with rectal adenocarcinoma who received long course neo-adjuvant chemoradiation followed by surgery were analysed and categorised based on the Tumour Regression Grade (TRG) into 2 groups- Group 1 (Good response, TRG 0,1) and Group 2 (Poor response, TRG 2,3). Other factors (clinical and pathological features like lymphovascular/perineural invasion, discontinuous extratumoural lesion deposits, resection margin status and pT/N/M stage of tumour) were also evaluated and all variables along with TRG were correlated with disease progression and 5 year survival. Statistical analysis used: IBM SPSS version 20.0. Categorical variables expressed using frequency and percentage and the continuous variables presented using mean and standard deviation. The chi-square test was used for finding prognostic factors. Univariate analyses of survival were carried out by Kaplan-Meier method and the evaluations of differences were performed with Log Rank test.

Results

Group 1 showed reduced risk for disease progression (p 0.01) and better mean disease free period and overall survival. Poor tumour regression was associated with lymphovascular and perineural invasion and regional lymph node metastases (p<0.001).

Conclusions

Pathological assessment of tumour regression serves as a good predictor for disease outcome and should be assessed in all neoadjuvant treated rectal resection specimens.

**PTU-055** MICROSATELLITE INSTABILITY IN STAGE II COLORECTAL CARCINOMA

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Introduction

10%–15% of colorectal cancer (CRC) is due to Microsatellite Instability (MSI). The aim of the study was to determine the prognostic significance of detecting MSI in Stage II CRC and to understand the demographic and pathological characteristics of the disease in the Indian scenario.

Methods

This was an 8 year retrospective study (2010 to 2017) of 195 patients with Stage II colorectal adenocarcinoma who were categorised into Microsatellite stable (MSS) or MSI based on immunohistochemical expression of the DNA Mismatch Repair (dMMR) proteins. Various clinical and pathological factors as per the Revised Bethesda criteria were compared and analysed between the MSI and MSS groups by Chi-square test and T Test. Kaplan-Meier method was used to calculate the Disease Free Survival (DFS) and Overall-survival (OS) for the 2 groups. Log Rank test was applied to know the strength of association between the DFS and OS with each of the parameters. The data was analysed using IBM SPSS version 20 software.

Results

There were 53 (27%) patients in the MSI group. Younger age, and presence of synchronous or metachronous malignancies, right sided location of tumour, poorly differentiated adenocarcinoma, mucin production and presence of peritumoral Crohn’s like lymphocytic response showed statistically significant association with MSI. A definite relationship of MSI status with family history could not be established. The mean DFS in MSI group was 74.7±3.49 years as compared to 69.2±3.631 months in MSS group. Disease related death was seen in 2.8% and 15.7% of patients in MSI and MSS group respectively, p=0.042. Overall survival among the MSI patients was significantly higher (76.6±4.149 months) than the MSS patients (65.05±3.555) p=0.04. MSI patients did not show improved survival with adjuvant therapy.

Conclusions

Early stage MSI related CRC has good prognosis even without adjuvant chemotherapy. Knowledge of the MSI status in CRC is useful in management decisions and prognostication. In addition it can help to detect those with Lynch Syndrome who may not fulfil the Revised Bethesda criteria.