Clinical evaluation and blebs tomographic filtration after routine use of mitomycin C during filtering surgery. About 49 cases

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Aim

The filtration surgery is a major means of therapy in the treatment of glaucomatous neuropathy. Its main cause of failure is postoperative scarring of excessive bleb. The use of anti-mitotic helped to improve the functional outcome of filtration surgery, but increased the rate of postoperative complications. The aim of our study is to analyze the interest of our application protocol intraoperative Mitomycine C. Systematic.

Methods

We included 49 eyes in 37 patients undergoing filtration surgery between January 2009 and February 2010. The same application protocol of intraoperative mitomycin C was used: positioning sponges impregnated with Mitomycin C (0.2 mg/ml) far behind the scleral flap, in sub-Tenon space, with protection banks previous conjunctival flap. An evaluation of the efficacy and postoperative complications of adjuvant therapy was performed. An analysis of Visante OCT-bleb was performed.

Results

We see a significant decrease of 41.1% of the intraocular pressure after surgery, which remains stable over 2 years. The post-operative complications related to the application of Mitomycin C are four fine blebs and avascular (8.2%) including 2 in the same patient and 3 late leakage of aqueous humor (6.2%) in 15 days requiring the installation of a point. We find no case of chronic postoperative hypotony. We find a statistically significant correlation between the functionality of the bleb and anterior-posterior length of the cavity filter (p = 0.02).

Conclusion

It seems that our technique of intraoperative application of Mitomycin C reduces the toxicity of anti-mitotic, particularly the risk of chronic hypotony, while maintaining satisfactory functional results. In addition, the Visante OCT-analysis suggests a later development of cavities filtration, probably related to the positioning of the posterior sponges with Mitomycin C. A randomized, prospective, higher effective could open a way for wider use and more secure in the mitomycin C during filtering surgery.