

were extra-mediastinal lymph nodes (57%) and lung metastasis (53%). Metastases were synchronous in 151/284 cases (53%). Squamous cell carcinoma accounted for 80% of cases. The dysphagia score was graded 3 or 4 in 22% of cases. Thirty two percents of patients had at least one another cancer (most frequent: head and neck cancer [63/97], lung cancer [15/97]). Sixty percents of patients received chemotherapy.

Results: From the development cohort, the following putative PF have been retained by univariate analysis: associated cancer, previous chemotherapy, extra-mediastinal lymph nodes, dysphagia grade, weight loss, performance status and hemoglobin level. The Cox model has retained 2 PF, only: associated cancers (HR=2.77 [1.39–5.54], $p=0.004$) and grade 3–4 dysphagia (HR=1.44 [1.08–2.14], $p=0.007$). The median survival was 10.9, 6.2 and 1.8 months in patients with none ($n=77$), 1 ($n=65$) and 2 ($n=11/171$) of these adverse PF, respectively ($p=0.025$). The median survival of the patients with none, one and 2 adverse PF was 9 vs 13 months (non significant, ns), 5 vs 6 months (ns), and 1.3 vs 5 months (ns), whether or not the patients received chemotherapy, respectively. Patients with squamous cell carcinomas exhibited a similar pattern of survival than the whole cohort of MOEC, with or without chemotherapy.

Conclusion: We show here some evidence that chemotherapy has no or little impact on survival for MOEC, regardless of the PF we identified.

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POSTER

Study to evaluate response to preoperative chemotherapy followed by postoperative chemoradiotherapy, expression of multidrug resistance gene and quality of life in locally-advanced gastric and gastroesophageal junction adenocarcinoma

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Background: We intended to assess the feasibility of combining neoadjuvant chemotherapy (NACT) with postoperative chemoradiation (POCRT) in locally advanced gastric/gastroesophageal junction adenocarcinoma (LAGC) along with multidrug resistance (MDR-1) gene expression & quality of life (QOL) assessment.

Materials and Methods: We enrolled 14 patients (pts) of LAGC (stage II–IV, age ≤ 70 years, KPS ≥ 70) in a single arm phase-II trial. After 2 cycles of NACT (cisplatin 80 mg/m² D1, capecitabine 2 g/m²/day D1–14 q3 weeks), response was assessed by upper GI endoscopy & CECT abdomen. Pts with resectable tumors underwent radical total/subtotal gastrectomy with D2 lymphadenectomy & POCRT (45 Gy/25#/5 weeks, concomitant capecitabine 1.5 g/m²/day). Inoperable pts received salvage chemoradiation (SCRT) or supportive care (BSC). Pre- & post-therapy (1 month) QOL was assessed by EORTC QLQ-C30 questionnaire (V3.0). MDR-1 expression was evaluated by flowcytometric assay of P-glycoprotein positivity.

Results: Median age was 50 years. Male to female ratio was 9:5. Tumor locations included GE junction/proximal stomach (4), distal stomach (8) & diffuse (2). Radiology showed N+ & T4 disease in 11 & 6 pts respectively. In 50%, tumors were initially unresectable. At a mean follow-up of 7.36 months, only 3 pts completed assigned treatment & all 3 had complete response (CR). Among others, locoregional progression, distant metastasis & noncompliance were noted in 28.6%, 21.4% & 28.6%, respectively. After NACT, response rate, disease control rate & symptomatic benefit were 28.6%, 57.2% & 78.6%, respectively. Only 1 of 7 unresectable pts became resectable post-NACT. Both NACT & POCRT were well tolerated (Gr 3/4 toxicity – NACT: hematologic-4, non-hematologic-6; POCRT: hematologic-1, non-hematologic-2). Pts with unresectable tumors received SCRT (1), palliative chemotherapy (1) or BSC (6). MDR-1 expression was monotonously low (mean 5.13%) & was not turned on after NACT (mean 3.2%). In the comparative analysis of pre-therapy & post-therapy QOL, Global health status (QL2) declined by 7.86%, social functioning declined by 28.8%, & financial difficulties increased by 33.69%.

Conclusions: NACT followed by POCRT is a novel & safe approach in LAGC. Still, only 21.42% pts completed assigned treatment & had CR, possibly owing to high noncompliance (28.6%) & adverse patient characteristics. More careful patient selection & longer follow-up will allow a more meaningful evaluation of this approach. MDR-1 pathway is probably not the major mechanism of chemoresistance in gastroesophageal adenocarcinoma in our patients.

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POSTER

Prognostic significance of preoperative serum tumor markers in the patients with curatively resected advanced gastric cancers

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Background: We evaluated the prognostic significance of preoperative tumor markers, carcinoembryonic antigen (CEA), carbohydrate antigen 19–9 (CA19–9), and carbohydrate antigen 72–4 (CA72–4), in the patients with curatively resected advanced gastric cancers.

Methods: Six hundred and sixty seven patients who had been enrolled in a phase III trial of adjuvant chemotherapy (AMC0201) and preoperative serum tumor markers were available for this study. We compared the relapse free survival (RFS) and overall survival (OS) according to patient's pretreatment clinical characteristics and serum tumor markers using log rank test and Cox proportional hazard model.

Results: Of total 667 patients, 3 year RFS rate and OS rate were 67.4% and 75.0%, respectively. Postoperative pathologic stage was II in 353 (52.9%), IIIA in 202 (30.3%), IIIB in 61 (9.1%), and IV (M0) in 51 (7.6%). CEA, CA19–9, CA72–4 were elevated preoperatively in 64 of 665 patients (9.6%), 75 of 664 patients (11.3%), and 121 of 639 patients (18.9%), respectively. After median follow up of 3.2 years, 209 patients (31.3%) had recurrence, and 164 patients (24.6%) died.

In univariate analysis, location of tumor, type of surgery, Borrmann type, TNM stage, CEA elevation, and CA72–4 elevation were significant prognostic factors in RFS and OS. In multivariate analysis, CA72–4 was independent significant prognostic factor for RFS and OS as well as tumor location, Borrmann type, and stage.

Conclusion: Preoperative serum CEA and CA72–4 levels were independent prognostic factors as well as clinical characteristics of pathologic stage, tumor location and Borrmann type in patients with curatively resected AGC.

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POSTER

Overexpression of tissue biomarkers associated with allelic alterations may have potential prognostic implications with different behavior in esophagus cancer

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Background and Aim: Expression of biomarkers and probable allelic alterations were studied in esophagus tissue samples from patients with esophageal carcinoma.

Methods: A total of 116 esophagus tissue samples were obtained from 25 patients with esophagus cancer. Histological studies revealed 23 samples were adenocarcinoma and 14 samples were epidermoid carcinoma while 79 samples were non-tumor. Expression of biomarkers was determined by enzyme immunoassay, and allelic alterations on chromosome 17p were performed by polymerase chain reaction (PCR) using primers D17S513 and D17S514.

Results: The adenocarcinoma group exhibited an increase of matrix metalloproteinase (MMP)-1 ($P < 0.0001$) and sialyl Le (a) ($P < 0.001$) mean levels when compared with the non-tumor group. Adenocarcinoma samples from patients with more than three positive lymph nodes had lower levels of tissue-inhibitor metalloproteinase (TIMP)-1 than those with negative nodes ($P < 0.0005$). Positive allelic alteration was associated with high levels of MMP-1 expression ($P = 0.003$). Epidermoid carcinoma samples showed higher expression of MMP-1 ($P < 0.0001$) and TIMP-1 ($P < 0.02$) than non-tumor samples. Both epidermal growth factor receptor and sialyl Le (a) levels were overexpressed in tumors of patients with more than three positive lymph nodes ($P < 0.005$). Carcinoembryonic antigen levels were higher in tumors associated with allelic wild type group ($P = 0.0001$) and patients with negative lymph nodes ($P < 0.05$). Furthermore, variability in expression of biomarkers was observed according to sample location, and allelic alterations were also found both in tumor and in some non-tumor samples.

Conclusion: The data suggest that overexpression of tissue biomarkers associated with allelic alterations may have potential prognostic implications with different behavior in esophagus cancer.