Answer to Medical Quiz

CASE I

Hyphema is the term used when there is blood in the anterior chamber of the eye. It is usually caused by nonperforating trauma to the eye. In rare instances, hyphema may occur spontaneously as a complication of ocular or systemic disorder such as blood diseases and the late stages of diabetic neovascularisation of the anterior segment of the eye.

Treatment is mainly conservative by sedation and elevation of the patient's head. If intraocular pressure is also elevated, give acctazolmide (Diamox) 250 mg orally every 6 hours. Also, mannitol 20%, 250 - 500 ml over 2 - 3 hours should be given if the hyphema is completely filling the anterior chamber. Also use an eye shield. The patient should be examined regularly thereafter to detect late complications.

CASE II

Congenital glaucoma is a disease in which the elevated intraocular pressure and increased resistence to aqueous outflow are due to a defect in the embryological development of the anterior chamber of the eye. Incidence in the general population is 0.01% to 0.40%. About 35% of the cases are diagnosed at birth and 70% by the age of 6 months. Late diagnosis at age of 1-3 years is in 10% of the cases.

The most important criterion for the diagnosis is the elevated intraocular pressure. However, we must have a high index of suspicion. Treatment is early surgical intervention.

CASE III

Diagnosis is glaucomatous visual field defects in the early stages taking arcuate shape extending from the blind spot. To diagnose glaucoma you need to have one or more of the three major findings. First, raised intraocular pressure above 22 mm Hg. Second, glaucomatous optic disc cupping, and third, documented glaucomatous visual field defects.

Glaucoma could be primary open angle, primary closed angle, secondary glaucoma or congenital.

In treating glaucoma cases, we must aim to lower the intraocular pressure to normal range either by medical or surgical means, and to treat the underlying surgical or medical problem in the secondary type.

CASE IV

Newborn ophthalmia (Ophthalmia Neonatorum: O N) is defined as conjunctivitis in an infant less than 30 days old with clinical signs of redness and swelling of the eye lids and conjunctivia, profuse purulent eye discharge and one or more polymurphonuclear leuccocytes per oil immersion field or a Gram stained conjunctival smear. The etiology of O N can be microbial or chemical in origin.

The infectious causes are subdivided into sexually transitted disease (STD) acquired from the mother during birth, and other micro-organisms. The most common causative agents are STD agents: N-gonorrheae and C-trachomatous.

REFERENCES

- Tabbara KF. Hyphema: Eye Emergencies. Diagnosis and Management. Laboratorios cust SR 1987; 43-44.
- Patrick D. Trevor R. Gradual Loss of Sight in Quiet Eyes: Lecture Notes on Ophthalmology. 5th ed. Blackwell Scientific Publications, Oxford 1974; 5:60-64.
- 3. Volker K. Newborn Ophthalmia (Ophthalmia Neonatorum). Community Eye Health 1988; 2:2-4.
- 4. Feghali J. Ro'mey KF. Congenital Glaucoma: A subject Review. The Arab Journal of Medicine 1983; 2:7:5-8.
- Laga M. Plummer FA, Nsanze E, et al. Epidemiology of Ophthalmia Neonatorum in Kenya. Lancet 1986; 2: 1145-1149.
- 6. Conjunctivitis of the Newborn. WHO, Geneva, 1986.