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Perioperative characteristics and outcomes of colorectal cancer in elderly patients

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Abstract

BACKGROUND Colorectal cancer (CRC) in older adults presents unique management challenges due to age-related physiological changes and comorbidities. However, this demographic is often underrepresented in clinical research. **AIM** To characterise the perioperative features and outcomes of older CRC patients undergoing surgery at a tertiary hospital in Malaysia. **METHODS** A cross-sectional study was conducted using patient records of older individuals (≥ 65 years old) diagnosed with CRC and who underwent surgery at USM Specialist Hospital, Malaysia, between January 2017 and December 2021. Data on patient characteristics, operative details, pathological findings, body mass index (BMI) based on the Asian classification and postoperative outcomes were collected. Statistical analysis employed chi(2) and t-tests to determine associations and identify significant predictors. **RESULTS** The study included 98 participants (57.1% males, 82.7% Malay), with the majority aged 65-69 years (44.9%). BMI indicated a significant association with age group ($P = 0.023$), with obesity more prevalent among individuals aged 70-74 years and 75-79 years. Type of operation ($P = 0.046$) and PN stage ($P = 0.027$) were also significantly associated with age group. Adjuvant treatment demonstrated a significant association with recurrence and follow-up ($P = 0.006$). Multivariate analysis revealed that BMI, ischaemic heart disease, and M stage were statistically significant predictors of patient survival after follow-up. Overweight patients were 11.22 times more likely to survive than those who were underweight [adjusted odds ratio (aOR) = 11.22, $P = 0.016$], whereas patients with ischaemic heart disease (aOR = 0.07, $P = 0.027$) or M1 stage disease (aOR = 0.24, $P = 0.014$) had significantly lower survival odds. **CONCLUSION** BMI, ischaemic heart disease, and metastatic status are critical determinants of survival, highlighting the importance of comprehensive preoperative assessment and individualised management strategies in this vulnerable population. Further larger-scale, longitudinal studies are needed to improve outcomes among older adults with CRC.

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