

these patients were treated more aggressive. Moreover, suspicious lymph nodes only in MRI were seen in two additional patients.

**Conclusions:** Our results indicate that US possible understages anal-canal cancer in various cases. An important fact is that these differences could result in different treatment for selected patients. However, no pathological staging was done and it is possible, that MRI overestimates the tumor extension. As the treatment is curative, further studies are necessary for definite conclusions. In future using endorectal coils for MRI.

763

POSTER

### Preoperative thermoradiotherapy in combined treatment of rectal cancer patients

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**Purpose:** To improve results of surgical method of treatment, using preoperative thermoradiotherapy in the combined treatment of patients with rectal cancer.

**Methods:** 202 patients, divided into 3 groups: 70 patients (group I) that received surgical treatment only, 68 (group II) that received preoperative radiotherapy only and 64 (group III) that received local UHF hyperthermia combined with preoperative radiotherapy were enrolled in the randomized prospective study. Preoperative gamma-therapy was performed using a single dose of 5Gr up to 25Gr of summed lesion dose, followed by an operation in 3 days. UHF hyperthermia was carried out during 3–5 days starting from the second day of radiotherapy.

**Results:** True reduction of cancer recurrences frequency from 23.3% (group I), to 13.4% (group II) and to 3.3% (group III) was observed. In group III decrease of distant metastases-4.3% was noted, compared with group II-9.2% and in group I-12.3%. As the result improvement of 5-year treatment outcome from 57.3% (group I), to 72.7% (group II) and 82.3% (group III) was achieved. The best results were obtained in cases of metastatic involvement of regional lymph nodes in which 5-year results constituted 25.0% (group I), 48.6% (group II) and 86.7% (group III).

**Conclusion:** Local UHF hyperthermia combined with preoperative radiation is a strong radiomodifying agent of radiotherapy, increasing tumor sensitivity to ionizing radiation, thus improving distant results of the combined method of treatment.

764

POSTER

### Thymidylate synthase (TS) and P53 as prognostic factors for patients (PTS) with colorectal cancer (CA) treated with adjuvant 5-fluorouracil (5FU) and levamisole (LEV)

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TS has been reported to be predictive in pts with advanced gastric and colorectal ca and prognostic in adjuvant treatment of rectal cancer. P53 expression can be regulated by TS protein. We evaluated the expression of TS and p53 by immunostaining in 175 paraffin-embedded samples of pts entered in the Dutch adjuvant trial comparing 5FU/lev with surgery alone. The male/female ratio was 94/81 pts; Dukes B/C ratio was 91/84; 127 of the pts had colon ca; 106 of the pts were >61 yrs; 150 pts had WHO performance status 0. TS was scored as 1+, 2+, 3+, p53 as + and -.

	TS1+	TS2+	TS3+	Total
p53-	19	37	24	80
p53+	35	33	27	95
Total	54	70	51	175

Median time for survival was too short, precluding evaluation according to DFS or OS. So far trend analysis showed a positive relationship between TS and p53 level. Subgroup immunostaining (79 pts) for Ki67, a proliferation marker, and bcl-2 showed that high proliferation was equally divided between all three TS groups and bcl-2 was positive in  $\pm 50\%$  of the pts in all three TS groups. In conclusion; in combination, TS and p53 are probably useful markers for prediction of prognosis in colorectal cancer patients.

765

PUBLICATION

### Preliminary study of GSH L-Cysteine Anthocyan (Recancostat Compositum<sup>TM</sup>) in metastatic colorectal carcinoma with relative denutrition

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Reduced glutathione (GSH) is a sulphur-containing nucleophile natural metabolic molecule able to maintain cellular integrity and protect healthy cell against toxic and radical compounds at physiological doses. Administered orally at high doses GSH associated with both L-Cysteine Glutathione precursor and Anthocyan (Recancostat Compositum<sup>TM</sup>). The drug had been reported concerning a chemoprotection against tissue toxicity of cytotoxic agents and multidrug resistance. Also the drug may induce inhibition of tumor growth in vitro and tumor regression with recovered nutrition and weight in vivo (on rats). A clinical trial had conducted in 11 metastatic colorectal carcinoma chemoresistant patients with various denutrition phase and loss of weight. We report first clinical date of this study. Treatment consisted in oral administration of 800 mg GSH twice a day for a minimum of 90 days or until progression or toxicity (total dose: 144 g GSH, 28.8 g L-Cysteine, 23 g Anthocyan). No drug related toxicities were observed. 8 patients were evaluated (3 early deceased). All patients (8) are living (3 to 10 months) and the median duration of treatment was 21 weeks (11–33). 4 patients are recovered normal diet, high karnofsky and increased weight (3 patients were able to back home), 4 patients have negative response.

**Conclusion:** In addition of active therapeutic effect in cancer and chemoprotection, Recancostat Compositum<sup>TM</sup> maintains karnofsky, nutrition and weight of multi treated patients. Because no toxicity with Recancostat Compositum<sup>TM</sup> at high dose, we will select patients with cancer cachexia in second step of extended trial.

766

PUBLICATION

### Colorectal liver metastases (CLM): Surgical or transcatheter treatment?

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**Aim:** To evaluate effectiveness of hepatic artery infusion (HAI), hepatic arterial chemoembolization (HACE), combined hepatic arterial and portal vein chemoembolization (HA&PVCE), and hepatic resection for liver CLM.

**Methods:** Our prospective study included 99 pts with Gennan's stage II and III of CLM. HAI with 5-FU was performed in 23 pts. HACE with 30–100 mg Doxorubicin-in-iodized oil plus gelatin sponge was carried out in 28 pts. Combined treatment in 23 pts included HACE and 10 to 15 days later PVCE. Every therapy was performed 2 to 4 times yearly. Curative hepatic resection was made in 25 remaining pts.

**Results:** Partial tumor response was seen in 2 (9%), 8 (29%), and 19 (83%) pts after HAI, HACE, HA&PVCE, respectively. Mean survival rates were 7.8  $\pm$  3.3 mo for HAI, 20.5  $\pm$  7.5 mo for HACE, and 22.9  $\pm$  7.5 mo for HA&PVCE ( $p < 0.001$  if compared with HAI and  $p < 0.05$  with HACE). After hepatic resection, the survival was 22.6  $\pm$  11.4 (NS in comparison with HA&PVCE).

**Conclusion:** In our series, both the HA&PVCE and hepatic resection were effective for CLM. However, there was no significant difference between these treatments in survival of pts.

767

PUBLICATION

### Increased serum deoxycholic acid levels in acromegalic patients with colorectal neoplasia

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Acromegaly is associated with an increased prevalence of both colorectal carcinoma and tubulovillous adenomas. As the bile acid deoxycholic acid (DCA) has been implicated in the pathogenesis of non-acromegalic colorectal cancer, we measured its levels in acromegalic patients with and without colorectal adenomas.

**Methods:** Fasting serum DCA was measured, using gas chromatography mass spectrometry, in 10 acromegalic patients (6M; mean age 59 yrs, range 39–73) known to have colorectal adenoma and 29 acromegalic patients (15