

with clinicopathologic features and prognosis was studied in 126 curatively (R0) resected gastric carcinomas.

Methods: DNA was extracted from 126 formalin-fixed, paraffin-embedded gastric carcinomas and corresponding normal mucosa. Each case were studied with a panel of at least 5 to 10 microsatellites containing mononucleotide and dinucleotide repeats. A tumor was considered as positive when at least one locus showed a different mobility band.

Results: MI could be detected in 44.4% (n = 56) of all tumors. 12.8% (n = 16) of the tumors showed MI in two and more loci. 32 (57.1%) of the 56 MI positive carcinomas belonged to the intestinal type, 21 (37.5%) to the diffuse type and 3 (5.4%) to the mixed type according to the Lauren classification. No significant difference could be demonstrated concerning the mean survival time of MI negative carcinomas (2.92 years) and MI positive carcinomas (2.35 years). MI was not correlated with age, depth of invasion or differentiation. However 5 of 6 (83%) cases demonstrating widespread MI (≥ 4 loci with MI) were free of lymph node metastasis. In comparison only 36 of 70 (51.4%) MI negative tumors were nodal negative.

Conclusions: MI is not infrequent in gastric cancer but no significant association could be demonstrated between MI and prognosis.

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ORAL

Expression of the $\beta 4$ integrin subunit is closely related to hematogenous metastasis in gastric cancer

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Purpose: Alterations in cell attachment to the extracellular matrix are postulated to play an important role in the process of invasion and metastasis. Laminin distribution patterns have already been shown to influence the mode of spread of gastric CA. Very little is known about the influence of laminin receptors like the $\alpha 6 \beta 4$ integrin on the pattern of metastasis of gastric CA.

Methods: We evaluated immunohistochemically the expression of $\alpha 6 \beta 4$ in specimens from 48 patients with advanced gastric CA. The relationship between the expression of $\alpha 6 \beta 4$ and the clinico-pathological features of the tumors was statistically analyzed.

Results: In 10/48 (21%) tumors, the expression of the $\beta 4$ subunit was found to be as strong as in the normal mucosa. This was seen predominantly in gland-forming CA ($p < 0.05$), showing a marked expression of laminin ($p < 0.005$) and a low rate of tumor cell dissociation ($p = 0.06$). After a mean follow-up of 19 months, 10 patients had developed hematogenous metastases. 6/10 (60%) presented a strong expression of $\beta 4$, whereas only 4/38 (11%) patients without hematogenous metastasis showed this expression pattern ($p > 0.01$).

Conclusion: Our findings indicate, that the $\beta 4$ integrin subunit may play an important role in the process of hematogenous metastasis in gastric CA.

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Serum tumor markers in gastrointestinal cancer patients: A prospective longitudinal study

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Purpose: The present study was designed to evaluate in a prospective trial, the ability of a combination of CA 72-4, CEA and CA 19-9 tumor markers to improve the clinical diagnosis of recurrent gastrointestinal (GI) cancer.

Methods: 300 GI cancer patients were enrolled. Patients with colorectal cancer, stages A, B C and D (with surgically resectable metastasis), and with gastric cancer, stages I, II, III and IV (only T4N2M0) entered the study. Patients were followed for at least 4 years after surgery or until diagnosis of recurrent disease. Serum samples were obtained before surgery and at every time point scheduled for the clinical follow-up. CA 72-4 and CA 19-9 RIA kits were kindly supplied by Centocor, Malvern, PA. Serum CEA levels were measured using the CEA RIA kit (Abbott).

Results: To determine whether the combined measurement of these tumor markers may be considered an indication to perform imaging diagnostic procedures, all patients whose serum levels of at least one of the three tumor markers became positive or increased more than 50% (over the mean of at least 3 previous determinations), were suspected as having recurrent disease, and therefore, were subjected to detailed imaging procedures. Among the 300 patients, 82 had recurrent disease. In more than 80% of the

cases, the serum levels of at least one marker significantly rose, allowing either a confirmation or a prediction of the diagnosis of recurrent disease. No false positive cases were observed.

Conclusion: In all the cases, the serum marker performance matched the diagnostic imaging procedures, suggesting their possible use as a pilot tool to guide imaging diagnostic procedures during the post-surgical follow-up.

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Randomised clinical study (phase III) FE vs. FEP in advanced gastric cancer

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Purpose: The study was to determine activity of high doses of 5-fluorouracil and epirubicin (FE) vs. the same combination + cisplatin (FEP) in advanced gastric cancer.

Methods: In prospective phase III clinical study 110 pts. with advanced gastric cancer were included. Out of 110 pts. 100 (69 male, 31 female) were evaluable. The treatment involved in FE arm 1000 mg/m² in 6 hour-infusion of 5-fluorouracil on days 1, 2, 3, 4, 5 and 120 mg/m² of epirubicin i.v. on day 1; in FEP arm the same combination of cytostatics + cisplatin 30 mg/m² on days 2,4 was administered. The cycles were repeated after 4 weeks.

Results: In FE arm 51 patients were evaluable with 1 complete and 14 partial remissions (31.4%), and in FEP arm out of 49 evaluable patients 2 complete and 17 partial remissions (40.8%) were observed.

Median survival in FE group was 6.7 mos, and in FEP group 8.9 mos. The survival difference is statistically significant ($p = 0.1959$). Febrile neutropenia (grade IV) was observed in 3 patients in arm FE and in 5 patients in arm FEP. The treatment related death was not registered.

Conclusion: The addition of cisplatin to high doses of 5-fluorouracil and epirubicin resulted in statistically significant better response to therapy.

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Taxotere-cisplatin (TC) in advanced gastric carcinoma (AGC): A promising drug combination

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Despite chemotherapy (chemo), the outcome of patients (pts) with AGC remains dismal. Taxotere (TAX) was shown to induce alone an interesting response rate of 24% in AGC. We conducted a phase II trial investigating its activity in combination with cisplatin.

Pts with AGC not pretreated palliatively by chemo, with measurable disease, PS ≤ 1 , normal blood count, and normal hepatic and renal functions received up to 8 cycles of TC (TAX 85 mg/m² d1, Cisplatin 75 mg/m² d1) q3w. TAX escalation to 100 mg/m² in 5 pts was too toxic and discontinued.

Among 41 pts already accrued, 37 pts (mean age 55 y, mean weight 62 Kg, M:F 31:6) are evaluable for toxicity (tox) and 31 for response. We observed 2 CR and 16 PR (RR = 58%, 95%CI: 39-75%). 3 fatalities occurred: 2 pulmonary embolisms and 1 suicide. Grade ≥ 3 tox were neutropenia 72%, thrombocytopenia 8%, alopecia 30%, fatigue 8% mucositis 5%, neurologic 3% and nausea/vomiting 3%. 4 of 153 cycles were complicated by non-fatal febrile neutropenia, 2 of them with TAX 100 mg/m². Other tox were grade 1-2 neurotoxicity 40% and fluid retention 30%, 4 grade 1 renal tox and 2 grade 1 hypersensitivity reactions.

We conclude that TC, as used, is well tolerated with significant efficacy in AGC. The planned accrual of 43 pts is about to be reached and mature results should be available for the conference.

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POSTER

Prognostic factors in non-curative gastric cancer

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Objective: To identify the importance of the extent site and distribution of residual intra-abdominal disease in patients having non-curative resection for gastric cancer and so assess the indications for extended resection.

Method: 230 patients who were explored with curative intent but in whom the resection was palliative because of residual microscopic (R1) or residual macroscopic (R2) disease were identified from a prospective data