

of which have been implicated in tumor prognosis. The aim of this study was to evaluate the prognostic significance of MMP-7 and MMP-9 in rectal cancer.

Methods: Eighty-seven patients with stage II or III rectal carcinoma who underwent potentially curative resection followed by postoperative adjuvant chemoradiation, and 5-fluorouracil based chemotherapy were investigated immunohistochemically using the monoclonal antibody MMP-7 and MMP-9. Clinical information, including tumor grade, carcinoembryonic antigen (CEA), disease-free survival (DFS), and overall survival (OS) was evaluated and compared with MMP-7 and MMP-9 expression.

Results: The median follow-up duration was 53.2 months, and mean patient age was 55 ± 11 years (range 32–75). The expression of MMP-7 correlated significantly with the presence of nodal metastasis ($P = 0.029$). MMP-9 expression was significantly correlated with the depth of tumor invasion ($P = 0.019$). No relationships were found between the MMP-7 and MMP-9 expression and age, sex, tumor size, tumor grade, or CEA level. Univariate analysis showed that MMP-7 expression was associated with poor 5-yr OS (12.8 months vs. 65.3 months, $P = 0.0405$). Multivariate analysis confirmed that MMP-7 was independently associated with adverse outcome (Relative risk: 1.415, $P = 0.027$). However, MMP-9 expression was not related to clinical outcomes.

Conclusion: MMP-7 expression was associated with lymph node metastasis and poor 5-year OS in rectal cancer patients.

687

PUBLICATION

Abdominoperineal resection or anterior resection for rectal cancer: study of patients' preferences before and after treatment

A. Zolciak¹, K. Bujko¹, L. Kepka¹, J. Oledzki², A. Rutkowski², M. Nowacki². ¹Cancer Center of Oncology, Department of Radiotherapy, Warsaw, Poland; ²Cancer Center of Oncology, Department of Colorectal Cancer, Warsaw, Poland

Purpose: The data in the literature do not allow for the conclusion that the oncological outcomes and the quality of life after anterior resection (AR) are superior to that after abdominoperineal resection (APR). Therefore, patients' preference remains a main reason for performing AR for low rectal cancer. The aim of the study is to evaluate these preferences.

Methods: Consecutive patients with rectal cancer (60 prior to surgery, 65 with permanent colostomy and 124 after AR) who visited our out-patient clinic answered the questionnaire on preferences for type of surgery.

Results: Preferences for APR, for AR or for leaving decision to a physician were respectively following: prior to surgery group – 5, 30, 65 per cent; permanent colostomy group – 46, 22, 32 per cent and AR group – 4, 68.5, 27.5 per cent. Among patients after surgery who had definite preferences, those after AR more frequently preferred the undergone type of surgery than those with permanent colostomy; 94 vs. 68 per cent, respectively, $P < 0.001$.

Conclusions: As the small percentage of patients prior to surgery prefers the APR, a shared decision-making process is of value for those with a low rectal cancer. The results suggest that for patients who underwent surgery, sequels after AR are generally perceived as less severe than those after APR. Nevertheless, approximately half of the patients after APR prefers undergone type of surgery, which suggests that perception of a colostomy as a bearable status is higher than it is commonly believed.

688

PUBLICATION

Does the surgical scalpel act the role of the second fiddle in the battle against lower two-third rectal cancers? A 5-year follow up study

M. Gábor¹, H. Urbancsek², T.I. Szendrői¹, M. Török³, Z. Szabad¹, Á. Horváth². ¹Kenézy Teaching County Hospital, Gen. Surgery, Debrecen, Hungary; ²University of Debrecen, Department of Radiation Oncology, Debrecen, Hungary; ³Kenézy Teaching County Hospital, Dept. of Pathology, Debrecen, Hungary

Background: Gold standard therapy of lower two-third rectal neoplasms is a hotly debated point of the onco-radio-surgical complex treatment, and it is source of boiling discussions.

Aims: The authors' aim was to evaluate a 5-y follow-up study regarding to T1–4, N0–2, M0 rectal cancers.

Patients and method: Four groups were set up, in each group was 50 patients with lower two-third T1–4 N0–2 stage (there were proved these stages by CT, MRI or rectal USG) rectal cancer. In the first group the patients had been given 50.4 Gy so-called long term three-field irradiation and three or at least two cycles of 5FU base chemotherapy. In the second one the patients had been given 50.4 Gy irradiation, in the third one they had been given a short term (4×4 or 4×5 Gy) irradiation before surgical intervention. The fourth one was the control group (following surgical

intervention an adjuvant standard chemo-irradiation). The down staging was strictly examined after neoadjuvant treatments by CT, MRI or rectal USG) There has been examined the overall survival (OS) time to relaps (TR) and disease free survival (DFS). The results were analysed by statistically.

Results: Histologically proved total remissions were detected only in the first and second group (4 and 7 patients, respectively). Proportion of clinical response in the three groups were 28%, 18% and 0%, respectively. Proportion of local failure was 12%, 14% and 20%, respectively. The difference between the groups were significant. Histologically proved total remissions were detected only in the long-term irradiated groups, though there is a significant difference depending on whether the patients had been given chemotherapy or not, alongside of the irradiation. There have not been detected local failures at all in the cases of clinical and histological total remissions after surgical interventions. Total remission has not occurred in stage of T4. Only three patients out of 200 were grouped in stage T1.

Discussion: The 5-y-survival in cases of total preoperative remission was nearly 100%. It is startlingly few the number of patients with early (T1) disease, and it seems that the proportion of early diagnosis won't change in the future without consistent and well-organised screening systems. In stage of T2 and T3 the neoadjuvant long term irradiation with or without chemotherapy can bring significantly better result than short term irradiation or the adjuvant treatment. In stage of T4 the chance for a successfully radical operation was significantly better after combined long term irradiation with chemotherapy than in the other three groups.

Conclusion: The authors recommend on the first place the method of long term three-field neoadjuvant irradiation combined with chemotherapy for T2–4 rectal neoplasms. The authors have proved the advantage of neoadjuvant treatment for rectal cancer instead of primarily used surgical intervention. It is possible that the surgical scalpel is inevitable part of the treatment these days but its main role must be shared with other pretenders.

690

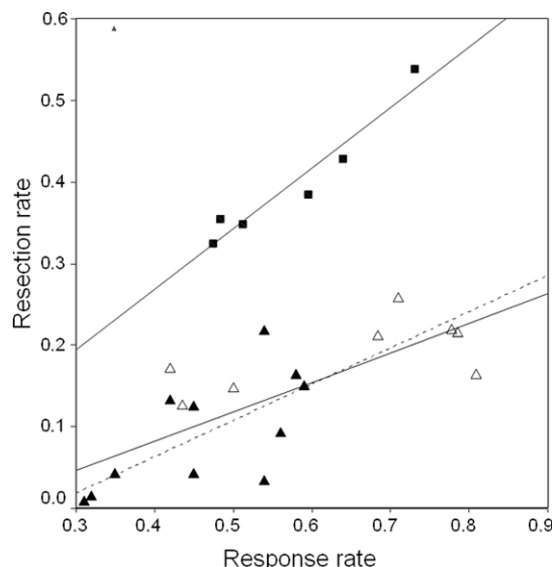
PUBLICATION

Correlation of the rate of liver resection to the rate of tumor response in patients with metastatic colorectal cancer

G. Folprecht¹, A. Grothey², S. Alberts², H.-R. Raab³, C.-H. Köhne³. ¹University Hospital Dresden, Medical Dept. I, Dresden, Germany; ²Mayo Clinic, Rochester, MN, USA; ³Klinikum Oldenburg, Oldenburg, Germany

Introduction: Long-term survival is reported in patients with liver metastases of colorectal cancer. Recently, an increased number of reports on liver resection following neoadjuvant chemotherapy in patients with initially unresectable liver metastases has been published.

Methods: We analyzed all published or presented trials and retrospective studies that report the rate of objective response and the rate of resection of initially unresectable metastases to correlate of objective response and the rate of resection of metastases.



Results: In studies that enrolled patients with metastases confined to the liver, 24 to 54% of patients were resected following chemotherapy, compared to 1 to 26% of patients in trials that included non-selected patients with metastatic colorectal cancer. A strong correlation was found between response rates and the resection rate in studies with patients with