

Morbidity and postoperative hospital stay in colorectal cancer surgery

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SUMMARY: Morbidity and postoperative hospital stay in colorectal cancer surgery.

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Knowledge of clinical factors influencing length of postoperative stay and development of complications could allow an early identification of patients subgroups requiring different postoperative care and surveillance. The aim of this study was to identify factors that can predict morbidity, mortality and hospital stay after colorectal cancer surgery. In our series, surgical complication, rectal and left colon tumor localization, ASA score, extraperitoneal anastomosis, presence of stoma, neoadjuvant therapy and advanced age were associated with a postoperative stay. Severe postoperative complications were more frequent in male, ASA III-IV patients who underwent anterior resection.

KEY WORDS: colon, rectum, cancer surgery, hospitalization length, complications.

Introduction

Knowledge of clinical factors influencing length of postoperative stay and development of complications could allow an early identification of patients subgroups requiring different postoperative care and surveillance.

The aim of this study was to identify factors that can predict morbidity, mortality and hospital stay after colorectal cancer surgery.

Materials and methods

The charts of 391 patients who underwent different operations for colorectal cancer at "A. Gemelli" Hospital between January 2003 and December 2008 were reviewed. Surgical, patient and tumor-related

variables, were recorded. The study endpoints were postoperative morbidity, mortality and the length of hospitalization.

Results

No mortality have been recorded. Overall morbidity rate was 20,7%. Thirty-one severe complication (life-threatening complications or complications requiring surgical, endoscopic or radiological intervention), 9 clinical anastomotic leakages and 10 postoperative bowel occlusions were identified. Rate of severe complications was higher in male patients and ASA III-IV. Anastomotic leakage was associated with extraperitoneal anastomosis.

Surgical complication, rectal and left colon tumor localization, ASA score, extraperitoneal anastomosis, presence of stoma, neoadjuvant therapy and advanced age were associated with a postoperative stay greater than 10 days in 103 patients.

Conclusions

Severe postoperative complications were more frequent in male, ASA III-IV patients who underwent anterior resection.

As regard postoperative stay, our analysis showed that postoperative complications were not the only factor associated with prolonged hospitalization: a critical review of these results allowed us to identify several clinical factors that unduly lengthened postoperative stay and could theoretically lead us to a meaningful shift in our postoperative protocol after colorectal surgery.

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