

### S5 - A Randomised Controlled Trial on Perioperative Elderly Patients Undergoing Colorectal Cancer Surgery with Enhanced Geriatric Input

Tony MAK Wing-chung<sup>1</sup>, LEUNG Wing-wa<sup>1</sup>, David DAI Lok-kwan<sup>2</sup>, Bosco MA<sup>2</sup>, Janet LEE Fung-ye<sup>3</sup>, Simon NG Siu-man<sup>1</sup>

<sup>1</sup>Division of Colorectal Surgery, Department of Surgery, The Chinese University of Hong Kong, Hong Kong

<sup>2</sup>Department of Medicine and Therapeutics, Prince of Wales Hospital, Hong Kong

<sup>3</sup>Division of Colorectal Surgery, Department of Surgery, Prince of Wales Hospital, Hong Kong

**Introduction:** Colorectal cancer is the second commonest cancer in Hong Kong, affecting a significant number of elderly patients. Major colorectal cancer surgery on elderly patients is associated with higher morbidity, mortality, readmission and longer length of stay. The comprehensive geriatric assessment has been shown to improve clinical management of elderly patients. Orthogeriatric care postoperatively has also been shown to improve outcomes following hip fracture surgery and reduce length of stay.

**Project Objectives:** To investigate the effectiveness of Enhanced Geriatric input in perioperative management of elderly patients undergoing elective colorectal surgery.

**Methods:** Seventy-four patients undergoing elective colorectal cancer resection aged 70 years or over were randomly allocated to one of two groups 1) conventional surgical care (SC) or 2) surgical care with enhanced geriatric input (SCG) in a single centre colorectal unit. Patients had comprehensive geriatric assessment preoperatively in addition to a routine preoperative assessment. Patient were jointly managed with a Geriatric team preoperatively with implementation of early discharge planning by the cologeriatric multidisciplinary team. Outcome measures include: Primary outcome will be the postoperative length of stay. Secondary outcomes are 30-day morbidity and mortality, destination of discharge.

**Results:** During the period between May 2015 to April 2017, 74 patients were recruited for the study. Male patients were more predominant in the SC group ( $p < 0.05$ ) but mean age, BMI and ASA grade were similar. Preoperative cognitive assessment found mean mental state score (MMSE) to be lower in the SC group but delirium and confusion scores were similar. Following surgery, the mean time to ambulation and time to flatus were significantly quicker in the SCG group. The SCG group also had a significantly lower 30-day morbidity with less paralytic ileus. Postoperative cognitive functions were similar in both groups. Length of stay was significantly lower in the SCG group compared to SC (7.1 days vs 14.0 days;  $p < 0.0001$ ), with the majority of patients discharging to home than to rehabilitation care.

**Conclusions:** The enhanced combined cologeriatric perioperative care on elderly patients undergoing elective colorectal resection reduced hospital stay. Patients had earlier ambulation, passage of flatus and consumption of diet post operatively compared to the standard care group with lower complications. There was no improvement in their general fitness or mental status with enhanced cologeriatric perioperative care.

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