TREATMENT OF CLOTTED BRESCIA-CIMINO-SHUNTS BY THROMBOLYTIC THERAPY WITH STREPTOKINASE^R. H. Koestering, H. Girndt, K.U. Schnuett and M.A. Guerrero. Department of Internal Medicine, University of Göttingen, W. Germany.

In patients with chronic renal insufficiency undergoing chronic hemodialysis or hemofiltration, shunts with great blood flows are always needed. In the past few years we have preferred Brescia-Cimino shunts (BCS). As there are only a few arteries and veins, from which shunts are able to be formed, we always try to save clotted shunts. We have performed thrombolytic therapy with Streptokinase^R 24 times. Immediately following the clotting of a BCS we began hemodialytic treatment for about 10-12 hours. Afterwards, according to the ASTK titres, an initial dose of Streptokinase^R was applied; this was followed by continuous doses of about 100,000 units/hour. If another hemodialytic treatment was necessary before reopening the shunt, we started this only after 3 days with a reduced dose of Streptokinase^R (50 % of the original amount). In 22 cases this thrombolytic therapy was successful within 3-120 hours, in 2 cases the shunts remained clotted. In three of the successfully treated patients, the shunts had been clotted for 19, 28 and 40 days. We believe that thrombolytic therapy with Streptokinase^R in patients with clotted BCS has proven to be successful and dependable.

ALTERATIONS OF BLOOD COAGULATION IN PATIENTS WITH PANCREATIC DISORDERS. H. Köstering, M. Hasenbein, C. Wendt and P.G. Lankisch. Department of Internal Medicine, University of Göttingen, W. Germany.

Hemorrhage as well as thromboembolism is often found in patients with pancreatic diseases. We systematically examined in the past two years blood coagulation factors in 74 patients, who were admitted to our clinic with elevated levels of amylases or who were transferred from other hospitals after complications had occurred. 58 patients with increased amylases (20 patients with acute pancreatitis, 25 with chronic relapsing pancreatitis, 2 with concomitant pancreatitis, 11 with pancreatic cysts) showed no severe complications. In comparison to 26 normal persons we found significant differences in the following results: enhancement of the thrombin generation in the TGT, shortening of the PTT and of the r- and k-time in the TEG, lowered levels of α_1 -antitrypsin, α_2 -macroglobulin and heparin-like substances (Hiepler Test), increased levels in fibrinogen and fibrin monomere complexes, and decrease in platelets and in Quick's Test. There were no changes in the thrombin time, antithrombin III and plasminogen. In the group of 16 patients with complications there were only 3 cases of hypercoagulability, all others showed signs of consumption-coagulopathy. The nine patients who died all showed signs of acute renal failure and pancreatic lungs. We believe that the disturbances of blood coagulation in patients with increased levels of amylases are initially caused by hypercoagulability and lead in some cases to thromboembolism, consumption-coagulopathy and DIC of the lungs and kidneys.

SURREPTITIOUS WARFARIN INGESTION IN THREE NURSES WITH CO-EXISTING BLEEDING DISORDERS. O. A. Hayne, L.A. Sherman, L.W. Gaston and E. Fraser. Dept. of Medicine, Dalhousie University, Halifax, N. S. and Dept. of Medicine, Washington University School of Medicine, St. Louis, Missouri.

We describe the clinical course and coagulation data of three patients surreptitiously ingesting Warfarin. All three patients, however, had co-existing conditions and screening coagulation tests which were initially felt to be responsible for the hemorrhagic state. All three patients were young nurses with ready access to Warfarin.

The first patient with previously documented systemic lupus erythematosus presented with hematuria and soft tissue bleeding and on the basis of screening coagulation tests was felt to have a lupus type anticoagulant.

The second nurse had disseminated intravascular coagulation and the third nurse had congenital factor V deficiency. All patients, however, had a severe depression in Vitamin K dependant coagulation factors and high levels of Warfarin were detected in the plasma of all patients. The co-existence of a disorder capable of producing hemorrhage and occult Warfarin ingestion has not been previously reported and presents a clinical diagnostic challenge.