ABSTRACT

Background: Tooth extraction is one of dental treatment that frequently done in dentistry. Tooth extraction could make a wound at soft or hard tissues. There are many components that involve in wound healing process, osteoblast is one of them. Osteoblasts have an important role in wound healing on bone remodelling phase. One of the plants that can increase osteoblastic cell numbers is cacao (Theobroma cacao L.). Cacao has flavanoids that contain catechin, that is believed to increase the number of osteoblastic cell in wound healing process.

Purpose: To count osteoblastic cell numbers after tooth extraction with cacao extract taken for 14 days and 21 days. Method: An in vivo research that uses twenty eight male wistar rats and divided into 4 groups. Incisor teeth has been extracted and thereafter taken cacao extract. The treatment group 1 (P1) took cacao extract for 14 days, and group 2 (P2) took cacao extract for 21 days.

Result: Cacao extract could increase the number of osteoblastic numbers especially after 21 days of application. Conclusion: Cacao extract can increase the number of osteoblastic cell after tooth extraction in wistar rats.

Keyword: Cacao, Catechin, Osteoblast, Tooth Extraction