Be aware of glaucoma therapy-related ocular surface disease when planning filtration surgery!

The Science behind the Tip

Glaucoma eye drops, especially when containing preservatives, are responsible for clinical or subclinical ocular surface alterations\(^1\). Amongst other negative consequences, the so-called glaucoma therapy-related ocular surface disease\(^2\) may i) increase the probability of needing glaucoma surgery, most likely due to medication intolerance\(^3\), and ii) increase the risk of surgical failure\(^1,4\). Indeed, preoperative conjunctival inflammation is associated with an exaggerated wound healing process leading to bleb scarring and filtration failure\(^1\).

A preoperative medical “preparation” of the ocular surface, including a one-month course of low-potency topical steroid, has been shown to improve the outcomes of filtering surgery\(^5\). This preoperative protocol may be tailored to each patient and combined with artificial tears and/or even partial or complete withdrawal of (preserved) glaucoma eye drops, that can be replaced, if needed, by oral acetazolamide.

References


Contributor: Antoine Rousseau, MD. Department of Ophthalmology, Bicêtre Paris-Saclay University Hospital, France