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0150 DYSFIBRINOGENEMIA AND HYPERCOAGULABILITY IN PATIENTS WITH MEMBRANOUS GLOMERULOPATHY

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Renal vein thrombosis (RVT) is a common complication in patients with nephrotic syndrome and membranous glomerulopathy (MGN). We demonstrated it angiographically in 12 of 24 consecutive patients. Thorough hemostatic surveys were done on 14, 6 with RVT. In 11 patients, 5 with RVT, platelet counts were significantly above normal, 402,000 to 700,000/mm^3 blood. In all but 4 cases, plasma fibrinogen was at least twice normal (mean 588 mg/dl). Factor VIII: C levels ranged from 152 to 337 U/dl (mean 236). Antithrombin III was depressed in only one patient. He did not have RVT. While prothrombin times, partial thromboplastin times, and activated partial thromboplastin times were normal in all patients (except when anticoagulants were being given), the thrombin time was significantly prolonged in 12 of the 14 patients (6 with RVT). In these 12 the Reptilase times were also long. The prolonged thrombin times cannot be attributed to inhibition by fibrinolytic degradation products since the FDP were elevated in only 5 cases (2 with RVT). It seems that an abnormality of the fibrinogen molecule (prolonged thrombin and Reptilase times) and "hypercoagulability" characterize the nephrotic syndrome associated with membranous glomerulopathy and possibly other renal lesions. We could not, however, distinguish between patients with and without renal vein thrombosis.

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0151 COAGULATION FACTOR XIII AND SERUM TRIGLYCERIDES IN PATIENTS WITH CHRONIC RENAL DISEASE ON CONSERVATIVE AND REGULAR DIALYSIS TREATMENT

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The behaviour of coagulation factor XIII (fibrin stabilizing factor, FSF) and of serum triglycerides was studied in patients with chronic renal disease, using a specific antiserum to the active subunit (FSF_A) for the direct measurement of the active fraction according to the Laurell's method. The plasma FSF_A concentration was measured in the following patients: I) 31 patients with chronic renal disease and serum creatinine below 1.5 mg/dl; II) 41 patients with chronic renal failure on conservative treatment; III) 53 chronic uremic patients on regular hemodialysis. FSF_A concentration was significantly higher than normal ($P<0.005$) in the patients with chronic renal disease without renal failure, and similarly increased in the 41 patients with chronic renal failure on conservative therapy ($P<0.001$), as well as in the patients on chronic hemodialysis ($P<0.001$). Plasma FSF_A levels were significantly higher in those patients with serum triglycerides above the upper normal limit and a significant positive correlation was found between serum triglycerides and FSF_A plasma levels. These findings suggest a possible interaction of FSF with blood VLDLs in the genesis of atherosclerosis, early and severe complication of uremia.

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0152 REGULAR HAEMODIALYSIS THERAPY (RDT) INDUCES A PROTHROMBOTIC STATE

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To determine whether activation of coagulation factors and platelets, reported during haemodialysis results in a prothrombotic state we have studied indices of coagulability in 15 undialysed and 32 dialysed uraemic patients. Mean plasma fibrinogen (g/l) in uraemic patients (3.53) was significantly higher than in controls (2.45) and rose further in dialysed patients (3.81). Factor VIII coagulant activity (CA) was greater in dialysed (202 ± 15.9%) than in undialysed uraemic patients (184 ± 14.2%) both being significantly greater than control (84 ± 3.9). Similarly Factor VIII related antigen (RA) was higher in dialysed patients (216 ± 18.5%) than uraemics (156 ± 9.6%) (control = 94 ± 5.6%). The mean RA/CA ratio and the frequency of a high RA/CA ratio (< 1.5), an index of thrombin induced consumption of Factor VIII-CA and intravascular coagulation, were higher in dialysed than nondialysed patients.

Despite the higher circulating levels of procoagulants and the evidence of thrombin activation the availability of heparin cofactor-antithrombin III (AT III) was lower in dialysed (154%) than in uraemic patients (159%) though in both groups AT III levels were higher than in controls (100%).

These results indicate that RDT is associated with a prothrombotic state which is not completely compensated for by an increase in

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