Background: Early onset colorectal carcinoma, defined as CRC at age below 45 years is rare but an increasing incidence has been noted in Southeast Asia. It is hypothesized to be a biologically and clinically distinct entity. Since data on this subject is scarce from this part of the world, our objective was to study the clinical presentation and outcome of early onset sporadic CRC in patients at a single tertiary care center in Pakistan.

Methods: Data was collected by a retrospective chart review. 131 patients were found eligible for the period between January 1, 2004 and December 31, 2011. A pre-designed and coded questionnaire was used and analysis was done using SPSS. Cox proportional hazard model was used to compute prevalence ratios.

Results: Early onset sporadic CRC accounted for 32% of all CRC treated in the specified time period. Rectal cancers accounted for 45% of the patients. The median age was 35 years (range 16-45 years) and the male to female ratio was 2:1. 74% of patients presented with advanced stage disease. On comparison, bleeding per rectum, signet ring morphology, stage and grade of tumor were found to be statistically significant for the rectal cancer group on a univariate analysis. 93% of rectal carcinoma patients received appropriate surgery and/or neoadjuvant/adjuvant therapy as opposed to 69% of colon cancers. Median survival was 19 months (range 0-112.5 months). However, Kaplan-Meier analysis revealed a trend towards an inferior survival for rectal carcinoma 2 years after initial diagnosis (p = 0.56).

Conclusions: A high incidence of early onset CRC is noted in our population. Rectal carcinoma accounts for almost half the patients in this young CRC population and was found to have a higher frequency of poor prognostic factors. This group showed a trend towards inferior prognosis 2 years after initial diagnosis. It is possible that a larger sample size may have elucidated a statistically significant difference between the two groups.