The art of tackling strabismus skillfully by sparing vessels

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Abstract

Background: Detaching a rectus muscle irreparably destroys its ciliary artery circulation which also supplies the anterior segment of the eye. Purpose: To educate strabismus surgeons about a method of detaching a muscle without compromising anterior segment circulation. Synopsis: A limbal based conjunctival incision is made. The muscle is identified, separated from its attachments and secured with 6-0 Vicryl. The anterior ciliary vessel supplying it is isolated by making a small snip incision in the muscle capsule with delicate blunt dissection parallel to the anterior ciliary artery The muscle is detached from its original insertion. The muscle is tied to sclera at the intended point of recession. The intact anterior ciliary artery, thus will continue to function, untouched. Highlights: We recommend pre-placing the sutures in the muscle and also in the sclera at the point of reattachment to avoid possible stretching and breaking of anterior ciliary vessels at the time of muscle detachment and also to dissect the artery free from muscle several millimeters more than the intended recession in order to spare the anterior ciliary circulation in strabismus surgery.

Video link: https://youtu.be/Bn050Ihu9rU

Key words: Vessel sparing, strabismus surgery, anterior segment Ischemia

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