ABSTRACT

THE INCREASE AMOUNT OF FIBROBLAST CELL AND ANGIOGENESIS POST DENTAL EXTRACTIONS RESULTING FROM THE PHYSICAL EXERCISE

PENINGKATAN JUMLAH FIBROBLAS DAN ANGIOGENESIS PASCA PENCABUTAN GIGI AKIBAT LATIHAN FISIK

Background: *Physical exercise with a low to moderate intensity on a regular basis can accelerate process of wound healing. Dental extractions will generate a wide wound enough area around socket. In the process of healing, fibroblast cell and angiogenesis have important role especially in the proliferation phases.* ***Methods:*** *These samples were divided into two groups; there were control group and treatment group. Treatment group was treated with physical exercise (swim test) for 30 minutes, which divided to 6 periods. With 5 minutes physical exercise and rest for 15 minutes each period for 7 days. All sample were euthanized on the* 5^{th} *day post extraction and then made a histopathology preparation to count the number of fibroblast and angiogenesis cell.* ***Results:*** *Using Independent Sample T test for fibroblast cell and angiogenesis cause both of them had a normal and homogeny results between control and treatment group.* ***Conclusion:*** *Within extraction post physical exercise will increase amount of fibroblast cell and angiogenesis so it can accelerate the process of healing.*

Keywords: *Physical exercise, Fibroblast, Angiogenesis, Wound healing*