necrosis, structure of tumoural vascular pattern, vascular emboli and reticular tumoural stroma) had been chosen to estimate the histological degree of malignancy, for all soft tissue sarcomas treated at the Oncological Institute of Cluj-Napoca, Romania, since 1979.

Using a multiple linear regression analysis, according to the Armitage and Gehen model, we selected six factors which showed the best correlation with patient survival in the majority of histologic types of soft tissue sarcomas. Among these, cellularity, mitotic index, polymorphism and macrosis were found essential and sufficient to determine the tumour grade, but tumoural vascular and stromal patterns also proved of important prognostic value in assessing the cancer progression.

EFFECT OF KETOTIFIN (K) ON ADRIAMYCIN (A)-INDUCED HISTAMINE RELEASE AND TOXICITY

F.Bartoli, G.Decorti, L.Candussio, S.Bevilacqua, F.Mallardi(1), V.Grill(1) and L.Bandini

Institute of Pharmacology and Anatomy, University of Trieste, Trieste, Italy.

K is an anti-anaphylactic drug which acts in part, similarly to sodium cromoglycate, by inhibiting mediator release from mast cells. However it has been shown that K induces also a non-cytotoxic histamine release from mast cells. We have recently demonstrated that sodium cromoglycate inhibits A-induced histamine release from rat mast cells and limits its cardiotoxicity. The aim of this study was therefore to test the effect of K on A-induced histamine release and the toxicity in mice. The intraperitoneal (i.p.) injection of various concentrations of K (from 2.1 to 25 mg/kg) induced significant histamine release from mast cells. 30 min afterwards, microscopic observation revealed that these cells were completely degranulated and no more histamine was present in the peritoneum. When administered i.p. to mice 30 min before A (15 mg/kg i.p.), K significantly ameliorated the survival time and reduced the cardiotoxicity. On the contrary, when given simultaneously, K increased the toxic effect of A. These data support the hypothesis that histamine release could play a role in the pathogenesis of A cardiotoxicity.

CHARACTERIZATION OF SERUM IMMUNE COMPLEXES ISOLATED BY SEPHAROSE PROTEIN-A IN GASTROINTESTINAL TUMOURS

C.Bartoloni, R.Baroni, L.Guidi, M.Marciano, A.Triceri and G.Gambassi

Istituto di Clinica Medica Generale, Università Cattolica S. Cuore, Largo A. Gemelli 8, I-00168 Roma, Italy

Circulating immune complexes (CIC) were analyzed in some gastrointestinal tumours to characterise their antigenic components. CIC were isolated from sera by 3.5% PEG precipitation and then purified on Sepharose 4BCL Protein-A followed by acid elution (glycine-HCl buffer). Molecular weight determination of the antigens was then obtained by sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE) with discontinuous buffers. Different molecular patterns of migration were shown from various patients. A preliminary analysis of the antigenic components was then undertaken in order to detect those factors being either different from, or in common with, the features displayed from a pool of control sera (normal healthy blood donors).

SERIAL ASSAY OF CIRCULATING IMMUNE COMPLEXES, CEA AND CA 19-9 IN GASTROINTESTINAL CANCER PATIENTS DURING CHEMOTHERAPY OR CLINICAL FOLLOW-UP

C.Bartoloni, L.Guidi, R.Baroni, A.Tricerri, C.Garufi, A.Grieco and G.Gambassi

Istituto di Clinica Medica Generale, Università Cattolica S. Cuore, Largo A. Gemelli 8, 00168 Rome, Italy

Circulating immune complexes (CIC) have been proposed as prognostic markers in human neoplasms even though conflicting results have been reported so far. Very little information is also available on their behaviour during the natural history of the disease as well as during chemotherapy. In this study, at least 4 serial assays of CIC have been performed in 14 patients with advanced gastrointestinal tumours during chemotherapy and in 2 patients with surgically resected colon cancer at intervals of 1 to 3 months. CEA and CA 19-9 were simultaneously assayed. The disease was monitored by CEA in 10 patients, by CA 19-9 in 9 and by CIC in 8. It should be emphasized that high levels of CIC predicted progression of disease in 6/16 patients, recurrence in 1/2 and, in 2 subjects, CIC were the only useful serum marker.

NITROSAMINE EXPOSURE IN SUBJECTS AT RISK FOR CANCER OF THE MOUTH, STOMACH, OESOPHAGUS AND URINARY BLADDER

H.Bartsch