HEMOSTASIS STUDIES IN PATIENTS WITH COLON CANCER. S.J. Sciallis and D.B. Kimball. Oncology Service, Walter Reed Army Medical Center, Washington, D.C.

Blood coagulation and platelet function studies were evaluated in eighteen patients with colon cancer (all clinical stages) prior to treatment with chemotherapy. All patients were asymptomatic or thrombosis and were not taking aspirin. The tests included general tests (prothrombin, partial thromboplastin time, platelet aggregation, fibrin split product concentration, a serial dilution protamine sulfate test for the presence of fibrin monomer). Average values compared to normal controls showed an elevated fibrinogen 400.5 mg/dl (normal 350.0 mg/dl), shorter activated partial thromboplastin time 29.4 seconds (normal 36.0), increased factor VIII coagulant activity 10.2% (normal 100%), and elevated fibrin split products 28.3 ug/ml (normal less than 16 ug/ml). Seven patients showed the presence of fibrin monomer. Eight patients showed enhanced aggregation reaction at or below 0.16 microgramal epinephrine. Six patients in the study showed more advanced cancer (five requiring intrahepatic artery infusion for extensive liver metastasis). Of this subgroup four patients demonstrated fibrin monomer and three patients showed spontaneous platelet aggregation. In this group, the fibrinogen was 286.2 mg/dl, fibrin split products were 28.3 ug/ml, and factor VIII was 110%.

STIMULATION OF THROMbasthenic PLATELETS BY COLLAGEN. A SCANNING MICROSCOPIC STUDY. L.Balleisen, W.Schramm, R.Harry. Medizinische Universitätsklinik, Münster, Medizinische Universitätsklinik, München, Germany.

The spreading of platelets on a silicone-coated surface has been evaluated as a sensitive test for the stimulation of thrombasthenic platelets by different collagen types. The platelets from six patients with Thrombasthemia were incubated with soluble type I, type III, methylated type I collagen and collagen type I fibrils and allowed to settle for one hour on a silicone surface. The platelets from two patients scarcely reacted, only a few pseudopodes were seen, no platelets had spread and no adhesion on collagen fibrils occurred, whereas the platelets from the four other patients showed many long pseudopodes, some of the platelets had spread and the adhesion on collagen fibrils seemed to be normal. Without collagen the platelets of all patients showed no pseudopodes and no spreading.

HAEMOSTASIS DISORDER AFTER AN EXTRA-CORPOREAL CIRCULATION IN CARDIAC SURGERY, BASED ON A STUDY OF 850 PATIENTS. Ch. Doutremepuich, A. Chauve, M. Deckers, M. Hoissen and P. Pontan. Hôpital du Tondu, Bordeaux, France.

The purpose of this study was to determine the influence of Extra-Corporal Circulation (E.C.C.) on the principal factors of haemostasis, then to define biological troubles with a view their prevention. Tests performed 25 minutes after the conclusion of E.C.C. neutralization of heparin by protamin, Kunitz inhibitor injection, produced the following results: platelet count 75795 ± 2045/microl prothrombin value 60.61 ± 10.97 %, fibrinogen 2.06 ± 0.85 g/l; the euglobulin lysis time was positive within 90 minutes for 1.16 % of the patients; an heparinemia lower than 0.2 UI/ml was found in 69.41 % of the cases when the E.C.C. was performed in conditions of moderate hypothermia (28°C) and in 81.81 % in deep hypothermia. A further injection of protamin was given in all cases where the heparinemia was found to be above 0.5 UI/ml. A new control reading was made 3 hours later and showed an heparin rebound in 34.65 % of the cases. These results allowed us to formulate a standard monitoring program in case of post-operative bleeding.