

ABSTRACT**THE EFFECT OF EGGSHELL AS AN OSTEOBLASTIC MATRIX FORMATION AS THE TREATMENT OF POST EXTRACTION**

Backgorund. Dental extraction is a surgery procedure involving bone & soft tissue which lead to form a large wound on the dental socket. Dental extraction results in the loss of supporting bone around the teeth and need time in its formation. Early step of bone formation is secretion of collagen & basic fluid by Osteoblast. Eggshell is a good bone biodegradable inhibitor, consist of 90% Carbonic Calcium and 10% mineral, such as Magnesium, Ferrous, Mangan, Zinc & Phospor. Carbonic Calcium in eggshell is a source of extracellular and Intracellular Calcium, which has biocompatibility nature, reabsorbable by our body and a good osteoconductive, can be used in bone regeneration in natural form or synthetized as hydroxyapatite (HA).

Objective. In order to know the effectivity of eggshell in accelerate osteoblast growth. **Method.** Using experimental research with animal test post dental extraction Cavia Cabaya. The Tested animal is divided into 2 groups, which in control group, exposure area is given CMC Na 3%, whereas in the intervention group, exposure area is given eggshell powder mixed with 100% consentration of CMC Na 3% **Result.** In control group, 14th day of post extraction resulting lowest mean of ostoblast is 63,9, while in intervention group, mean of osteoblast is 81,3 and at the 28th day of post extraction, in control group mean of osteoblast is 94,8 while in the intervention group mean of the osteoblast is 109,3. **Conclusion.** There is significant increase of osteoblast in intervention group at the 14th day and 28th day of post extraction compare to the control group. The conclusion is application of eggshell can proceed to formation of bone matrix post dental extraction

Keyword: Dental Extraction, Osteoblast, Calcium, Hydroxyapatite.