



The results of trabeculectomy with mitomycin C are significantly improved in children with glaucoma secondary to juvenile idiopathic arthritis if they are on immunomodulatory treatment

The Science behind the Tip

Juvenile idiopathic arthritis (JIA) is the most common systemic disease associated with childhood anterior uveitis. Whereas the prognosis for vision was poor in previous years, good visual outcomes can now be achieved by early case recognition and by rapid referral to a uveitis specialist for immuno-modulatory therapy (IMT)¹.

JIA predisposes to secondary angle-closure glaucoma which can be difficult to treat and surgical intervention is often needed². Chronic inflammation and young age at onset increase the risk of filtration failure³. However, in children on tumour necrosis factor inhibitor (anti TNF alpha) who undergo trabeculectomy with mitomycin C, control can be achieved in 73% 10 years after surgery (versus 0% not on IMT)³. The success rate is even better in those who have not undergone previous ocular surgery.

References

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- 2) Sijssens KM, Rothova A, Berendschot TT, de Boer JH. Ocular hypertension and secondary glaucoma in children with uveitis. *Ophthalmology* 2006; 113:853-9.
- 3) Leinonen S, Kotaniemi K, Kivela E, et al. Potential effect of tumor necrosis factor inhibitors on trabeculectomy with mitomycin C for patients with juvenile idiopathic arthritis-related uveitic glaucoma. *JAMA Ophthalmol.* 2015; 133:1323-8.