Colorectal Neoplasia in Young Adults

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Background: Colorectal cancer (CRC) is a significant health concern globally, being the second leading cause of cancer-related deaths in men and a third in women within Canada with a growing trend among young adults worldwide. However, research on colorectal neoplasia in young adults, particularly in Southeast Asia, is limited. *Objectives:* The goal of the study is to identify risk factors associated with advanced colorectal neoplasia (ACN) in young adults and propose an evidence-based age cut-off for CRC screening. *Methods:* We conducted a retrospective cohort study of 130 young adult patients in the Philippines. Patient demographic and clinical variables, such as age, gender, family history of CRC, location of the lesion and type of service, were analyzed. Multiple predictive models were trained using three-fold cross-validation. An age cut-off was determined using the receiver operating characteristic curve. *Results:* We identified age, gender, family history, and lesion location to be the significant predictors of ACN. The odds of ACN increased with age (OR 1.10 [95% CI: 1.05, 1.16]), in females (2.62 [1.07, 6.75]), and with a family history (13.5 [3.12, 97.0]). Left-sided lesions such as lesions in the descending colon (5.78 [1.31, 29.0]) were more strongly associated with ACN than the right-sided lesions in cecum and ascending colon. Further analysis identified 36 years as the optimal age cut-off for ACN risk stratification. *Conclusion:* These findings could inform health policy for improving early detection of CRC, and provide a foundation for revising the recommended age for CRC screening in young adults, particularly in the Philippines.