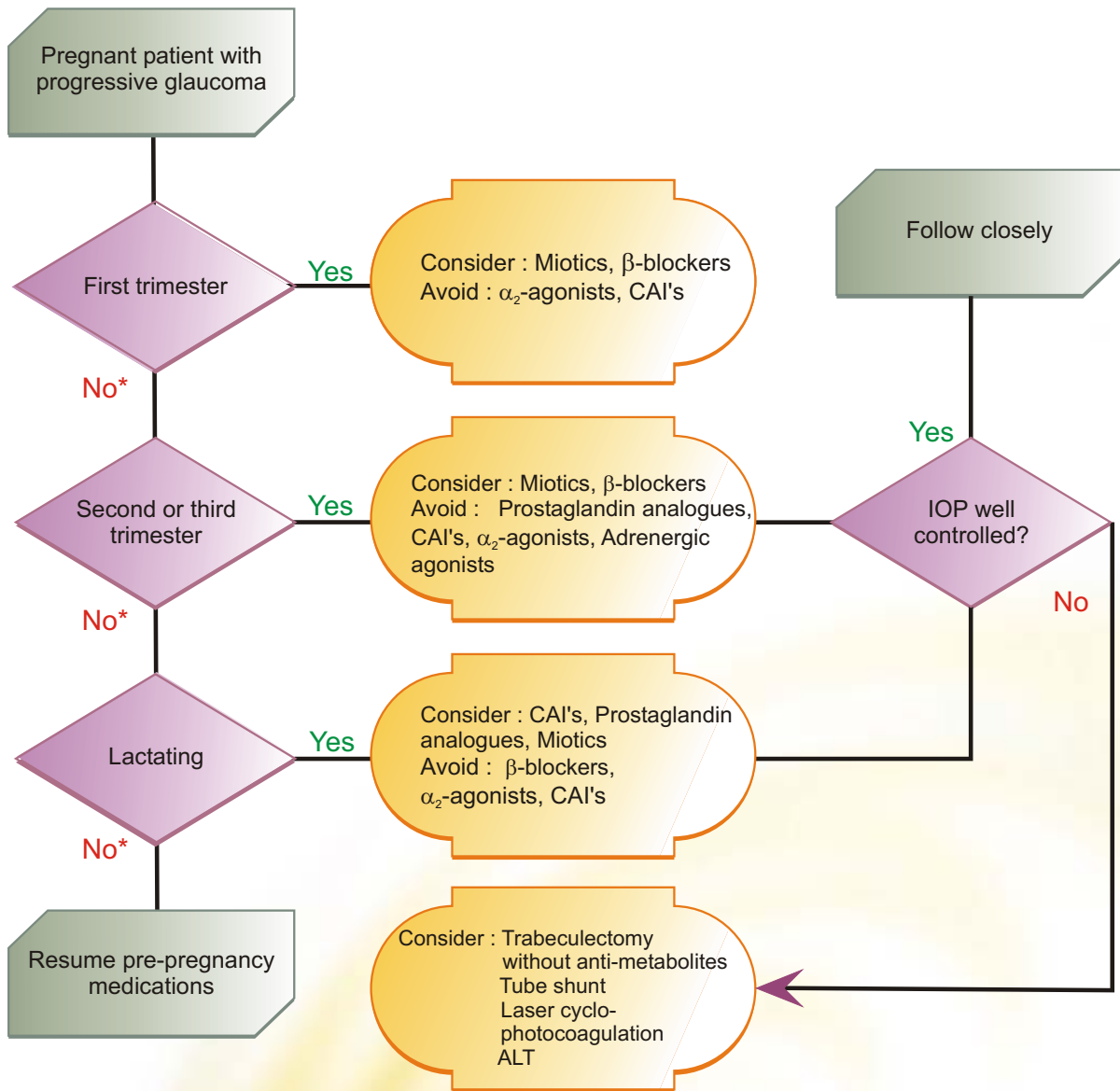


Pregnancy and Glaucoma



* A higher IOP may be tolerated for the duration of pregnancy and lactation hence treatment can be postponed.

Decision algorithm for treatment of pregnant patients

Pregnancy and Glaucoma

Glaucoma is predominantly a geriatric disease, which occasionally affects young people, including women of childbearing potential. In the clinical management of glaucoma in pregnant women, the harmful effects of medications on the fetus should be considered.

Diagnosis of glaucoma in pregnancy: Diagnosis or detection of glaucoma in pregnant females becomes difficult as the IOP usually decreases during pregnancy and tends to stay low several months post partum.

Medical Management: Little is known about the teratogenicity of commonly used glaucoma medications. Most of the medications are classified under

- Pregnancy class C (uncertain safety, adverse fetal effects in animals)
- Pregnancy class B (drugs presumed to be safe on the basis of animal studies)

The following is a list of glaucoma medications with known studies or case reports with pregnant or lactating mothers.

Sr No	Glaucoma Medication Class	Effects	Pregnancy Category/ Class
1.	β -Blockers	Secreted in milk, systemic side effects like bradycardia and asthmatic attacks seen in children	Category C
2.	Non selective adrenergic agonist	Epinephrine crosses placenta, may cause uterine atony, may delay labour, anoxia of fetus, minor abnormalities to newborn	Category C
3.	α adrenergic agents	Brimonidine known to cause bradycardia, hypertension in infants	Category C
4.	Miotic agents	No association found between use and congenital abnormalities in first 4 months of gestation	Category C
5.	Carbonic anhydrase inhibitors	May cause congenital glaucoma, microphthalmia, and patent ductus arteriosus	Category C
6.	Prostaglandin analogues	Involved in the physiology of labour and delivery	Category C
7.	Hyperosmotic agents	Intraamniotic mannitol produces abortions	Category C

All the above-mentioned drugs are categorized in category C i.e. they must be used in a pregnant female only in unavoidable circumstance, or when benefits outweigh risks involved.

If IOP elevations are not high and can be tolerated for the gestation period, treatment can be postponed.

Surgical Management: Several critical issues are to be considered when deciding on surgical options in a pregnant patient who failed medical management.

General anaesthesia: It has risks to both mother and fetus during pregnancy, with increase in fetal deaths during first trimester. So most of the ophthalmic surgeries are performed on local anaesthesia with intravenous sedation.

Antimetabolites: It is wise to avoid the use of antimetabolites in pregnant populations.

Surgeries: Argon Laser Trabeculoplasty must be considered before trabeculectomy.

Laser cyclophotocoagulation is usually only performed on eyes with poor vision and low visual potential.

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