Pengaruh membran amnion terhadap jumlah sel fibroblas pada proses penyembuhan luka (kajian histologis pada gingiva kelinci)

Abstrak

Proliferation phase is the second of the three phases in wound healing. In this phase, fibroblast is a pivotal component. The migration and proliferation of fibroblasts are influenced by FGF, TGF-β and FGF. Amniotic membrane (AM) which consists of several growth factors that play an important role in wound healing can be used as transplantation materials. This study investigated the influence of AM on the number of fibroblast cells in the process of wound healing on rabbit's gingiva. Thirty six rabbits were divided into 2 groups, one is the control group (C) and the other is the treatment group (I). Each of the groups were divided into 6 groups. composed of 3 rabbits based on the date of termination, i.e. 1st, 3rd, 5th. 7th. 10th and 14th day after wounded. Five layers of AM were applicated on T group wounding and C group wounding were let open. Histological evaluation was done to calculate the number of fibroblast cells. Data analysis was done by using MANOVA. The results showed there was a significant difference ($p<0,05$) in the number of fibroblast cells between T and C groups among the groups of termination dates. The one having the highest number of fibroblast cell was in T 10 group. lt can be concluded that AM enhanced the number of fibroblast cells in the process of wound healing on rabbit's gingival.