Younger age at presentation of colorectal cancer: just a trend or different biology?

Salem Salem1, Sami Heba1, Allahkoubi Nasi2, Moneer Manar1
1National Cancer Institute, Cairo University, Cairo, Egypt, 2National Cancer Institute, Cairo, Egypt

Introduction: Colorectal cancer (CRC) is a disease predominantly affecting older individuals. Recent studies suggested a constantly rising incidence in young age worldwide. We noticed increased incidence of early onset CRC at our institution. The aim of this study is to assess the incidence, the clinicopathological features and survival of CRC patients in young age in comparison to standard age.

Methods: This is a retrospective study that included all CRC patients who were diagnosed and treated in the National Cancer Institute, Cairo University between 2008 and 2012. Data on the patient characteristics and clinical outcomes were collected and evaluated.

Results: Through this period, 607 patients were assessed. The median follow up period was 26 months (range; 2-163 months). The mean age ± SD of the included patients was 49.1 ± 14.3 years while the median was 50 years (ranging from 16 to 85 years) with slight female predominance. Thirty percent of patients were ≤40 years. Compared to standard age group, younger age patients (<40 years) had significantly less comorbidities, better ECOG performance status and higher incidence of left-sided cancer location (p = 0.001, p = 0.002 & p = 0.03 respectively). They also presented with significantly higher pathological grade, higher incidence of mucinous histological type, and more node-positive disease (P < 0.001 for all). Standard age had significantly high preoperative CEA and higher incidence of metastatic disease (p = 0.046 & p = 0.001 respectively) while younger age had significantly higher incidence of stage III disease and significantly more exposed to chemotherapy (p = 0.001 for both). However no significant differences were found between both groups regarding event free or overall survival.

Conclusion: There is an alarming higher incidence of younger age at presentation of CRC in Egypt with unfavorable biological behavior. However there was no significant impact of age on survival. Further larger trials are warranted to explore the possible environmental and molecular background behind this trend.