ABSTRACT

COMPARISON OF PEROXIREDOXIN-2 PROTEIN EXPRESSION BETWEEN PRIMARY PTERYGIUM AND RECURRENT PTERYGIUM

(Cross Sectional Observational Analytic Study In Outpatient Installation of Community Eye Hospital of East Java)

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Purpose: To determine the role of peroxiredoxin-2 protein in the recurrence of pterygium.

Methods: Twenty seven primary pterygiums, eighteen recurrent pterygiums, and two normal bulbar conjunctivae obtained in this study. Formalin-fixed, paraffin-embedded tissues were analyzed by immunohistochemistry methods with peroxiredoxin-2 primary antibody.

Results: The statistical tests results showed that there was no significant difference in terms of age and sex between primary and recurrent pterygium groups ($p=0.281; p=0.226$). The level of peroxiredoxin-2 expression on the primary pterygium (class 0: vacant, class 1: 4, class 2: 20, class 3: 3) did not differ significantly with recurrent pterygium (class 0: vacant, class 1: 2, class 2: 11, class 3: 5), the Mann Whitney Test results show $p=0.227$ ($p>0.05$).

Conclusion: The results of this study indicate that peroxiredoxin-2 is not involved predominantly in pterygium recurrence. There are other mechanisms that are more influential in pterygium recurrence.

Key words: Peroxiredoxin-2, primary pterygium, and recurrent pterygium