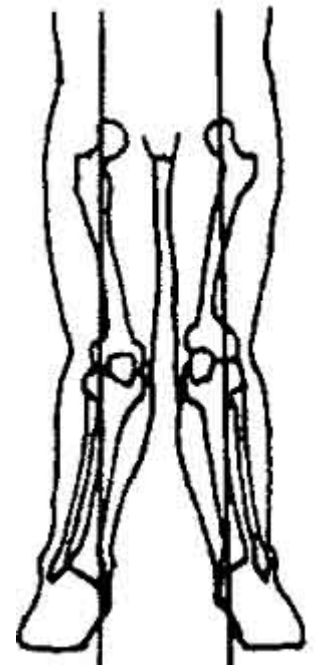
- Coxa vara
- Genua vara and valga



VARA (O)



VALGA (X)



Examination of the JOINTS

- Arthritis – inflammation or Arthrosis - degeneration

 - Dolor
 - Calor
 - Rubor
 - Tumor (edema, swelling, osseal hyperplasia, accumulation of fluid, thickening of the synovial membrane and capsule of the joint)
 - Functio laesa



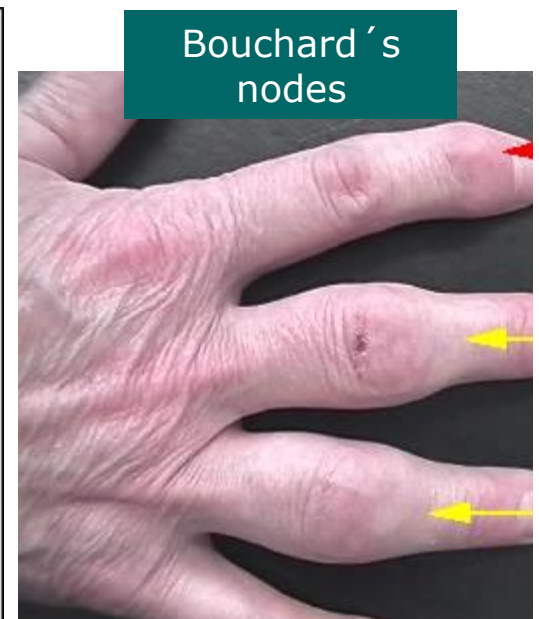
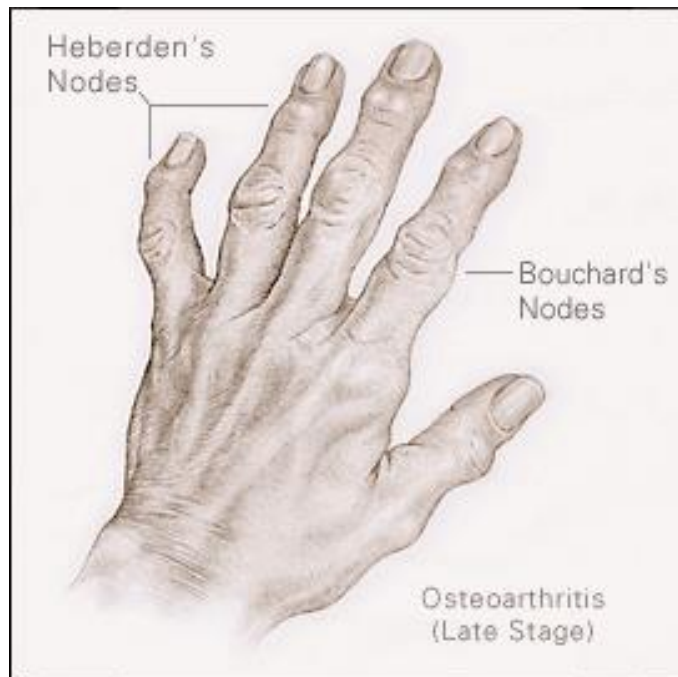
Examination of the JOINTS

- Arthritis – inflammation or Arthrosis - degeneration
 - Dolor
 - Calor
 - Rubor
 - Tumor
 - Functio laesa



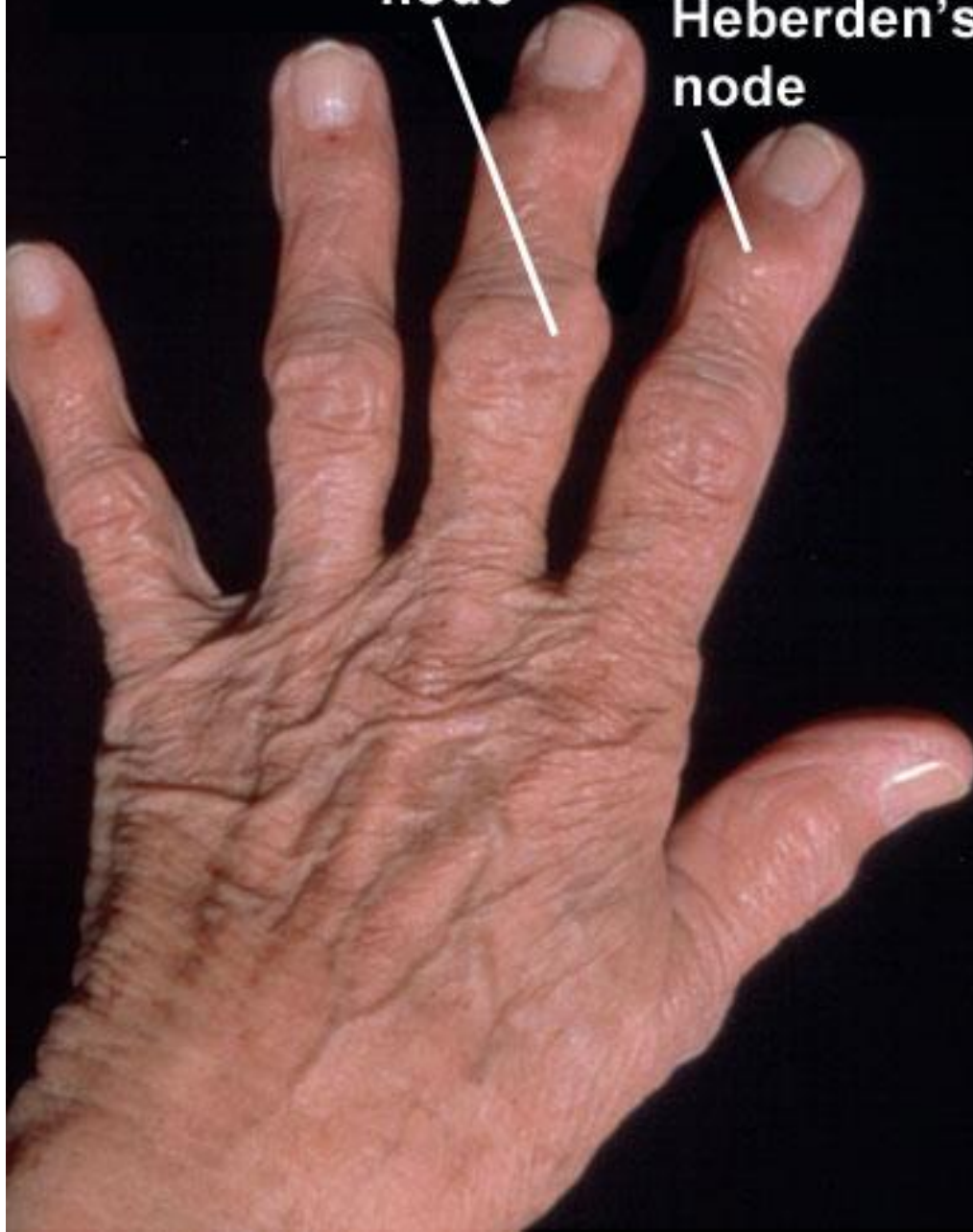
Examination of the JOINTS

- Arthritis – inflammation or Arthrosis - degeneration
 - Heberden´s nodes – arthritis
 - Bouchard´s nodes - arthrosis



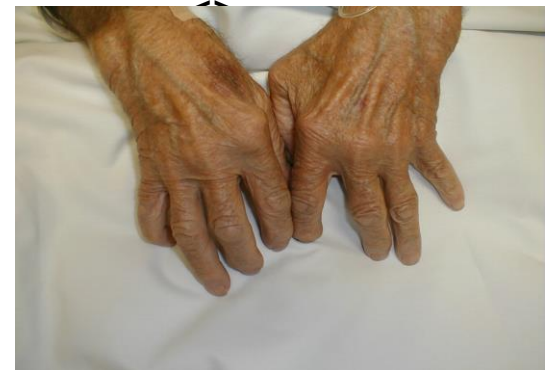
**Bouchard's
node**

**Heberden's
node**



Examination of the JOINTS

- Deformities
 - – pathologic position or pathologic configuration of the articulating bones
 - - nodes (knots)



Examination of the SPINE

- Inspection at rest
 - Skoliosis (dextro x sinistro)
 - Kyphosis x lordosis
 - Gibbus (humpback)

Thoracic

Lumbar



Examination of the SPINE

- Inspection at rest
 - Skoliosis (dextro x sinistro)
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KYPHOSIS

Kyphotic spine



Normal spine

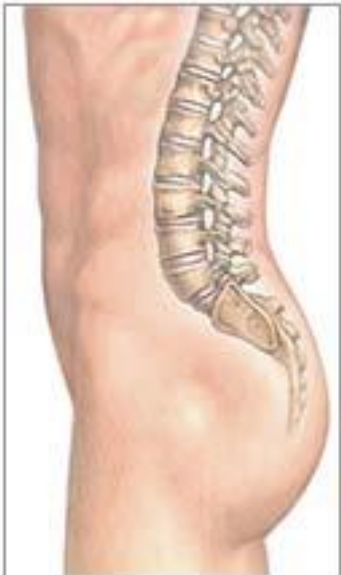


Examination of the SPINE

- Inspection at rest
 - Skoliosis (dextro x sinistro)
 - Kyfosis x lordosis
 - Gibbus

LORDOSIS

Columna vertebral normal



Lordosis de la columna vertebral



Examination of the Spine

- **During motion**

- **Thomayer's distance test**

- patient bends forward with knees extended and tries to touch the ground with the fingertips
 - normal findings: to 10 cm between the floor and the fingertips

- **Shober's distance test**

- in an upright patient 10 cm are measured proximally from the intersection between the posterior midline and a line connecting both superior posterior iliac spines
 - normal findings: after leaning forward the distance is at least 4 cm longer

Examination of the Spine

- **During motion**
 - **Lateroflexion**
 - **Stibor's distance test**
 - in an upright patient the distance are measured between the intersection between the posterior midline and a line connecting both superior posterior iliac spines and the spinous process of the C7 vertebra
 - normal findings: after leaning forward the distance is at least 6 cm longer