

Morbidity, mortality and risk factors of emergency colorectal surgery in elderly patients on Acute Care Surgery service

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Abstract:

Background : Acute Care Surgery service system is a rapid response to definite surgery of emergency surgical conditions which obviously improve the patients outcome. Elderly patients have numerous factors associated with high rate of mortality and morbidity especially in emergency colorectal surgery. This study aims to identify potentially preventable risk factors that impact mortality and morbidity that if handled properly might improve elderly patients outcomes.

Methods: A retrospective review from medical records and analysis of patients over 60 year-old who had emergency colorectal conditions on Acute Care Surgery service, Ramathibodi Hospital from August 2017 - August 2019. Demographic data, hospital process, oncologic outcome and complications were collected. Odd ratio was used to defined significant risk factor.

Results: Eighty-three patients were analyzed. An average age is 72.55 years old. The most common diagnosis is colorectal cancer 68(82.93%). Colorectal cancer locations are left side 34(42.50%), right side 30(37.50%), and rectum 16(20%). Clinical presentations are obstruction without perforation 56(68.29%), perforation 22(26.51%), ischemia 2(2.41%), and bleeding 3(3.61%). Overall mortality rate is 7.22%. The cause of death is septic shock 3(50%), respiratory failure 3(50%), pulmonary embolism 1(16.67%), and advanced disease process 1(16.67%). Morbidity rate from surgical and medical complications are 44.5% and 26.5%, respectively. From all causes, the operations performed are

resection with primary anastomosis 56(71.79%), Hartman procedure 9(11.54%), loop colostomy 12(15.38%), and percutaneous drainage with antibiotics 1(1.28%). Average time from diagnosed to operation room is 62.5 mins. Average operative time is 160.92 mins. Risk factors in emergency colorectal surgery are preexisting heart disease, clinical perforation, and ventilator dependent 6.7-folds, 17.64-folds, and 0.077-folds increased risk of death, respectively. The operative time, intraoperative intravenous volume infusion, blood loss, preoperative nutritional status, lactate level, and other co-morbid are no risk factor of death.

Conclusion: Emergency colorectal surgery in elderly has high rate of mortality and morbidity. Two risk factors for mortality in our study seem not modifiable; preexisting heart disease and clinical of perforation, ventilator dependent is potentially modifiable by advanced surgical critical care. Regarding our result, an early, rapid, protocol-driven process such as sepsis fast track might help improving mortality in septic elderly patients with clinical presentation of perforation.



Biography:

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