

# Examination and important pathological changes in the eye area

## Eye area

### Eyebrows

- Prominent in acromegaly.

### Eyebrows

- Denser in women – virilism,
- thinning – myxedema, thallium poisoning.

### Caps

- Infiltration – myxedema, kidney disease,
- spots – Addison's disease and Basedow's disease,
- xanthelasma palpebrarum – yellow spots on the upper eyelids in biliary cirrhosis.

## Bulbes

Physiologically, they are in the middle position. We examine the mobility of the bulbs with the patient's head fixed, we have a finger about 1 m from his eyes and we move with him horizontally and vertically.

- **Exophthalmus** – ventricular appearance of the bulbs and widening of the eye slit, bilateral and symmetrical; in thyrotoxicosis – other manifestations:
  - Moebi's symptom – when viewed close to the bulbs, they diverge due to muscle weakness.
  - von Graefe's sign – the lid does not follow the bulbus during craniocaudal movement – a white crescent appears.
  - Stellwag's symptom – sparse blinking.
- **endophthalmus** – bulb invasion – rarer, part of Horner's Triassic along with miosis and eyelid ptosis,
- **strabismus** – weakening of the eye muscles,
- **nystagmus** – rapid eye movements.

## Conjunctivae

- Pale – in anemia,
- hemorrhages – in bleeding conditions,
- hyperemic – inflammation,
- xerophthalmia – dry eyes – vitamin A deficiency.

## Sclera

- Yellowish to yellow – jaundice, subicterus,
- blue – osteogenesis imperfecta,
- brown spots:
  - physiologically – melanin in blacks,
  - pathologically – homogentisic acid in alkaptonuria.

## Cornea

- Arcus corneae senilis – white-gray circle,
  - signs of atherosclerosis in the elderly,
  - sign of hyperlipidemia in people under 40,
- Kayser-Fleischer green-brown ring – contains Cu – Wilson's disease.

## Pupils

- Mydriasis – pupil dilation – parasympathetic disorder,
- miosis – pupil narrowing – sympathetic disorder.

## Links

- Endocrine orbitopathy

## Literature

- CHROBÁK, Ladislav. *Propedeutika vnitřního lékařství*. 2. edition. Grada, 2003. ISBN 80-247-0609-1.

Portal:Internal medicine Portal:Internal propaedeutics Portal:Ophthalmology