THE ENHANCEMENT OF EPITHEL THICKNESS ON FULL THICKNESS WOUND OF MARMOT (CAVIA COBAYA) DUE TO ORAL ADMINISTRATION OF WATERMELON (CITRULLUS LANATUS) SEEDS EXTRACT

ABSTRACT

Background: Tissue damage triggers complex activity which is called as wound healing process. It needs amino acid nutritions such as glutamic acid and arginine to support the process. Purpose: This study is aimed to determine the effects of oral administration of watermelon (Citrullus lanatus) seeds extract which contains glutamic acid and arginine in epithelization of Cavia cobaya’s full thickness wound. Methods: A 10 mm full thickness wound was made on the back skin of every subject which is classified into group K1 and K2 as control groups and P1 and P2 as treatment groups. Group P1 got 1 gram/day oral administration of watermelon (Citrullus lanatus) seeds extract for 7 days in and P2 for 14 days. Control groups did not get watermelon (Citrullus lanatus) seeds extract. Results: The treatment groups showed thicker epithelization than control groups. Conclusion: There was difference of epithelization thickness between control and treatment groups after oral administration of watermelon (Citrullus lanatus) seeds extract.

Keywords: wound healing, glutamic acid, arginine, watermelon seeds extract.