

Multivisceral Resection for Locally Advanced Colon Cancer: Clinical and Treatment Characteristics Based on Final Pathological Evaluation. A Retrospective Study

Bogdan Filip^{1,2}, Ana Grigoras^{1,2}, Madalina Gavrilesu^{1,2}, Ionut Hutanu^{1,2}, Iulian Radu^{1,2}, Viorel Scripcariu^{1,2}, Dragos-Viorel Scripcariu^{1,2}

¹Department of Surgery, Grigore T. Popa University of Medicine and Pharmacy, Iasi, Romania

²1st Surgical Unit, Regional Institute of Oncology, Iasi, Romania

Abstract

Background: Radical resection remains the most important factor that influences long term survival for patients with colon cancer. In order to achieve R0 resections in cases of locally advanced colon cancer a multivisceral resection is required. The aim of this study is to give insights regarding tumour characteristics, surgical treatment, early results and final evaluation of surgical specimen.

Methods: This retrospective study includes all consecutive patients positively diagnosed with colon cancer between January 2018 and January 2025 in whom multivisceral resection was performed. We evaluated the clinical characteristics of the patients, the type of surgery, postoperative complications and the final pathological staging. We grouped the patients based on pathological evaluation and TNM staging system in pT3, pT4a and pT4b.

Results: During this period there were 968 patients diagnosed with colon cancer in whom surgery was performed, of those multivisceral resection was performed in 82 cases (8.47%). Based on final pathological evaluation 21 patients (25.6%) presented pT3 tumours and the rest, 74.4% were pT4 tumours, the vast majority were patients with pT4b tumours (43 cases, 52.4%). Most common organs resected were small bowel 26 patients (31.7%), bladder 29 cases (34.1%), genital organs in 24 cases (28.2%) and abdominal wall in 22 cases (25.9%). Based on pathological evaluation pT4b tumours were more frequent moderate (55.8%) and poorly (7%) differentiated with lymphatic (67.4%), vascular (39.5%) and perineural invasion (27.9%) by comparison with pT3 or pT4a tumours. Severe complication occurred in 7.31%.

Conclusions: Multivisceral resection represents a relatively safe procedure in the radical treatment of patients with advanced colonic cancer. Our study demonstrates that if this procedure is done in a tertiary centre by a surgical team with high expertise and experience in treatment of advanced abdominal malignancies it can provide a safe solution for these patients.

Keywords: advanced colon cancer, multivisceral resection, morbidity