SOME STUDIES ON THE COAGULATION AND FIBRINOLYTIC ACTIVITY IN SICKLE CELL PATIENTS. N. O. Osamo and A. A. Famodu. Haematology Unit, University of Benin Teaching Hospital, Benin City, Nigeria.

Basic studies on the activity of the coagulation and fibrinolytic systems have been carried out on two hundred sickle cell patients and the results compared to another two hundred AA subjects covering a wide spectrum of socio-economic classes. Euglobulin lysis times (ELT) [illegible] products (FDP), Fibrinogen levels, and levels of Factors V and VIII were measured using standard techniques with proven reproducibility. These estimations were performed in some of the sickle cell patients who arrived promptly at the onset of crisis and the results compared to the measurements obtained during their quiescent asymptomatic periods before and after crisis. It was found that there was no significant difference in the fibrinolytic activity among patients with sickle cell disease during their asymptomatic periods and normal AA subjects. At the onset of crisis, however, FDP levels in sickle cell patients appeared to drop while ELT was shortened. Factor VIII levels were consistently higher in the sickle cell patients than in their normal counterparts while Factor V levels were more variable. The significance of these findings in relation to the natural history of the disease and the general management of these patients will be discussed.

THROMBOEMBOLIC SURVEILLANCE USING 125 I LABELLED FIBRINOGEN OF 1000 PATIENTS WHO UNDERWENT TRAUMATOLOGIC AND ORTHOPEDIC SURGERY. C. Marchal, C. Robert, M. Videgrain, and L. Pourcelot. Medecine Nucleaire (PR. Planiol), Clinique Chirurgicale B (PR. Barsotti), Clinique Orthopedique (PR. Castaing) C.H.U. 37033 TOURS Cedex (France).

From 1975 to 1977, 1006 tests using 125 I fibrinogen have been performed on orthopedic and traumatologic patients who were undergoing a thromboembolic treatment either by means of the association of dipyramidole and aspirin administered orally (24%) or by subcutaneous heparin (76%). The 125 I fibrinogen was injected preoperatively or immediately postoperatively. A daily radioactive counting was performed on the inferior members for approximately 6 to 8 days. 102 venous phlebography controls demonstrated an accuracy of 80% for the 125 I fibrinogen test. Of 1006 patients, 15.2% of the fibrinogen tests were positive, 59.7% of which were positive between the first and fifth postoperative day ($p<0.02$). The isotopic signs of venous thrombosis occurred in 21% of the hip surgery patients, 14.5% of the lumbar spine surgeries, 13% of the knee surgeries, and 11.5% of the patients who underwent surgery for other traumatic lesions. In these 1006 patients, 9 pulmonary emboli occurred of which 2 were fatal. The 125 I fibrinogen test can only be applied to evolutive thrombosis and does not permit one to differentiate between hematomas and thrombosis, nor to detect pelvic thrombosis. However, this test still remains a simple, faithful, and nontraumatic diagnostic tool in the early detection of thrombosis of the inferior members in patients undergoing traumatologic and orthopedic surgery. Moreover, the labelled fibrinogen test is useful in the determination of the efficacy of antithrombotic preventive medication. Our study has manifested the superiority of subcutaneous heparin (18% positive test) over the association of dipyramidole-aspirin (38.6% positive test) in the prevention of thromboembolic accidents in hip patients ($p<0.001$).

QUALITATIVE PLATELET ABNORMALITY DUE TO ABSENCE OF ADP-ADRENALINE-INDUCED RELEASE REACTION. N. Ciavarella, V. De Mitrio, M. Coviello, A. Scaraggi, M. Schiavoni. Clinica Medica II, Università, Policlinico, Bari, ITALY.

We present a 14 y. old male patient with a history of bleeding tendency characterized by frequent epistaxis and easy bruising. The template Ivy bleeding time was prolonged (>15', 15', 12'). Platelet (P.) retention was reduced (0%, 15% 20%). P.aggregation induced by collagen was normal but second-phase aggregation induced by ADP and Adrenaline (ADR) was absent. Ristocetin-induced aggregation was normal. Platelet ATP, ADP and 5-Hydroxytryptamine (5HT) content were normal. ^{14}C-5HT uptake was also normal. When incubation of PRP with ^{14}C-5HT was continued up to 5hr, radioactivity was retained within the P. as in controls. ^{14}C-5HT release was normal when induced by collagen but strongly reduced by ADP and ADR. Malondialdehyde production by P. during secondary aggregation was normal. These data are sufficient to rule out a Storage-pool-disease or an ASA-like-syndrome. Moreover the mother and the brother of the patient have also a mild hemorrhagic diathesis and some similar laboratory abnormalities. This rare condition is opposite of a P. abnormality characterized by inability of P. to respond to collagen, reported by Hirsh et al., Papayannis et al. and Mielke et al..This may give a new insight into the phisiology of P. aggregation.