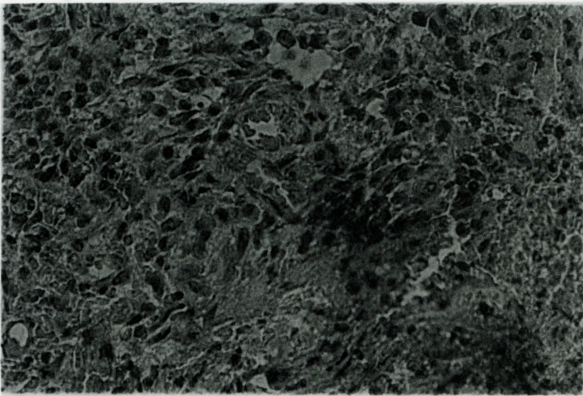


(a)



(b)

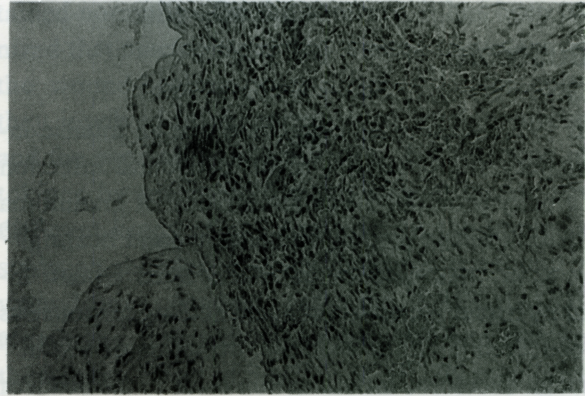
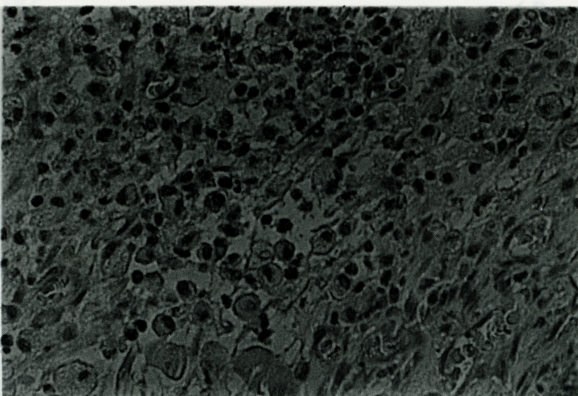


Fig. 4. Photomicrographs ($\times 100$) of the wound area and its surrounding tissue covered with either SACCHACHITIN membrane (a) or gauze (b) for 7 days.

Figs. 5a and 5b show the results of the wound-healing process on day 16 when covered with SACCHACHITIN membrane for regions closer to and away from the center of the wound, respectively. The differentiation of the epithelia appeared to be quite good. A gradual change in the dermal region of the wound area was also observable: the closer the region to the center of the wound, the less the extent of differentiation of the epithelia observed, and granuloma granulation tissue appeared to be more obvious. Even then, the presence of mast cells fused with polymorphonuclear cells was observed; and in regions more

distant from the center of the wound, the epithelia were well differentiated and a fibrous structure had formed with an abundance of matrix materials present extracellularly. On the contrary, granuloma granulation tissue was hardly observable on day 16 when the wound was covered with gauze (Fig. 6a). Only a small amount was found in the epithelia of regions closer to the wound. The dermal region had no mast cells and its major components were fibrous cells and extracellular matrix (Fig. 6b). However, the amount of extracellular matrix and level of cell density appeared to be lower compared to those observed with

(a)



(b)

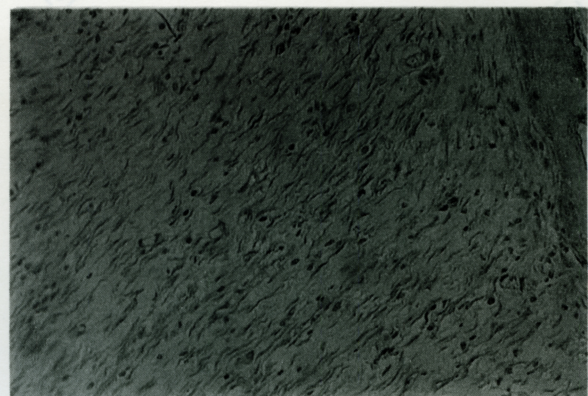


Fig. 5. Photomicrographs ($\times 100$) of the region close to (a) or away from (b) the center of the wound area covered with SACCHACHITIN membrane for 16 days.