

# COLORECTAL CANCER UNDER 30: INVESTIGATING THE EMERGING TREND

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## Introduction:

Colorectal cancer (CRC) is the third ranking malignancy and the second leading cause of cancer-related deaths in the U.S. (9%) [1], higher among old (85% >50) and less common < 40, [2] hence the routine screening of young is not cost effective [3]. However, it is rising among under 40, 15% of all the cases with higher frequency of mucinous histology, poorer differentiation, and presenting with later-stage diagnosis—all of which are linked to worse outcomes which raises concerns about change of risk factors, delays in diagnosis, and whether current screening guidelines are sufficient [4]. Limited data exist for patients under 30, and this study aims to analyze their clinicopathological features, treatment patterns, and survival outcomes in the local population [5]

## Results:

261 colorectal cancer patients under 30 years were studied. Few patients had lifestyle risk factors or comorbidities; 11.1% smoked, and BMI averaged 21.5 kg/m<sup>2</sup>.

Mean overall survival was 36.7 months, with 1-, 3-, and 5-year OS rates of 85.1%, 40.6%, and 27.5%. Mean recurrence-free survival was 25.3 months, with 1-, 3-, and 5-year RFS rates of 52.1%, 32.3%, and 28.7%, respectively.

Age	24.2 y	
Sex	Male (64.4%)	Female (35.6%)
Histopathology	Adenocarcinomas (87%)	Mucinous (14.6%) Signet-ring (42.1%)
Grading	Poorly Differentiated (50.2%) Well Differentiated (7.7%)	
Staging	Stage IIIA or IIIB (33.7%) Stage IIIC (26.4%) Stage IV (8%)	
Neoadjuvant	CAPOX (58.2%)	Radiotherapy (54.4%)
Surgery (89.3%)	Low Anterior Resection (18.8%) Abdominoperineal Resection (12.6%) Right hemicolectomy (5.7%) Extended resections (5.4%)	
Complications (9.6%)	Wound infections (3.8%) Anastomotic leaks (0.8%)	
Adjuvant (59.4%)	CAPOX (43.7%).	

## Materials and methods:

This retrospective observational study was conducted at SKMH&RC after IRB approval. Medical records from HIS of colorectal cancer patients under 30 years diagnosed between January 2016 and December 2021 were reviewed for demographics, tumor characteristics, stage, treatment, and survival outcomes. Patients who underwent resection were followed for at least three years. All statistical analyses were performed using SPSS v25

## Discussion:

CRC is increasing among young: Globocan [1]. This study examined patients under 30 years to evaluate the disease characteristics and management. In Pakistan, the young are not screened and patients present late.

Globally, early-onset CRC (EOCRC) now comprises 10–15% of all cases, with rising incidence particularly in those under 30 [5] [6]. While some cases are hereditary, most are sporadic and influenced by environmental or lifestyle factors. Most patients presented with advanced (T3/T4) disease and aggressive histology, including poorly differentiated and signet-ring tumors. Once in hospital, diagnostic and treatment pathways were prompt and multidisciplinary. Despite NCCN recommendations for germline testing and heightened vigilance in young adults, such practices remain uncommon locally

**Conclusion:** Rising CRC among the younger age group in our society needs vigilance but regular screening is not cost effective as indicated by the guidelines

## References:

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