was significant decrease in WBC (median 6.2 vs. 4.9 10^3/ul; p=0.03), PLT (235 vs. 184 10^3/ul; p=0.01) before and after radiotherapy. RBC and Hb did not significantly decrease. The maximum Grade 3 early skin toxicity by the end of treatment was present only in two patients. No Grade 4 toxicities were observed. The maximum Grade 2 fatigue, Grade 1 dysphagia, Grade 1 pain with swallowing were recorded. The early skin toxicity resolved in all patients evaluated one month after finishing the treatment.

Conclusions: This 6-week course of definitive radiotherapy using SIB technique showed to be feasible and was associated with acceptable early skin toxicity. Long-term follow-up data are needed to assess late toxicity and clinical outcomes.

Electronic Poster: Clinical track: Gastrointestinal tumours (upper and lower GI)

EP-1195
Chemoradiotherapy for T4 and/or M1 lymph esophageal cancer - recent experience in a Japanese high-volume center
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Purpose/Objective: to review data for patients with stage T4 and/or M1 lymph esophageal cancer who have been treated with definitive chemoradiotherapy since 2000 in an institution that is one of high volume centers in Japan.

Materials and Methods: We retrospectively reviewed data for all patients with T4 and/or M1 lymph esophageal cancer who had been treated by definitive chemoradiotherapy between 2000 and 2013 in Tohoku University Hospital. The eligibility criteria included 1) histopathologically proven esophageal cancer, 2) T4 and/or M1 lymph (UICC 2002), 3) having undergone at least 1 cycle of concomitant chemotherapy, 4) having been irradiated with 50 or more Gy, and 5) no other active malignant tumor during treatment. Survival estimates were calculated from the first day of radiotherapy using the Kaplan-Meier method, and differences were evaluated by the log-rank test. Statistical significance was defined as a value of p<0.05 in the present study. SPSS software for Windows version 20.0 was used for all calculations. Toxicity was graded according to the Common Terminology Criteria for Adverse Events (CTCAE v3.0).

Results: Data for 86 patients were used for analysis in this study. Median age of the patients was 66 years. Primary sites were in the cervical, upper thoracic, middle thoracic, lower thoracic and abdominal esophagus in 9 patients, 20 patients, 49 patients, 7 patients and 1 patient, respectively. Clinical stages were III in 54 patients, IVa in 5 patients and IVb in 27 patients. Median total irradiation dose was 60 Gy (range, 50-70 Gy). CDDP+5-FU, CDGP+5-FU, CDDP+5-FU+DOC and CDGP+DOC were performed as concomitant chemotherapy with radiotherapy in 47, 35, 2 and 2 patients, respectively. Median observation period for the survivors was 36.1 months. At the last observation date, there were 68 deaths including 5 intercurrent deaths. The 1-year and 3-year overall survival rates were 40.1% (95%CI=29.5-50.7%) and 22.4% (95%CI=13.0-31.8%), respectively. Three patients had grade 3 radiation pneumonitis and 1 patient developed grade 5 radiation pneumonitis. One patient showed grade 3 pleural effusion. The overall survival of patients without M1 lymph was significantly better than that of patients with M1 lymph (3-y, 32.3% (95%CI=19.0-45.6%) vs. 6.7% (95%CI=0-15.7%, p=0.005). The overall survival in recent patients (2007-2013) was not improved from that in past patients (2000-2006) (3-y, 15.9% (95%CI=2.0-29.8%) vs. 26.0% (95%CI=13.8-38.2%), p=0.32). There was no significant difference of survival rate between patients treated with 60 Gy or less and patients treated with more than 60 Gy (3-y, 25.3% (95%CI=10.8-39.8%) vs. 20.0% (95%CI=7.8-32.2%), p=0.45).

Conclusions: We showed the results of definitive chemoradiotherapy for T4 and/or M1 lymph esophageal cancer in a Japanese high-volume center after 2000. T4 patients without M1 lymph showed a relatively good 3-year survival rate of about 30%; however, the results were not improved after 2000.

EP-1196
Surgical interval after neoadjuvant treatment in rectal cancer: impact on response and outcome
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Purpose/Objective: The optimal waiting period between completion of neoadjuvant therapy and surgery in locally advanced rectal cancer (LARC) is controversial. The recommended duration and its impact in surgical radicality is discussed. The specific purpose of this study is to evaluate the effect of surgical interval on cancer response: tumor regression grade (TRG), postoperative morbidity and long-term oncologic outcomes.

Materials and Methods: Retrospective data analysis from patients with clinical stage II-III treated with chemoradiation (CRT) followed by surgery and IORT, between February 1995 and December 2012 is reported. Two groups according to the interval between neoadjuvant therapy and surgery (≤6 and >6 weeks) are evaluated. Clinico-pathological data related to response patterns as well as survival were compared.

Results: Three hundred thirty-five patients were assessed, of which 59.4% underwent delayed surgery. Baseline characteristics of the study groups, showed a higher proportion of patients with increased oncologic risk factors in the delayed surgery group (cT4, 14.1% vs 18%; cN+, 64.1% vs 76.6%). Complete pathological response (ypT0N0) and TRG 3-4 categories incidence are not significantly different among groups (8.8% vs 12%, p = 0.348; 41% vs 50.8%, p = 0.082), respectively. The maximal dimension of residual tumor post-neoadjuvant treatment was influenced by surgical period (p = 0.006). Longer surgical interval did not affect incidence or severity of complications or length of hospital admission (9.50 vs 10 days; p = 0.093). After a median follow-up time of 71 months, delayed surgery had a significant impact on overall survival (55.9% vs 70.4%; p = 0.014), not observed in disease-free survival (69.9% vs 74.9%; p = 0.233) or local relapse-free survival (LRFS) (90.4% vs 94.5%: p = 0.123).
Conclusions: A modest surgical interval prolongation more than 6 weeks was safe, did not negatively affect response or oncologic outcomes and was identified as independent favourable prognostic factor for overall survival. Randomized studies are justified to explore more significant delayed time intervals between neoadjuvant CRT and surgery in LARC.

EP-1197
Clinical outcome and toxicity of 3D-conformal radiotherapy combined with chemotherapy for gastric cancer
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Purpose/Objective: To evaluate retrospectively efficacy and toxicity of adjuvant radio-chemotherapy in patients with gastric cancer and to relate these results to the outcome of landmark INT0116 study that was criticized because of high toxicity and poor treatment compliance.

Materials and Methods: A total of 102 patients, who underwent postoperative fluorouracil (5-FU)-based radiochemotherapy in our institution between 2004 and 2010 for stage IB-IV (AJCC 6th ed.) gastric cancer were selected. Stage distribution was as follows: IB-5 (5%), II-32 (31%), III-49 (48%), and IV-14 (14%). There were 96% R0 resections; 15% of the patients had a D2 resection. Radiotherapy to 45 Gy was defined individually and delivered with 3D conformal technique. Chemotherapy was carried out during the first four and last three days of RT with continuous infusion of 5-FU (400 mg/m2/day) and Leucovorin. Patients received additional three cycles of chemotherapy of 5-FU (425 mg/m2/day) and Leucovorin. Patients with stage I-III had four cycles of chemotherapy. Acute hematological and gastro-intestinal toxicity was evaluated according to the NCI-CTC v3.0 scale.

Results: Seventy-four (72.5%) and 98 (96%) patients received all five planned cycles and completed radiotherapy, respectively. The 3- and 5-year overall survival (OS) rates were 57% and 48%, respectively. Multivariate analysis showed that variables significantly affecting OS were pT3-T4, pN2-3, and IV-14 (14%). There were 96% R0 resections; 15% of the patients had a D2 resection. Radiotherapy to 45 Gy was defined individually and delivered with 3D conformal technique. Chemotherapy was carried out during the first four and last three days of RT with continuous infusion of 5-FU (400 mg/m2/day) and Leucovorin. Patients received additional three cycles of chemotherapy of 5-FU (425 mg/m2/day) and Leucovorin. Patients with stage I-III had four cycles of chemotherapy. Acute hematological and gastro-intestinal toxicity was evaluated according to the NCI-CTC v3.0 scale.

Conclusions: We demonstrated improved treatment tolerance, compliance, OS of adjuvant radio-chemotherapy for gastric cancer in comparison with INT0116 study. Conformal radiation techniques might have contributed to this improvement.

EP-1198
Methylenetetrahydrofolate reductase C677T polymorphism in patients treated for locally advanced rectal cancer
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Purpose/Objective: Preoperative radiation therapy combined with fluoropyrimidine is the standard treatment for locally advanced rectal cancer. However, there is a large individual difference or variation in tolerance and therapeutic efficiency. The genetic polymorphisms represent one of the major causes in this variation. The aim of our study is to analyze the relationship between gene polymorphism of the Methylenetetrahydrofolate reductase MTHFR (important enzyme in fluoropyrimidine metabolism) tolerance and the therapeutic efficiency of fluoropyrimidine in patients with locally advanced rectal cancer.

Materials and Methods: Between December 2011 and November 2013, 52 blood samples were realized for DNA extraction. MTHFR gene polymorphism were determined by polymerase chain reaction restriction fragment length polymorphism PCR-RFLP in patients with stage II and III histologically proved rectal cancer there were 21 women and 31 men with a median age 50.8 years, range 23-70 years. The tumor was located in lower rectum in 56% of cases. 30 patients had stage III. Preoperative radiation therapy was delivered in all patients with a total dose of 45 Gy, associated at fluoropyrimidine (5-fluorouracil + folic acid in 30 patients, Capecitabine in 22 patients), followed by surgical resection in eight weeks in all patients. The treatment tolerance was evaluated according to the NCI-CTC version 3 toxicity criteria. Therapeutic efficiency was evaluated by histopathological postoperative specimen examination. Kaplan-Meyer survival curves were defined for each polymorphism in our series.

Results: The distribution of the three genotypes CC, CT and TT were respectively (32.6%, 48% and 19.2%). The risk of developing severe (grade 3-4) toxicity was observed in 677 CC (9,6%), 677CT (7,6%) and 677TT (3,8%). T-level downstaging after neoadjuvant treatment was demonstrated in 63.3% of cases in patients with 677TT genotype, it was 40% in 677CT genotype and 58.8% in 677CC genotype. No association is observed between C677T polymorphism and survival [log rank= 0.02, p = 0.99].

Conclusions: In spite of the limited patient number, our study shows that the MTHFR 677 TT genotype can have a protective role of fluoropyrimidine toxicity, and it can be a predictive factor in therapeutic efficiency. This study will be continued, in order to include more patients and to analyze the second polymorphism in MTHFR gene (1298 A>C).