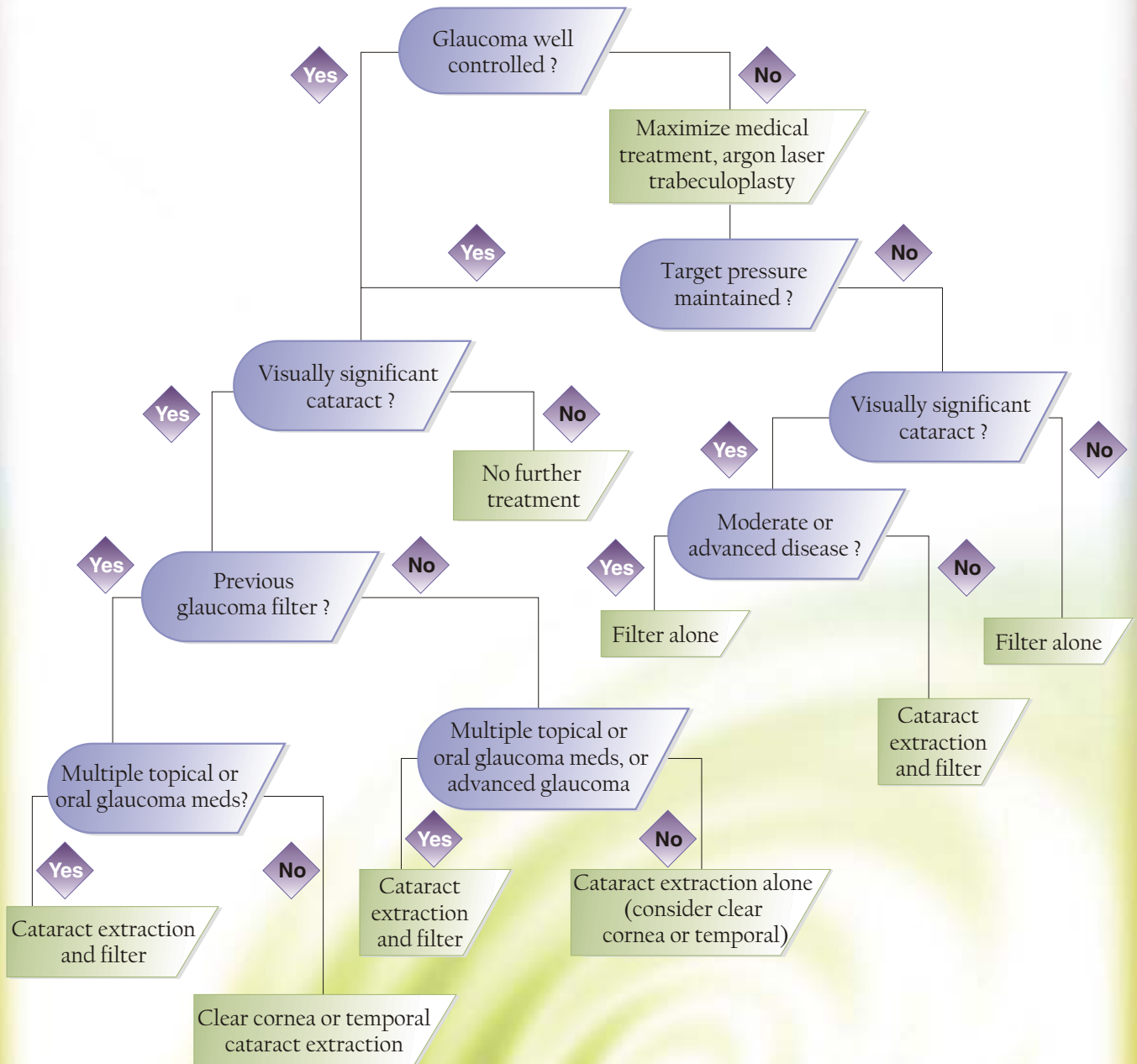


Cataract and Glaucoma



Decision tree: trabeculectomy and cataract surgery

Cataract and Glaucoma

One of the challenging aspects of Ophthalmology is treatment of patients with a coexisting glaucoma and a visually significant cataract.

As per the Framingham Eye Study, the incidence of cataract and glaucoma is

Population age	Glaucoma (%)	Cataract (%)
52-64 yrs	1.4	4.6
65-74 yrs	5.1	46.1

● Precautions

As the cataract progresses, stopping the administration of miotics is often desirable to provide the greatest recovery of pupil dilation.

■ Prostaglandin analogue use

- There is evidence that prostaglandin analogues like *latanoprost* can result in increased risk of CME in predisposed individuals. Hence, discontinuing the agent at least 2 weeks before the surgery is recommended, with a 4 to 6-week discontinuation of *latanoprost* after the surgery to prevent the risk of CME.

■ Assessment of Vision

- Assessing potential vision is a very difficult task in such cases because the exact cause of loss of vision can't be determined. Even with highly sensitive instruments, the positioning and directing the device in the proper area is vital for proper results.

● Management of Cataract and Glaucoma

■ Well-controlled Glaucoma

- When the target pressure range is reached, and glaucoma is controlled, if the visual function impairment limits the patient's life then cataract extraction should be considered. There is excellent potential for substantially improved vision with cataract extraction.
- If no filtration surgery is performed at the time of cataract extraction, there is an increased risk of post operative IOP rise in patients with glaucoma than those without glaucoma.
- Antiglaucoma medications are effective in blunting this increase in IOP but they cannot prevent its occurrence. This pressure increase must be anticipated and treated vigorously to prevent a risk of additional glaucomatous optic nerve damage.
- With modern small incision phacoemulsification techniques, there is a long-term 1 to 4 mm Hg reduction in IOP for 1-2 yrs. Intraocular pressure reduction occurs in non glaucomatous eyes also.

■ Poorly-controlled Glaucoma

- Poorly controlled IOP, progressive moderate to severe glaucomatous damage with borderline severity of the lenticular opacity, filtration alone may be the best option in maximizing the success in controlling glaucoma
- If the IOP is not controlled but the visual significance of the cataract is such that the patient requires a rapid visual rehabilitation, a combined procedure facilitates this goal, while also controlling IOP. This is most reasonable with a case of mild to moderate glaucoma.

With improved surgical outcomes of both cataract extraction and glaucoma filtration surgery using modern techniques aids in the successful management of coexisting cataract and glaucoma.