

COMPARISON TO THE EFFECT OF PAZOPANIB AND BEVACIZUMAB ON WOUND HEALING WITH STEROID IN EXPERIMENTAL GLAUCOMA FILTRATION SURGERY

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Rapid wound healing is the primary cause of the surgical failure in glaucoma surgery. This study was performed for the comparison of the effects of bevacizumab and pazopanib with corticosteroids on wound healing after trabeculectomy. In the study, 21 New Zealand white rabbits were randomly divided into three groups by providing seven rats for each group. Limbus-based trabeculectomy was performed for the eyes of rabbits. Topically administered prednisolone acetate (%1), bevacizumab 5mg/ml, pazopanib 5mg/ml were applied for groups I, II and III respectively with a daily dose of six hours intervals for 28 days. Operated eyes of the rabbits were enucleated on the 28th day after the operation and histopathological sections were taken from the bleb sites. Fibroblasts were stained with Hematoxylin-Eosin and evaluated histopathologically. Additionally, PDGF- β , FGF- β and VEGF staining intensity were evaluated immunohistochemically. The fibroblast numbers were significantly lower in groups II and III vs the group I (p0.05, p0.05, respectively). There was no statistically significant difference between groups II and III (p0.05). Group II and III had lesser FGF- β and VEGF immunohistochemical staining intensity than of group I (p0.05, p0.05, respectively). There was no significant difference between groups II and III (p0.05). PDGF β immunohistochemical staining intensity in group III was lesser than those of groups I, II (p0.05, p0.05, respectively). There was no significant difference between groups I and II (p0.05). As a result; it was concluded that bevacizumab and pazopanib might be good alternatives of corticosteroid treatment on delaying wound healing in glaucoma surgery.