5-Fluorouracil in Management of Pterygium

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Antimitotics are gaining popularity as adjunctive therapy with surgical excision of pterygium to bring down its recurrence rate which has been acknowledged to be as high as 30-50% in different studies. In the present study role of 5-Fluorouracil (5-FU) in the management of pterygium has been worked out comprehensively. Toxicity of 5-FU has been reported by Smith et al. especially for fibroblasts and vascular endothelial cells which has been said to be responsible for various complications induced by this drug. Hence attention has been paid to this end also in the present study and are being discussed.

Material and Method

Fifty eight eyes of 46 patients were taken into account in our study, 12 of whom were having bilateral involvement. Eyes with primary and recurrent pterygium were grouped separately and each group was subdivided into two, one receiving 5-FU as subconjunctival injections and the other having the same applied in form of sponges soaked in it. In the former subgroup 5 subconjunctival injections (0.1 ml each) in strength of 50 mg/ml were given on alternate days to achieve a total

dose of 25 mg. In the later subgroup sponge soaked in 5% solution (50 mg/ml) of 5-FU was applied over bare sclera for 3 minutes intraoperatively and was followed by irrigation with copious amount of balanced salt solution. The cases were followed up for 6 to 9 months postoperatively and the results were evaluated in terms of success rates in different sub groups and also taking all of them together. The various complications which were encountered with were also recorded in follow up period.

Observations

The observations and results of our study are being presented in form of tables I and II.

Results

58 eyes (46 patients) were operated for primary/recurrent pterygium. 5 Fluro Uracil was used as intra-operative surface application or as post operative subconjunctival injection. Success rate as prevention of recurrence during a follow up period of 6-9 months in primary and recurrent pterygium was 76.2% and 68.8% respectively (overall 74.1%). Intraoperative