PLATELET ADHESION

THROMBOSITY OF THE VESSEL WALL AFTER SINGLE AND REPEATED INJURY. B. Pasche, J. Swedenborg and A. Ljungqvist. Department of Experimental Surgery and Pathology, Karolinska Hospital, Stockholm, Sweden

Injury to the endothelial lining of the vessel wall gives rise to increased thrombogenicity but fibrin formation is only seen after repeated injury.

The purpose of the present study was to simultaneously study the appearance of thrombin enzymatic activity and morphological changes in human aortic segments with serial cross sections by light and electron microscopy after repeated injury. Endothelial injury was caused by balloon catheter in rabbits. The animals were sacrificed and the aorta was excised, was measured with citrated whole blood as a sample and ADP, and was studied.

The capacity of the surface to inhibit thrombin in vitro was also studied. It was found that the thrombin activity was lower after repeated injury particularly in the case of thrombin.

It is concluded that injury of the endothelial gives rise to appearance of thrombin enzymatic activity after repeated injury proportionally more thrombin is found, which may explain why fibrinogen is more easily demonstrated on the surface after repeated injury.