

**KECEPATAN ADSORBSI *BOVINE BONE* UKURAN 150-355 μm
TERHADAP DARAH (GOLONGAN O)**

***VELOCITY OF BOVINE BONE 150-355 μm ADSORPTION
TO BLOOD (TYPE O)***

ABSTRACT

Background. In dental implants, less of alveolar bone volume is an obstacle. To overcome this, bone grafting material is used to elevate and widen the remaining alveolar bone. The alternative bone grafting material that can be used is bovine bone. In the application, bovine bone require blood to stimulate the activity of osteoblasts in bone formation of bone remodelling process. Bovine bone mixed with blood or saline solution first then it will adsorbs blood and convert it into bone matrix. Velocity of bovine bone adsorption to blood maybe associated with the determination of a golden time in the execution of one of the bone grafting procedure.

Purpose. To find out velocity of bovine bone 150-355 μm adsorption to blood (type O).

Material and Method. Twenty eight samples of demineralized bovine bone 150-355 μm were divided into two groups. Each group consisted of fourteen samples. Group 1 absorb blood (type O) whereas group 2 absorb Natrium klorida 0,9% solution (as control).

Result. There is a significant difference between both group, $p=0,000$ ($p<0,05$). The average velocity of bovine bone 150-355 μm adsorption to blood (type O) is 0,025 mm/s whereas to Natrium klorida 0,9% solution 0,096 mm/s.

Conclusion. The average velocity of bovine bone 150-355 μm adsorption to blood (type O) is lower than to Natrium klorida 0,9% solution.

Keywords: bovine bone, adsorption, blood (type O)