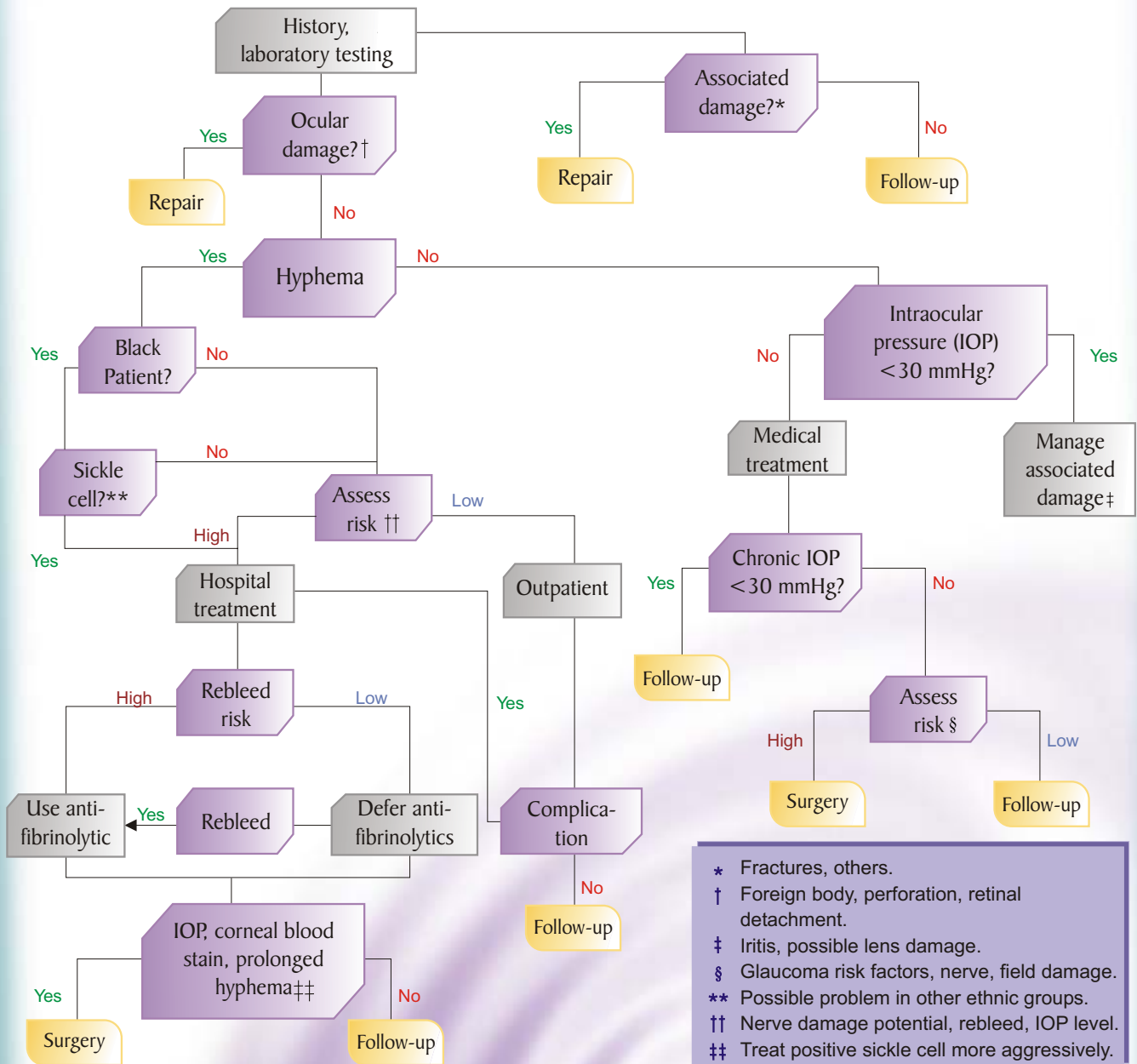


## Ocular Trauma Related Glaucoma



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Ocular Trauma is the third most common ophthalmic indication for hospitalisation. The treatment of ocular trauma And possible secondary glaucoma is a complex clinical scenario.

There are two types of Glaucoma associated with Ocular trauma:

### 1. Acute Glaucoma: It occurs due to a recent ocular trauma

#### ■ Management of Acute Glaucoma

Correlates with management of hyphema and trauma

To arrest continuous bleeding, to minimize rebleeding, to facilitate blood elimination and to treat associated Iritis and secondary glaucoma the following treatment may be necessary

- Hospitalization
- Use of cycloplegics, Antifibrinolytic agents
- Corticosteroids
- Medical management of IOP by aqueous suppression, prostaglandin analogues etc.
- Acetazolamide is to be avoided,  $\beta$ -blockers are the first line drugs
- Topical steroids are used since they reduce the risk of secondary haemorrhage
- Osmotic agents and mitotics are to be avoided

#### ■ Surgical Management of Acute Glaucoma

IOPs greater than 50 mmHg for 3-5 days or greater than 35 mmHg for 7 days warrant surgical intervention for evacuation of blood with or without Trabeculectomy.

Corneal staining is another indication for surgical intervention.

### 2. Chronic Glaucoma

It is seen in patients a long time after the actual incident of ocular trauma. It is further categorized in two types of Glaucoma.

#### ■ Ghost cell Glaucoma (Haemolytic Glaucoma)

For this glaucoma to occur there must be haemorrhage in vitreous humor and defect in the hyaloid face.

The obstruction is due to macrophages laden with red cell degenerative products, cells containing Heinz bodies and deformed cells which block the trabecular meshwork.

**Treatment involves anterior chamber lavage and vitrectomy may be necessary to remove the source of degenerating cells.**

#### ■ Angle recession Glaucoma

The late onset glaucoma after trauma is often called as angle recession glaucoma.

Angle recession, is not obvious due to healing, which has occurred over a span of time.

#### Management

Treatment is primarily medical. Prostaglandin analogues like latanoprost are extremely beneficial and effective in chronic glaucoma.

**If medical intervention fails surgery may be necessary.**

Standard glaucoma surgery like Trabeculectomy enhanced by adjunctive use of antimetabolites has been recommended.

An artificial filtering shunt should be considered if Trabeculectomy fails.

Argon Laser Trabeculoplasty is relatively ineffective.