515

RADICAL RADIOTHERAPY OF ANORECTAL CARCINOMA.

V.H.J.Svoboda, J.Kovarik.
Department of Radiotherapy and Oncology, St.Mary's Hospital, Portsmouth, England.

45 patients with carcinoma of the anus or lower rectum were treated by radical radiotherapy either by interstitial treatment alone or by combination with external beam. Twenty implants used a tailor-made template for manual iridium wire afterloading. This technique will be described in detail. Its main advantage is regular dose distribution. 36 tumours responded fully, 6 partially.The adenocarcinomas recurred more often, but their inferior response could be due to the localisation which was less suitable for an implant.The treatment was well tolerated even by old patients. The importance of pre-treatment assesment will be stressed as well as the fact, that the results were obtained without the use of concommitant chemotherapy.

516

MULTYMODALITY STAGING FOR RECTAL CANCER

Salvetti M; Leo E; Cozzi G; Tesoro Tess JD; Meroni E; Andreola S.

Istituto Nazionale per lo studio e la cura dei Tumori - Milano Italia.

The accurate staging for rectal cancer is important for surgical and radiotherapic planning. Various techniques (CT, EUS, MRI) can be used, but a correct distension of the wall combined with a high quality examination are essential to reach good diagnostic results.
A consecutive series of 12 patients with rectal cancer were examined by CT, MRI and EUS before surgical resection and their results were compared with pathological findings. CT and MRI were performed with a rectal balloon inflated respectively with water and air, without and with i.v. contrast medium (60+60 ml of non ionic c.m. for CT and 0.2 ml/Kg of GD-DTPA for MRI). EUS were performed with a 7.5/12 MHz flexible echo-endoscope.
Three patients had a Dukes A tumour, 4 Dukes B and 5 Dukes C. Rectal stenosis made EUS impossible in 18% of patients. Perirectal fat infiltration was correctly diagnosed in 91% by CT, in 75% by MRI and 44% by EUS. Infiltration of adjacent structures was correctly stated in 100% by CT, in 91% by MRI and 89% by EUS.
The single techniques show high accuracy in staging rectal cancer. Furthermore, if a combination of CT, MRI and EUS is considered, 100% sensitivity for fat or adjacent structures infiltration as well as 92% for nodal involvement is encountered.

517

COMPUTED FUSION OF MRI AND ANTI-CEA IMMUNOSCINTIGRAPHY IN THE FOLLOW UP OF OPERATED RECTAL CANCER

L.Kronberger,jr., R,Nicoletti, G.Ranner, E.Graif, R.Stollberger, R.Einspieler, M.Wiltgen, G.F.Fueger F.Ebner, P.Steindorfer

University Clinics of Graz, Austria

In the detection of recurrences after operated rectal cancer MRI(Philips Gyroscan S15) and anti-CEA immunoscintigraphy (Elscint 409 ECT) have recently been introduced.
From the PACS archive the MR-images are sent via ethernet to a gateway computer, translated from PACS format to Elscint-format and then sent to the nuc-med processor (Elscint SP1) where the fusion of MRI and ECT is performed.
In this series we examined 40 patients operated on a rectal cancer:
A 42 yrs old man, exstirpated only 9 monthes ago, was admitted due to a suspicious lyphnode-metastasis dorsal the left iliac artery. The ECT showed a concentration of indicatoractivity dorsal the left il.art., the MRI a 3x4x3cm lesion of low signal indensity left lateral the urinary bladder. The concordant localisation was verified by computed fusion and the metastasis proven by second look operation and histological assessment.
The fusion of MRI and ECT facilitates the diagnosis of recurrences and improves early detection and possible treatment planning.
In this series the specifity of MRI was 0.77, this of ECT 0.77.The fusion of both methods improved the specifity to the value of 0.98

518

IMMUNE DISREGULATION IN COLON CANCER

A.M. Berghella, P. Pellegrini, D. Piancatelli, T. Del Beato, D. Adorno and C.U. Casciani
CNR Institute of Tissue Typing-L'Aquila-Italy

Sera of patients (IL-2 n=20; sIL-2R n=40) and controls (IL-2 n=18; sIL-2R n=32) were tested using an enzyme-linked immunoassay. IL-2 was not significantly different between groups. sIL-2R was increased in patients (566.0±312.3 vs 360.3±226.6 U/ml p=0.003). A significant correlation of sIL-2R with stage and grading was found (stage: r=0.318 p=0.045; grading: r=0.428 p=0.021).To verify if this situation can affect the in vitro activation of PBMC (n=9) we examined their response to IL-2 and anti-CD3mab. The proliferation after treatment with IL-2 +anti-CD3mab was higher than with IL-2 alone in the stage IV (n=4: 124858±13333 vs 36575±21994;p<0.001). In other stages it was not different. This result can be consistent with the presence of populations showing different response to activation, which might be produced by changes in environmental IL-2 concentration. It can be supposed that a IL-2 production, appears selective for CD3+T cells.Thus, since this population includes the tumoral specific cytotoxic precursor cells, it should be helpful for the tumor regression, but it is conceivable that it cannot perform its functions, through a deficient responsiveness of ThCD4+ specific subpopulation.

519

SOLUBLE LYMPHOCYTE ACTIVATION MOLECULES IN CANCER

P. Pellegrini, D. Piancatelli, A.M. Berghella, T. Del Beato, D. Adorno and C.U. Casciani
CNR Institute of Tissue Typing-L'Aquila-Italy

The CD30 molecule is an activation antigen expressed only in a very small percent of normal lymphoid cells. In 55 cancer patients, (51 colon cancer, 3 gastric cancer, 1 anal cancer) and 1 colon adenoma, serum levels of soluble IL-2 receptor (sIL-2R) and of soluble CD30 antigen (sCD30) were assayed, using an enzyme-linked immunoassay. 18 healthy subjects were used as control group.
Our previous results show that sIL-2R was significantly increased in colon cancer patients. sCD30 was detectable in 5 of 55 cancer patients and 1 of 18 healthy subjects. Increased levels of sCD30 were significantly associated with increased levels (> 600 U/ml) of sIL-2R (p=0.007) in 3 colon cancer and 2 gastric cancer patients.
Although the physiologic role of CD30 antigen is not known, the presence of detectable levels of this molecule in association with sIL-2R might have a significance also in the immune disregulation connected with solid tumor, not only in lymphoproliferative diseases.
Keywords:colon cancer,soluble IL-2 receptor,soluble CD30

520

PHASE II TRIAL OF ADDING RECOMBINANT ALFA-2 INTERFERON (IFN) (INTRON A^{R}) FOR PROGRESSIVE LUNG METASTASES IN PATIENTS WITH ADVANCED COLORECTAL CANCER (CRC) PRETREATED WITH 5-FLUORURACIL (5-FU) AND LEUCOVORIN (LV)

C Görg, K Görg, K-H Pflüger & K Havemann

Department of Internal Medicine, Philipps-University, Baldingerstrasse, D-3550 Marburg, Germany

Biomodulation of 5-FU with LV is a major step forward in the treatment of CRC-patients. Interferon as single agent have not shown any level of significant effect in CRC. Its adding to 5-FU exhibit synergistic antineoplastic activity in subgroups, especially in patients with lung metastases.
13 pts with CRC and lung metastases were pretreated with 5 day continuous infusion of 5-FU, 600 mg/m^2/day, and a 2 hour infusion of LV, 200 mg/m^2/day, repeated every four weeks. In all patients chest x-ray revealed tumor progression and IFN was added in a dose of 3 x 10^6 U/1, subcutaneously 3 times a week. No dose escalation was peformed. All patients (mean Karnofsky 75, mean age 55 years) were evaluated for toxicity and response every 4 weeks. Toxicity was constant and mild including flu-like syndrom 11/13, fatigue 9/13 grade 1 or 2. Response rates were 0 CR, 1 PR, 1 MR, 7 NC, 4 PROG. Overall response rate including CR+PR+MR was 23 % (CR+PR+MR+NC = 69 %). Median time to progress was 4 months (range 0-10 mo).