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Mitomycin Eye Drops as Treatment for Pterygium

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We used an antineoplastic-antibiotic agent, mitomycin, in the form of eye drops as adjunctive treatment for primary and recurrent pterygia after surgical excision. Sixteen primary and four recurrent pterygia were treated with 1.0 mg/ml mitomycin eye drops, 14 primary and 10 recurrent pterygia were treated with 0.4 mg/ml mitomycin eye drops and 18 primary pterygia were treated with placebo eye drops. Postoperative follow-up for the eyes treated with mitomycin eye drops ranged from 3 to 34 weeks (mean, 23 weeks). One of 44 pterygia treated with mitomycin recurred after 5 months (recurrent rate, 2.3%), whereas 16 of 18 primary pterygia treated with placebo eye drops developed postoperative granulomas and recurrent pterygia with a mean postoperative period of 6 weeks (recurrence rate, 88.9%). Topical mitomycin (1.0 mg/ml) caused conjunctival irritation, excessive lacrimation, and mild superficial punctate keratitis. These topical side effects were minimized with the 0.4 mg/ml mitomycin dosage. No systemic toxicity was noted with either dosage. We believe that mitomycin eye drops is a safe and effective adjunct to surgical excision in the treatment of primary or recurrent pterygia, or both.

Abuse of the drops is associated with scleral melting and perforation, and use of the drops is discouraged in patients with ocular surface disease (SJS, KCS, rosacea). One application of 0.2-0.4 mg/ml mitomycin-soaked cellulose sponges for 4 minutes following pterygium excision, intraoperatively, is equally effective and is much safer than dispensing of mitomycin drops for postoperative use.