

Nonelective Left-Sided Colon Cancer Resections are Associated with Worse Postoperative and Oncological Outcomes: A Propensity-Matched Study

Mircea Beuran^{1,2}, Ionut Nego^{1,2}, Mihaela Vartic³, Alexandru Runcanu², Cezar Ciubotaru², Adelina Cruceru², Alina Prodan²

¹Carol Davila University of Medicine and Pharmacy Bucharest, Romania

²Department of General Surgery, Emergency Hospital of Bucharest, Romania

³Department of Anesthesia and Intensive Care, Emergency Hospital of Bucharest, Romania

Abstract

Background: Emergency general surgery patients are at significant risk of postoperative complications and mortality compared with their elective counterparts. Although challenged by some studies, increasing evidence shows that emergency colectomy for cancer is associated with worse early postoperative and long-term outcomes.

Methods: We have included all patients with colon cancer admitted to the Emergency Hospital of Bucharest between January 2011 and January 2016. Selection criteria: (1) colon tumor; (2) left-sided localization of the tumor; (3) pathology exam revealing adenocarcinoma. Exclusion criteria: (1) rectal cancers; (2) benign pathology (e.g. diverticulitis).

Results: We included 615 patients with left-sided colon cancer. 275 (44.7%) patients presented complicated disease. The complication was represented by obstruction in 205 (33.3%) patients (OG), hemorrhage in 55 (8.9%) patients (HG), and perforation in 15 (2.4%) patients (PG). The anastomotic leakage rate was similar between obstructive and elective cases (6.2% versus 6.5%, $P>0.05$), but was significantly higher for hemorrhagic patients (16%) ($P=0.046$). The 30-day complication rate and mortality were significantly higher in emergency patients ($P<0.05$).

Conclusions: We found significant worse short- and long-term outcomes for patients with non-elective left-sided colon cancer resections. Correlating the ominous prognosis with the high incidence of the complicated disease, we may emphasize the impact on de complicated colon cancer on the general population.

Key words: colon cancer, complicated disease, emergency surgery