

Fig. 1.Positive reaction (arrow) of α₂ integrin surface labeling of mesenchymal cells adjacent to PDCM 7 days after intra-tissue implantation (X400).

faces of some inflammatory cells. On day 7, a positive reaction began to appear between the interface of surrounding cells and the PDCM (Figs. 1, 2).

Localization of integrin $\alpha_6\beta_1$ appeared in samples of the fifth day after surgery. It was distributed mainly on the surface of endothelial cells of new vessels in the invaded granulation tissue. The most significant amount of integrin $\alpha_6\beta_1$ appeared on the 14th day after PDCM implantation concomitant with neovascular formation (Fig. 3).

In the first few days after implantation of PDCM, the number of CD11b+ cells increased with time and presented multilobulated nuclei. On day 5, most of the CD11b -labeled cells has become mononucleated macrophages. The cell number reached the highest point by day 7. In the late stage of this study (days 21-42), CD11b-labeled cells were composed mainly of macrophages and some multinucleated giant cells (Fig. 4, Table 1).

DISCUSSION

At least 15 α and 8 β subunits are currently known. They are heterodimers containing 1 α and 1 β subunit. Their patterns of association are specific for many different matrix molecules and cellular targets. They are also considered to be important for the diapedesis of white blood cells. In the present study, mAb α_2 , α_3 , and

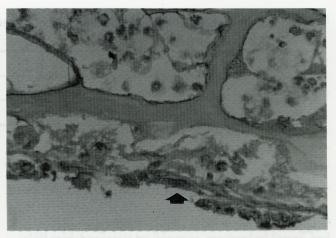


Fig. 2. Presentation of an α_3 adhesive molecule labeled on connective tissue cells and the recognition surface of PDCM (X400).

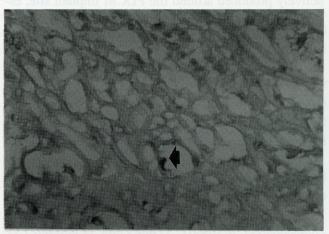


Fig. 3. On the 14th day after PDCM implantation, $\alpha_6\beta_1$ is mainly distributed on the surface of endotheial cells of new vessels (X400).

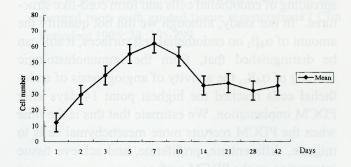


Fig. 4. CD11b+ cell counts in the adjacent tissue of PDCM. It demonstrated a causal link between neutrophils, macrophages, and T-cells in the field of PDCM implantation.