No ocular motility complications after subtenon topotecan with fibrin sealant for retinoblastoma.

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Abstract:

Objective: To report our long-term experience with the local toxicity profile and ocular motility changes after treatment of intraocular retinoblastoma with subtenon topotecan chemotherapy. Design: Cross-sectional study. Participants: Ten eyes in 8 patients with retinoblastoma treated with subtenon topotecan. Methods: We assessed potential complications in ocular motility in eyes with retinoblastoma treated with subtenon topotecan using forced duction testing under general anaesthesia. Eyes subsequently enucleated because of treatment failure were examined histologically. Results: Ten eyes in 8 patients with retinoblastoma treated with 1 to 4 injections of subtenon topotecan were examined repeatedly, with a mean follow-up period of 37 months. Ocular motility remained normal in all eyes by forced duction, with no observed persistent conjunctival congestion, abnormal ocular motility, or enophthalmos in retained eyes 3 years after last injection. Histopathologic examination of the 2 enucleated eyes did not reveal signs of orbital tissue necrosis or fibrosis. Conclusions: Unlike subtenon carboplatin, subtenon topotecan therapy is not associated with long-term toxicity affecting ocular muscles or orbital soft tissue. No effect on ocular motility was observed.