

ABSTRACT

**THE EFFECT OF BEVACIZUMAB ON ANGIOGENESIS
INTRABECULECTOMY AREA**

(Experimental Study in *Oryctolagus Cuniculus*)

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Objective : to examine the effect of Bevacizumab injection to the angiogenesis which the amount and density of blood vessel as the indicators after trabeculectomy procedure.

Method : This was a true experimental study using 16 eyes of 16 New Zealand White Rabbit eye treated by trabeculectomy procedure with eight eyes as the control group using Balanced Saline Solution (BSS) and eight eyes as the treatment group using Bevacizumab. It was injected subconjunctiva after the trabeculectomy. At the end of the study all rabbits in each group was sacrificed, the eye was enucleated and the bleb area was dissected, and then processed for histological studies. The amount and density of blood vessel were evaluated using haematoxyllin eosin methode at day 14 after the eyes was done for trabeculectomy procedure.

Result : The mean of amount of blood vessel in control group was $22,63 \pm 11,02$ and treatment group was $14,75 \pm 4,92$ ($p=0.043$). The mean of density of blood vessel in control group was $19,10 \pm 1,69$ % and treatment group was $16,53 \pm 2,90$ % ($p=0.029$)%. The result shows there were statistically significant difference between the two groups ($p<0.05$).

Conclusion : In this study the subconjunctival Bevacizumab injection after trabeculectomy reduce the amount and density of blood vessel compared with subconjunctival BSS injection only, thus it is potential in preventing subconjunctival fibrosis after trabeculectomy.

Keyword : Bevacizumab, angiogenesis, amount of blood vessel, density of blood vessel, Trabeculectomy