PENGARUH PLATELET RICH PLASMA (PRP) PADA KONSENTRASI TINGGI TERHADAP KULTUR SEL FIBROBLAST

(THE EFFECT OF HIGH CONCENTRATION PLATELET RICH PLASMA (PRP) ON FIBROBLAST CELL CULTUR)

ABSTRACT

Background. *The purpose of periodontal therapy is to protect and maintain tooth growth. The main purpose is to repair the loss of periodontal tissue that can cause trauma and periodontal disease. PRP is a new research in department of periodonsia, which can promotes wound healing. PRP contains PDGF and TGF-β that can increase the proliferation and differentiation of fibroblast cell.* ***Purpose.*** *The aim of this study was to acknowladge the effective concentration of platelet rich plasma that can increase the proliferation of fibroblast cell.* ***Method.*** *This study was an experimental laboratories using different concentration of PRP taken from patient blood, then mixed with fibroblast cell from baby hamster kidney 21. The result was read with ELISA reader.* ***Results.*** *Colour intensity rate indicate that PRP was effective in promoting the proliferation of fibroblast cell at 80% concentration.* ***Conclusion.*** *The effective concentration of PRP was 80%, where it can increase the proliferation of fibroblast cell in order to promote wound healing.*

Key words: *Platelet rich plasma, fibroblast cell culture, periodontal therapy.*