Poster Board P5-079

0311 PLASMA β-THROMBOGLOBULIN AND PLATELET FACTOR 4 LEVELS IN CARDIAC VALVE PROSTHESIS

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Thromboembolic complications occur frequently in patients who have undergone cardiac valve replacement and platelets are known to be actively involved in the pathogenesis of such thrombi. A method of in-vivo assessment of platelet function would be useful in the management of such patients. βTG and PF4 levels, the indicators of platelet release reaction in-vivo, were measured in 100 patients who had cardiac valve replacement at least six months previously; Group A-54 patients had porcine heterograft, Group B-32 patients had disc valves and Group C-14 patients had double valve replacement. Findings of these patients were compared with 50 controls. In the control group, the mean βTG was 27.6ng/ml, and PF4 9.0 ng/ml. In each of the three groups of operated patients, both mean βTG and PF 4 levels were significantly raised ($p < 0.05$). Group A 61.5 ng/ml and 26.5 ng/ml, Group B 57.0 ng/ml and 19.6 ng/ml and Group C 63.0 ng/ml and 36.6 ng/ml respectively. Of the 100 cases studied, 57 involved mitral, 29 aortic and 14 multiple valve replacement. No significant differences were observed in βTG or PF4 plasma levels with the different type of valve involvement. The clinical implications of these results will be discussed.

Haemostasis in Pregnancy and the Newborn

Level 5 – Green Side (Hungerford Foyer)

Free Poster Session 11.30 – 12.45

P5-031

0312 FACTOR IX IN THE HUMAN FETUS

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Factor IX activity and factor IX antigen were determined in plasma from five male fetuses of gestational age 17-22 weeks. The fetuses were obtained from women undergoing abortions for medico-social reasons. The level of factor IX activity was between 0.04 and 0.05 units/ml in all five fetuses. Factor IX antigen was determined by the electroimmunoassay technique of Laurell using a precipitating rabbit antiserum to factor IX. The lower limit of detectability of the electroimmunoassay was reduced from about 0.12 units/ml to 0.02 units/ml by incubating the agarose gels following the electrophoresis with a peroxidase conjugated swine antiserum to rabbit IgG immunoglobulins. The three eldest fetuses had levels of factor IX antigen between 0.06 and 0.08 units/ml, whereas factor IX antigen could not be detected in the two youngest fetuses (twins of gestational age 17 weeks). The results indicate that the determination of factor IX antigen in fetal plasma may become of value for prenatal diagnosis of hemophilia B-.