

Multi-organ Resections for Colorectal Cancer: Analysis of Potential Factors with Role in the Occurrence of Postoperative Complications and Deaths

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Abstract

Aim: Multi-organ resection for colorectal malignancy is a topic of interest nowadays as it raises the issue of benefits versus increased morbidity. This study aims to identify factors that may influence the development of postoperative complications and death following multivisceral resection.

Methods: The study included 107 patients hospitalized in the Surgical Clinic III of Cluj-Napoca, who underwent multivisceral resections for colorectal cancer pathology. This is a retrospective study covering the period between 2006 and 2010. This study compares the morbidity and mortality following multi-organ resections for locally advanced colo-rectal cancer, with results in patients with uncomplicated colorectal resections. The study also highlights the impact that certain factors have on the development of postoperative complications.

Results: This study shows a higher incidence of death and postoperative complications in the case of multiorgan resections. The differences were found to be statistically significant as follows: postoperative complications: 26% after multiorgan resection and 14% after uncomplicated resection respectively ($p = 0.001$); postoperative death: 11% after multi-organ resection and 3% after uncomplicated resection respectively ($p < 0.001$). The factors that have influenced in a negative way the postoperative evolution of the patients were: diabetes, personal history of malignant disease, associated heart disease, major abdominal surgery prior enrolling, the number of resected organs and increased intraoperative blood loss (over 500 ml).

Conclusion: In cases of locally advanced colorectal neoplasm, multiorgan resection should become the standard indication, as it offers patients their only chance of survival, comparable to that obtained in less advanced stages of the disease. This indication is underlined by the high resectability rate (R0) accomplished in our service. Preoperative compensation of the associated pathologies, the surgery performed by experienced teams, as well as providing an adequate intensive care are required to reduce the postoperative risks.

Key words: colorectal cancer, local invasion, multiorgan resection, morbidity, mortality

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