

## Symposium no. 11: New Approaches to Cancer Diagnosis and Management

11.049

## CONTROL OF THE BLOOD VESSEL CHANGES BY DSA

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Rectum cancer patients with liver metastases are studied. The primary tumor was resected and a catheter "Implantofix" was implanted intra-operatively for an intraarterial hepatic chemotherapy with Mitomycin, 5-Fluorouracil and Farmorubicin. DSA of the hepatic blood vessels was carried out preoperatively. We report on the changes in the hepatic blood vessels under the influence of the chemotherapy and especially on Farmorubicin which appears as an inhibitor of the tumor angiogenic factors. The effect of Farmorubicin was examined by DSA performed after the chemotherapy.

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IN VITRO PRODUCTION OF PGE<sub>2</sub> BY SQUAMOUS CELL CANCER LINES OF THE HEAD AND NECK (SCCHN)

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Our previous results have shown that PGE plasma levels and production of PGE *ex vivo* by tumor tissue correlates with incidence of tumor recurrences and metastases in patients with SCCHN. In this study we have determined the production of PGE<sub>2</sub> by tumor cell lines because it has not been adequately documented, in particular SCCHN. In 15 out of 21 cell lines, levels of PGE<sub>2</sub> in culture supernatants were elevated (mean of control  $\pm 2SD$ ). PGE<sub>2</sub> levels could not be related to the site, stage or histopathologic differentiation of the tumor and no significant difference between levels of PGE<sub>2</sub> produced by cell lines derived from primary and metastatic tumors was observed. The ability of cell lines established from primary tumors to spontaneously produce high levels ( $\geq 66$  pg/ml) of PGE<sub>2</sub> was associated with an increased incidence of cervical metastases ( $p=0.05$ ) in these patients.

11.053

## GROWTH INHIBITION OF HUMAN COLORECTAL CARCINOMAS BY A MONOCLONAL ANTIBODY DIRECTED AGAINST THE IGF-I RECEPTOR.

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We have tested the responsiveness of 8 human colorectal carcinoma cell-lines to insulin-like growth factor I and II (IGF-I and II) in limiting culture conditions (0.5% FCS). Proliferation of 5 lines (HT-29, LS411N, LS513, SW480, WiDr) was stimulated up to 3-fold. Maximal stimulation was obtained with 30 ng/ml and half-maximal stimulation required 1.11-6.51 ng/ml of growth factor. Sublines of HT-29 have been cultured in medium containing 0.5% FCS for several months. Thereafter, the sensitivity to exogenous IGF-I and II was reduced, as compared to the parental HT-29 cell-line. To investigate a putative autocrine loop we cultured 3 cell-lines in the presence of  $\alpha$ IR3 MAb, directed against the IGF-I-receptor.  $\alpha$ IR3 (2  $\mu$ g/ml) inhibited growth of HT-29, LS513 and LS411N about 55, 40 and 20%, respectively. Lower doses still reduced growth of HT-29 and LS513, but did not affect growth of LS411N line. Furthermore,  $\alpha$ IR3-mediated growth inhibition of HT-29 and LS513 cells could be overcome by the addition of exogenous IGF-I and II. Our results suggest that IGF-III may play a role in autocrine growth regulation of at least some colorectal carcinoma cell-lines.

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## ADENOCARCINOMA OF THE UTERINE CERVIX - RESULTS AFTER COMBINED TREATMENT IN TWENTY YEARS PERIOD

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For the period 1969-1988 36 patients with adenocarcinoma of the uterine cervix underwent combined treatment (surgery and radiotherapy). The average age was 48 years (range 27-69). The predominant incidence was in the age group 40-49. Stage distribution was: stage Ib - 24 patients, st. IIb - 12. The histological type in 83.3% was differentiated adenocarcinoma. In two patients irradiation and surgery were done, in 31 - surgery and irradiation, in 3 - radiotherapy, surgery and radiotherapy. The therapeutic results are presented according to the age, stage, differentiation degree and lymph metastases. The 5-year survival rate is 42%.

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## PHOTODYNAMIC THERAPY FOR VAGINAL CARCINOMAS.

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6 patients with recurrent neoplasias of the vulva or corpus uteri which had received all available treatment previously including surgery, chemotherapy and various forms of radiotherapy, underwent treatment with HPD-PDT using Photosan II and an Argon pumped dye laser. Whereas five times i.v. sensitisation of 2,5 mg/body-weight was performed, one patient underwent local sensitisation with Cutisan, a topical form of Photosan. Light treatment was performed after 24 hours and 4 hours for the topical sensitisation, respectively. The energy delivered via a quartz fiber ranged from 500 mWatt - 1000 mWatt sec. for 10-25 min. The follow up time ranges from 6 months to 2 years. There were two complete responders (14 and 20 months), one patient suffered a local recurrence 6 months after PDT and was retreated after topical sensitisation. Two patients died due to metastatic growth of the tumor 4 and 12 months after, respectively. Despite the small patient number we conclude that PDT could offer a valuable therapeutic approach for local gynecological carcinomas which is easily feasible and without major complications.

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## CA 72-4 in Carcinoma of the prostate.

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The CA 72-4 assay allows the measurement in serum of a high molecular weight human tumor associated glycoprotein called TAG 72. This marker presents a good sensibility for gastric cancer.

We have tested 47 patients with prostatic cancer. The cut of considered is 3,8 U/ml. The distribution of CA 72-4 levels is shown in the table below:

	n.	+	-	%
prost.c.	47	5	42	10.63

These data don't confirm a preliminary study of the use of CA 72-4 in prostatic cancer.