Phaco-Adjusted Trabeculotomy for Uncontrolled Chronic Angle Closure Glaucoma

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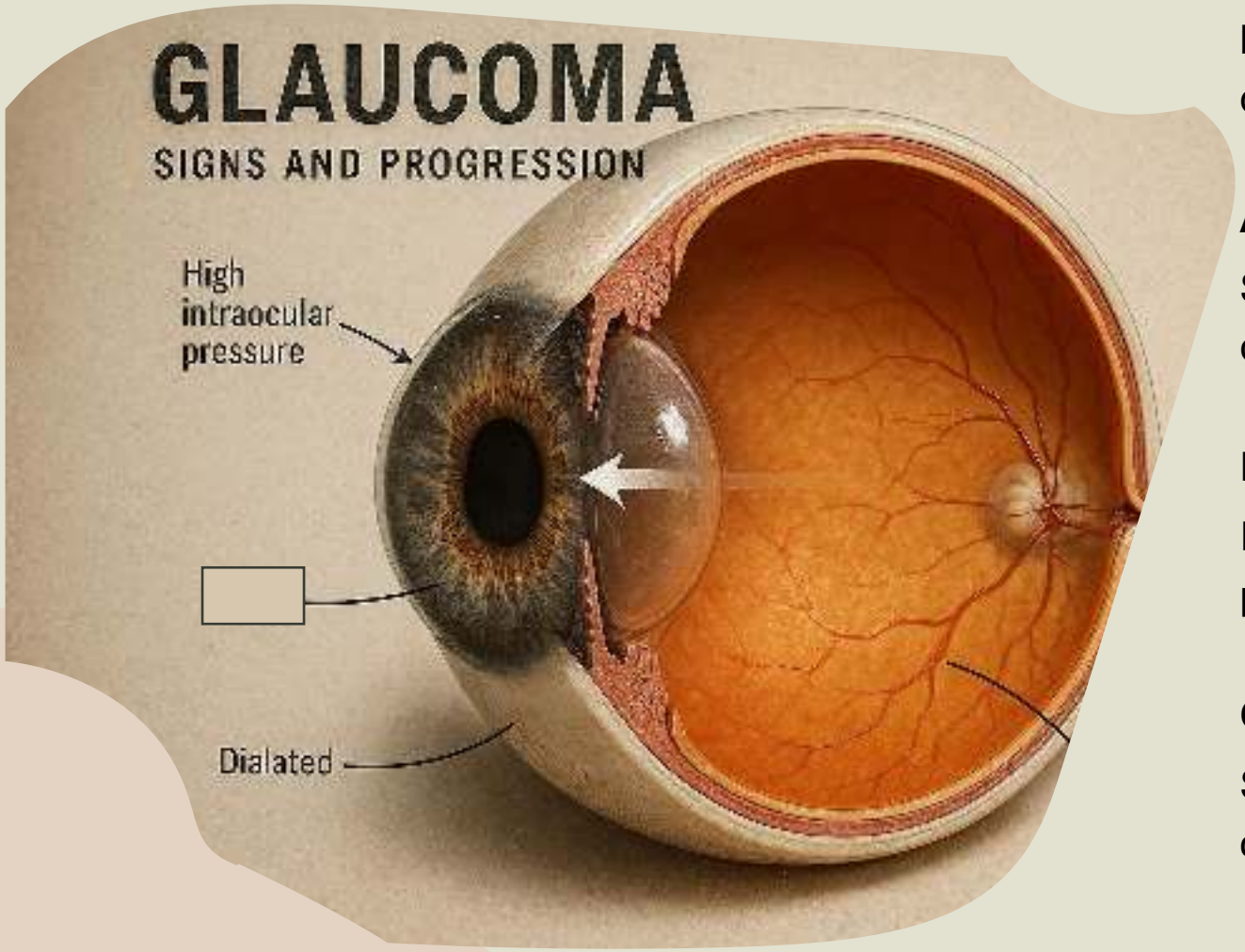
Definition and Pathophysiology



Progressive Angle Blockage

CACG develops gradually as the anterior chamber angle becomes increasingly obstructed, impairing Aqeuous drainage.

Anatomical Risk Factors

Shallow anterior chamber, lens position, and age-related changes predispose eyes to iridotrabecular contact in CACG.

Increased Intraocular Pressure

Impaired aqueous humor drainage elevates intraocular pressure, contributing to optic nerve damage over time.

Optic Nerve Damage

Sustained high pressure causes progressive damage to the optic nerve, leading to vision loss.

Limitations of Medical Therapy

Inadequate Response to Medication

Over 40% of patients with CACG do not achieve adequate IOP control despite maximum medical therapy.

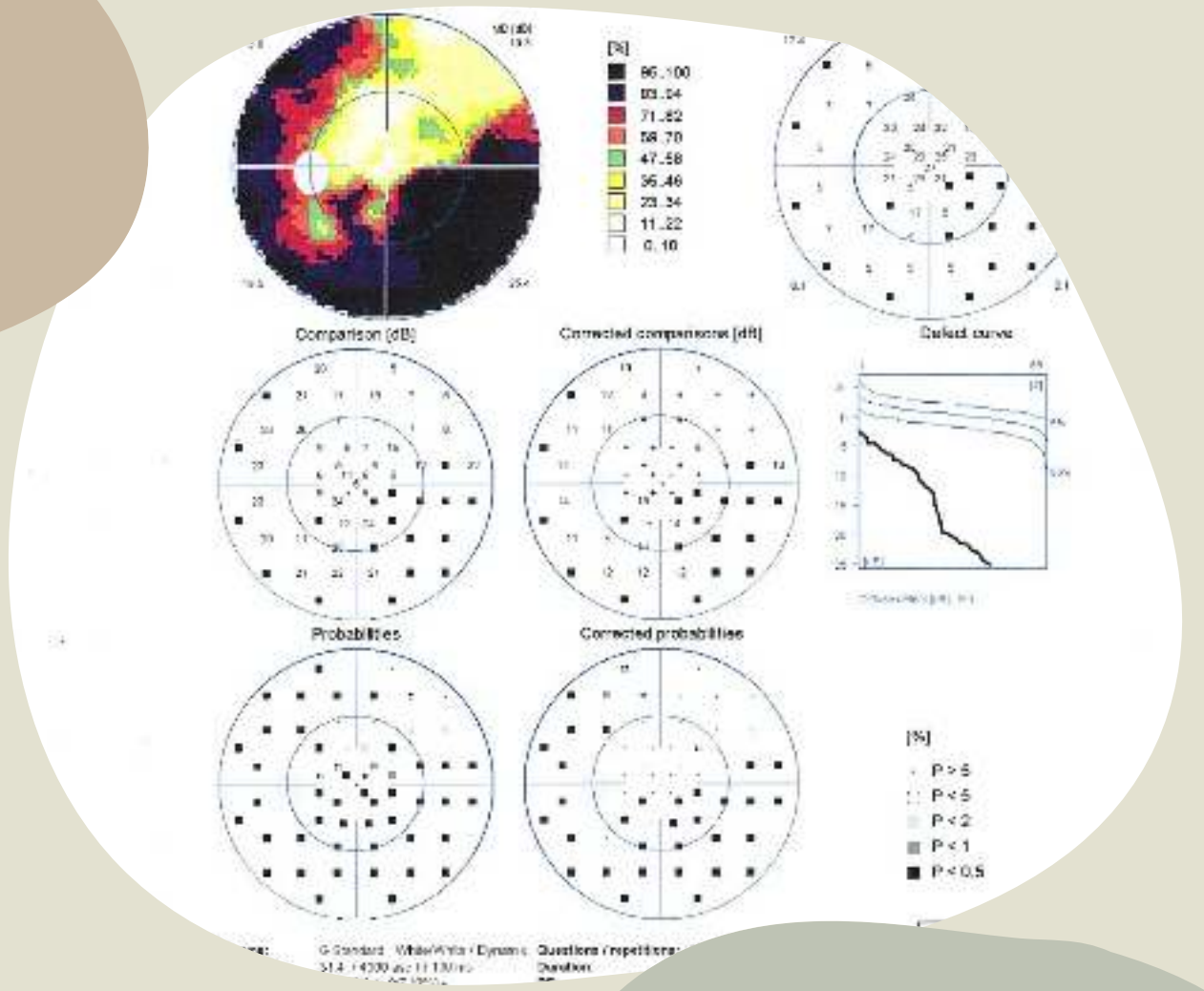
Medication Adherence Issues

Poor adherence and side effects reduce the long-term effectiveness of topical treatments in managing CACG.

Need for Surgical Intervention

Surgical options become necessary when medical therapy fails to control IOP or prevent visual field loss.

I have a CASE



Male 53 years

Left eye developed severe headaches past 3 months.

Glaucoma diagnosed, given full medical treatment

IOP 50-53 (full medical treatment

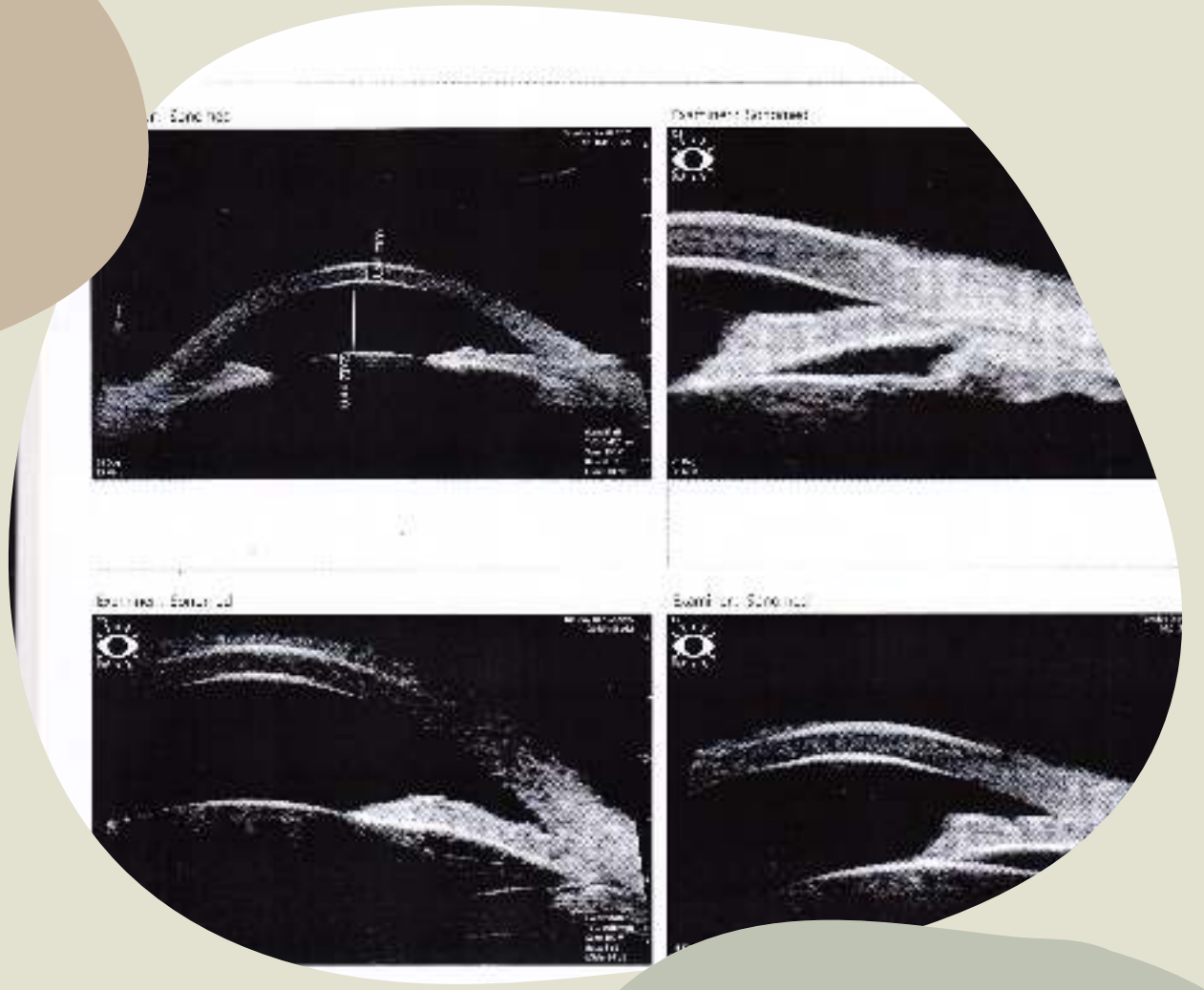
Shallow AC (1.98mm), synechial angle closure

0.8 CDR

significant visual field loss , Visual Field Worsening

Surgeons evading surgery

I have another CASE



Female 47 years

Left eye developed severe headaches past 3 months.

Glaucoma diagnosed both eyes given full medical treatment

IOP Rt: 34, lt 25 (full medical treatment

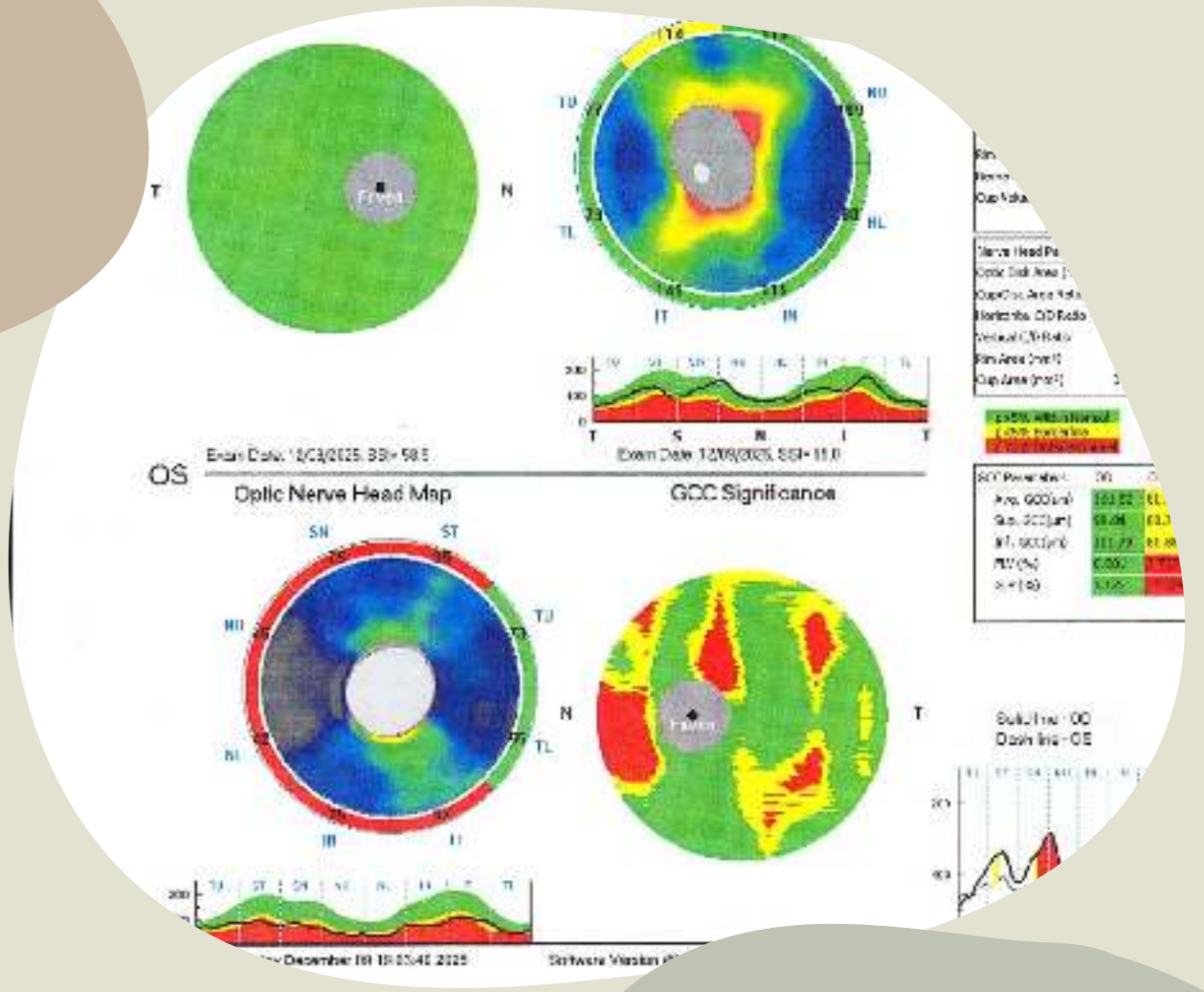
Shallow AC (2.0mm), synechial angle closure

0.2 CDR bil

mild visual field loss , Visual Field Worsening

Previous YAG iridotomies did not lower IOP

And several other CASES



Risk factors

1. Opening an eye with uncontrolled high IOP
2. Extremely shallow AV
3. Abnormal anatomy of the anterior segment
4. Choroidal effusions
5. And further…..

Phaco-Adjusted Trabeculotomy

RIO 2026

Partial hyphema up to 2 days postop, spontaneous resolution

Oscillating IOP up to early 20s first 2 weeks

Plateau lowering to low teens after cessation of topical steroids

Phaco-Adjusted Trabeculotomy can be a viable tool in the management of advanced high risk ACG case

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