

An additional patient responded to sulfinpyrazone. When the drug was discontinued, pulmonary embolus recurred. These findings suggest that recurrent DVT may involve heterogeneous groups of patients and platelets may play an important pathogenetic role in some of them. The approach to the problem with this panel of 3 tests appears useful in the selection of patients for treatment with antiplatelet agents.

*S. Sagar, V. V. Kakkar and Duncan P. Thomas* (King's College Hospital Medical School, London SE5 8RX, England): **Postoperative Deep Vein Thrombosis in Patients on Oral Contraceptives.** (129)

A causal relationship has been established between the use of oral contraceptives and venous thromboembolism occurring in previously healthy women. There is also evidence that the risk of thromboembolism is further increased if patients undergo a surgical operation while on oral contraceptives (M. P. Vessey et al., Brit. med. J., 3, 123, 1970). In the present study, activated Factor X inhibitor (XaI) levels were measured in blood samples withdrawn from 48 women before, during and after a minor dental operation. In 26 patients not on oral contraceptives, the mean preoperative Factor XaI level was 92.0% (S. E. M.  $\pm$ 4.1), and no significant changes occurred in response to surgery. In 22 patients taking oral contraceptives, the mean preoperative Factor XaI level was 83.3% (S. E. M.  $\pm$ 3.7) and during the operation there was a significant fall to a mean level of 70.6% (S. E. M.  $\pm$ 4.8) ( $P < 0.05$ ). Factor XaI levels returned to preoperative values within a week of operation. These findings indicate that even a minor operation causes a significant fall in Factor XaI levels in women on oral contraceptives.

*O. Ponari, E. Civardi, R. Potì and A. G. Dettori* (Centre for Haemostatic Diseases, Ospedali Riuniti, Parma, Italy): **Fibrinolytic and F. VIII Response to Various Stimuli in Occlusive Arterial Disease.** (130)

The responsiveness of fibrinolytic activity and of plasma Factor VIII level to both venous occlusion (v.o.) and i.v. nicotinic acid (N. A.) was investigated in a group of patients with occlusive arterial disease.

A marked hyperfibrinolysis, with average decrease of ELT of -55%, was seen after v.o. in such patients, with a rise of F. VIII (average value +30%). A control group of comparable age but with no signs of atherosclerosis, showed similar changes after v.o. (ELT about -65% and F. VIII +60%). A comparable hyperfibrinolytic response was also found in a group of young (< 40 y.) normal subjects.

I. V. administration of N. A. (100 mg) obtained variations of ELT of similar magnitude (-50%) in both groups (patients and age-matched controls). Changes in F. VIII were absent or only moderate.

The responsiveness to v.o. in single cases showed no correlation with an index derived from main risk factors (both clinical and biochemical) for thrombosis.

Our results do not agree with the hypothesis that an altered responsiveness of vascular fibrinolytic system is an important factor in the pathogenesis of occlusive arterial disease.

*K. Gjesdal and D. Sørli* (University Hospital, Tromsø, Norway): **Platelet Studies During Vascular Surgery.** (131)

Platelet counts, *in vivo* aggregates and platelet factor 4 (PF-4) were studied in 5 patients during femoro-popliteal revascularization. Blood samples were taken from radial artery, superior vena cava and the popliteal vein before clamping of the common femoral artery, at the end of the ischaemic period, 5 minutes after release of the clamps and just before wound closure.

Platelet counts fell transiently to 80%. Reversible platelet aggregates were more frequent on the venous side. The initial and final values from v. poplitea approximated to those from the v. cava. Both during ischaemia and after onset of flow, the popliteal vein samples had a higher aggregation percentage than arterial and central venous blood. Extremely high values (60%) were found in 2 cases with prolonged arterial clamping (3 h). The