treatment; 1 had an ileostomy. Two patients (25%) required prolonged admission, 1 was admitted to critical care with neutropenic colitis. Capectabine was discontinued in 6/8 (75%); 5 (63%) required a break in XRT. Two patients (25%) discontinued XRT altogether. Mean small bowel V45 for patients who did and did not develop G3 toxicity was 38.6 cm$^3$ (range 0 - 178.8) and 113.0 cm$^3$ (38.4 - 222.4) respectively. Two patients had a small bowel V45 >195 cm$^3$, both developed G3 bowel toxicity.

Conclusion: In this series, incidence of G3 bowel toxicity in patients receiving chemoradiotherapy for rectal cancer was not influenced by gender, age, pre-treatment bowel habit or body habitus. PTV size, patient positioning and radiotherapy delivery technique did not alter the risk. Patients who developed G3 toxicity had a larger volume of small bowel receiving $>45$ GY. Based on this, we now routinely calculate dose to small bowel, thus identifying patients who are at higher risk of developing G3 toxicity and review or change the treatment plan, including chemotherapy dose, to mitigate this risk.

EP-1291
Can mucosal criteria estimate response in rectal cancer treated with neoadjuvant chemoradiotherapy?
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Purpose or Objective: The past decade in rectal cancer research has raised questions about complete pathological response (pCR) after neoadjuvant therapy. In this context, there has been much hype to identify patients with clinical complete response (cCR) who could eventually be candidates for nonoperative cancer care. So far, experts have published stringent criteria to define cCR, which remain to be validated with surveillance strategies. The purpose of our study is to review pathological mucosal changes after neoadjuvant combined chemoradiation therapy (CRT) for rectal cancer.

Material and Methods: This retrospective review was conducted in a tertiary referral center. Histopathology reports were retrieved for rectal cancer patients treated with neoadjuvant CRT. Exclusion criteria included recurrent rectal cancer, stage IV disease, rectal cancer in the context of IBD or FAP, patient enrollment under clinical trials with chemotherapy or other treatment schemes, and patients who were not operated. The macroscopic mucosal appearance of the specimen was compared with the final pathological staging.

Results: Eighty-eight patients met our inclusion criteria and had complete staging and pathological data with gross mucosal descriptions. These included 59 male and 29 female patients with a median age of 63 years (range 29-83). The staging proportions were: 3.4% stage cl, 15.9% stage cII, and 80.7% stage cIII; 93.2% of patients were cT3/cT4 and 75% were cN+. Clinical CRM was involved in 30 patients. All patients were treated with neoadjuvant CRT consisting of 45 Gy in 25 fractions to the pelvis with a tumour bed boost of 5.4 Gy in 3 fractions using 3D conformal radiotherapy; chemotherapy was 5-FU based. Total mesorectal excision (TME) was performed in all patients. The median time between the last day of radiotherapy and surgery was 58 days (range 32-308). As a result, 15 patients (17.0%) were staged between the last day of radiotherapy and surgery was 58 days (range 32-308). As a result, 15 patients (17.0%) were staged.

Conclusion: In this series, incidence of G3 bowel toxicity in patients receiving chemoradiotherapy for rectal cancer was not influenced by gender, age, pre-treatment bowel habit or body habitus. PTV size, patient positioning and radiotherapy delivery technique did not alter the risk. Patients who developed G3 toxicity had a larger volume of small bowel receiving $>45$ GY. Based on this, we now routinely calculate dose to small bowel, thus identifying patients who are at higher risk of developing G3 toxicity and review or change the treatment plan, including chemotherapy dose, to mitigate this risk.

EP-1292
Association between obesity and local control of rectal cancer after surgery and radiotherapy
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Purpose or Objective: The association between metabolism and cancer has been recently emphasized. This study aimed to find the prognostic significance of obesity in advanced stage rectal cancer patients treated with surgery and radiotherapy (RT).

Material and Methods: We retrospectively reviewed the medical records of 111 patients who were treated with combined surgery and RT for clinical stage II-III (T3 or N+) rectal cancer between 2008 and 2014. The prognostic significance of obesity (body mass index ≥25 kg/m$^2$, according to Asian classification) in local control was evaluated.

Results: The median follow-up was 27.3 months (range, 3.3-82.1 months). Twenty-five patients (22.5%) were classified as obese. Treatment failure occurred in 33 patients (29.7%), including local failures in 13 patients (11.7%), regional lymph node failures in 5, and distant metastases in 24. The 3-year local control, recurrence-free survival, and overall survival rates were 88.6%, 72.6%, and 87.3%, respectively. Obesity (n=25) significantly reduced the local control rate (p=0.049, 3-year local control 75.8%), especially in women (n=37, p=0.026). Segregation of local control was best achieved by body mass index of 25.6 as a cutoff value.

Conclusion: Obese rectal cancer patients showed poor local control after combined surgery and RT. More effective local treatment strategies for obese patients are warranted.

EP-1293
Intensified neo-adjuvant chemoradiotherapy in locally advanced rectal cancer: long-term follow-up
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Purpose or Objective: To report long-term follow-up data and determine the toxicity rate in patients with locally advanced rectal cancer (LARC) treated with intensified neo-adjuvant regimen.

Material and Methods: Patients with histologically proven adenocarcinoma of the rectum, stage III-IV, were included and treated with a tri-modality approach. Baseline patient characteristics are shown in Table 1. Intensified neo-adjuvant treatment (CRT) consisted of RT total dose of 50.4/54 Gy and concomitant OXP (50 mg/m$^2$/ week) and 5-FU (200 mg/m$^2$/ five daily continuous infusion). Surgery was planned 7-9 weeks after the end of CRT. Adjuvant chemotherapy was recommended in those patients with lymph-node metastasis at diagnosis.

Results: One hundred patients (median age 64 years) were eligible, between January 2007 and December 2014. Overall, the 5-years OS and DFS were 76.4% and 74.5%, respectively. Local recurrence was recorded in 9 patients (9%) and 23 patients (23%) presented distant metastasis. CRT was well tolerated, with only 17% grade 3/4 acute toxicity. Twenty-four patients (24%) had a pathologic complete response (pCR) and only 1 patient peri-operative metastasis. The 5-year OS rate was 95.7% for patients with pCR and 70.4% without pCR (p = 0.0489). The 5-year DFS were 95.7% and 66.7% for pCR and no-pCR tumor histology, respectively (p=0.0275) (Figure 1).