

ABSTRACT

Guided bone regeneration is a type of treatment that allows the growth of bone in a space defined by the tissue barrier, but the relatively high prices become a constraint in clinical applications. Therefore development of freeze dried demineralized bovine cortical bone membrane (DFDBCMB) as an alternative collagen membrane that can be used as guided bone regeneration is important. To determine the effectiveness of 300 μm DFDBCMB as guided bone regeneration, a research on biodegradation rates of 300 μm DFDBCMB compared with bovine pericardium membrane (Jason[®] membrane, Botis Dental) were done, by implanted both membrane in subcutaneous dorsum region of Wistar rats. Study of degradation rate were observed using light microscope on specimen that stained with Hematoxylin Eosin on 7, 14, 21 and 28 days after implantation. The result of study showed that there were no significant difference on biodegradation rates between DFDBCMB compared to Jason[®] membrane after the implantation ($p>0,05$). We conclude that there were no difference on biodegradation rate between DFDBCMB and Jason[®] membrane.

Keywords: guided bone regeneration, bioresorbable membrane, collagen membrane, biodegradation