(5) Complicated Cataract

Secondary to disease in the eye:—

(1) Iridocyclitis.

(2) Old detachment of retina.(3) Retinitis pigmentosa.

(4) Glaucoma.

(5) Siderosis due to intra-ocular foreign body.

CATARACT DUE TO OTHER CAUSES

(1) General diseases: Mongolian idiocy; Parathyroid deficiency (calcium deficiency), Tetany; Cholera; Nervous diseases—myotonia atrophica.

(2) Poisons or toxins; Naphthaline; Ergot;

Eclampsia in pregnancy.

(3) Irradiation cataract—Exposures to X-rays, radium; Glass workers, due to heat.

Signs and Symptoms of Cataract

(1) Loss of vision (except when opacity is too small and peripheral). "Spots in front of eyes."

(2) Diplopia and polyopia.

(3) Colour changes.

(4) Refraction changes (astigmatism, myopia).

(5) Cataract may be obvious or may only be detected on careful examination.

Old people tend to have a normal grey reflex in the pupil which should not be confused with cataract.

TREATMENT OF CATARACT

No drops or other form of medical treatment will arrest the progress of cataract in any way. Treatment is usually irrespective of the cataract.

Palliative treatment—In early stages of cataract, to improve the vision:—

(1) Mydriatics (weak)—dark glasses.

(2) Suitable glasses (tendency for myopia) or magnifying glass.

Surgical treatment

Optical iridectomy. Usually done for lamellar cataracts and therefore most commonly in children. Allows patient to see round the cataract.

CATARACT OPERATIONS

Preliminary investigations

(1) General health: (a) Test urine and treat diabetes if present. If sugar is found in excess the patient is sent home for stabilisation. Any history of severe hæmophilia, a course of Vitamin K. 10 milligrammes T.I.D. or intra-muscular injections of Kapolin 1 c.c. Also the same dose repeated post operatively. (b) Eradicate focal sepsis, e.g. teeth. (c) Treat bronchitis and chest conditions to avoid post-operative complications.

(2) Eliminate presence of organisms in conjunctival sac (by taking culture) and lachrymal sac (by syringing).

(3) Ensure that the eye is quiet and there is no intraocular inflammation present (e.g. iritis).

(4) Eliminate disease of the retina by testing projection of light and activity of pupil.

CHOICE OF OPERATION.

Depends on age of patient. Under 35 years, the lens will be absorbed by aqueous.

1. Discission of lens with a needle. Aqueous comes in contact with the lens fibres, causes them to become opaque and swell up, and eventually absorbs them.

Curette evacuation becomes necessary if secondary glaucoma is produced.

2. Capsulotomy.—After absorption of the lens it is necessary to make a gap in the posterior capsule with a needle.

In young adults, the small soft nucleus absorbs slowly and it is usually desirable to remove the soft lens matter and nucleus by *curette evacuation* and *Anterior Chamber washout*. This is always done if secondary glaucoma is produced.

Sometimes the discission and Anterior Chamber washout are combined in the *linear extraction* in which the anterior capsule is opened with a keratome and the soft lens matter washed out at the same operation.

Over 35 years, absorption of the nucleus cannot occur, and the extra-capsular of intra-capsular method of extraction is employed.

Extra-capsular extraction.—Removal of the lens, leaving the capsule.

1. Graefe knife incision. Anterior capsule opened with capsule forceps, cystitome or graefe knife. Lens expressed. Anterior Chamber washout. Iridectomy. Reposition of iris. Replacement of conjunctival flap.

2. Capsulotomy at least six weeks afterwards.

Intra-capsular extraction.—Removal of lens complete in its capsule. Incision as before. Grasp capsule with intra-capsular forceps. Rock it to tear suspensory ligament, then withdraw. No Anterior Chamber washout. Iridectomy. Reposition of iris, etc., as before.

Complications of cataract extraction.

Operative.

1. Slicing iris with the knife.

2. Vitreous loss, usually due to dislocation of the lens before expression or clumsiness in expressing it or using the Anterior Chamber washout. Important to prevent pressure by speculum. Extraction with scoop usually required. Sometimes sutures are inserted. Iris is replaced and vitreous prolapse abscised and the eye padded as quickly as possible.

Post-operative.

1. Hyphæma and vitreous hæmorrhage. Sometimes spontaneous, but often due to misbehaviour of the patient or bad nursing. The blood thickens, the capsule, causes bloodstaining of iris, posterior synechiæ, secondary glaucoma, long convalescence.

2. Iris prolapse (and drawn-up iris). May be due to restlessness of patient, or bad nursing. Other factors are, bad operative technique in which the iris is not properly replaced, vitreous or residual soft lens matter pushing iris out.

Usually wound gapes and the iris is washed out with the escaping aqueous.

Treatment.

Repositioning or abscission of the prolapse by operation usually required. Sometimes eserine and good nursing is sufficient.

3. Infection and panophthalmitis. An acute purulent inflammation beginning in anterior part but eventually involving the whole eye (panophthalmitis), usually due to organisms particularly pneumococcus, present in conjunctival sac, at operation or introduced with instruments.

previous page next page