**Drugs in Ophthalmology**

**HYDROXYCIN**

- Potentially dangerous – risk of:
  1. dendritic (herpetic) corneal ulcer progression (slit lamp examination is essential before steroid administration!)
  2. glaucoma

**CYCLOPLICICS**

- use for eye examinations, short procedures.
- **do not use for eye pain treatment** – anesthetics abolish corneal reflex →→ corneal damage.
  - instead use: eye pads, cold compresses, mydriatics (not in glaucoma!)

**MIOTICS**

- **PILOCARPINE** 1-4% → use to reverse mydriatics, to treat glaucoma.
- **HOMATROPINE** 5%

**ANTIMUSCARINICS**

- **TROPICAMIDE**
  - 10% (lasts 3 days)
  - 0.25% (lasts 10 min if necessary):
    - pupil involvement markedly changes management of new-onset CN1 palsy
    - pupil examination - **OBJECTIVE indicator of visual function** (important in suspected functional visual loss).
  - 3% (lasts 24 hours)
  - 0.5-1% (lasts 3 hours)
  - for longer action / wider dilation - 10% PHENYLEPHRINE and/or 1% CYCLOPENTOLATE (lasts 24 hours).

**Cycloplegic Drug Use**

- Do not dilate pupils of any patient with unexplained visual loss, ptosis, dysmotility until reviewed by senior examiner:
  1. pupil involvement markedly changes management of new-onset CN1 palsy
  2. pupil examination - **OBJECTIVE indicator of visual function** (important in suspected functional visual loss).
  3. Horner syndrome is missed easily unless combination of anisocoria that is worse in dark, pupil dilation lag, and ptosis can be correlated.
  4. pupils are clinically normal in Horner syndrome.

**Ointments vs. Drops**

- Ointments are especially useful at night or when eyelid crusting & sticking is problem.
- Drops need application q 2 h; allow 5 min between drops to avoid overspill.
- Ointments are retained much longer than drops.
- Drops need application q 2 h; allow 5 min between drops to avoid overspill.
- Ointments are especially useful at night or when eyelid crusting & sticking is problem.

- eye preparations have warnings **not to use longer than 1 month**, but all preparations contain *bacteriostatic drugs*, so contamination is rare (preparations in practice may be used > 1 month).

**Ointments**

- for eye examination use short acting mydriatics (repeated in 5-10 min if necessary):
  - 2.5% PHENYLEPHRINE
  - 0.5-1% TROPICAMIDE (lasts 3 hours)
- **CYCLOPENTOLATE** 1% (lasts 24 hours)
- **ATROPINE** 1% (lasts 7 days)
- **HOMATROPINE** 5%

**Antihistamines**

- **ZELASTINE**
- **ETOTIFEN**
- **ODOXAMIDE**
- **MEDASTINE**
- **EVOCABASTINE**
- **NESTHETICS**
- **DENDRITICANS**
- **ANTHISTAMINES**
- **ASSOCIATION**
  - **ACEHOLICINS**
  - **EBICAMINE**
  - **KETOTIFEN**
  - **LEVOCAMBINE**

**Stereoids**

- **CHLORAMINE** 4%
- **OLOPATADINE** 0.1%
- **LOXICAMINE** 0.1%

**Mast Cell Stabilizers**

- **ANTHISTAMINES**
  - **AMERICAN FORM**
    - **ACEHOLICINS**
      - **EBICAMINE**
      - **KETOTIFEN**
      - **LEVOCAMBINE**

**Bibliography** for ch. “Ophthalmology” → follow this LINK »»