

## **Treatment results of older patients with colorectal cancer operated in the emergency setting - systematic review of the literature**

J. Kenig(1), J. Mituś (2), K. Mastalerz(1), A. Niekurzak(1), U. Skorus(1), K. Rapacz(1), A. Kapelańczyk(1), P. Pietrzyk(1)

1. Department of General, Oncologic and Geriatric Surgery, Jagiellonian University Medical College, Krakow, Poland

2 Department of Surgical Oncology, Centre of Oncology Maria Skłodowska-Curie Memorial Institute, Krakow, Poland.

**Introduction:** Due to the prolongation of life expectancy in Europe, the proportion of older people in the population is constantly increasing. This also applies to the number of patients operated due to colorectal cancer in the emergency setting. A consensus conference of the European Association for Endoscopic Surgery (EAES) suggested that<sup>2</sup> all patients with acute abdomen could benefit from a laparoscopic approach. Therefore, the aim of this work was a literature systematic review of the results of the treatment of older patients with colorectal cancer operated in the emergency setting, particularly operated using the laparoscopic approach.

**Materials and methods:** A systematic review of Medline, Embase and Cochrane library was made from January 2000 to December 2017 using PRISMA criteria, quality assessment of Newcastle-Ottawa research and the risk of systematic errors. The primary goal was to assess 30-day mortality and morbidity. The secondary goal was the oncological results of treatment (margins, lymph nodes), 5-year survival

**Results:** Finally, 11 studies were included in the study (2 prospective and 9 retrospective) including 18892 patients aged 70-101. Women accounted for 59%. ASA> 2 comprised 33-100% of the surveyed populations. Only 4 studies described in detail the stage of cancer. The most common indications for the procedure were in order: obstruction of the gastrointestinal tract, perforation and bleeding. 30-day mortality ranged from 9-30%, 30-day complications occurred in 20-82%. The one-year mortality increased with age and was 30-50%. Only two studies have described oncological results that showed non-radical treatment in 8-14% of patients. Only 2% of older patients were treated using minimally invasive surgery. There was no difference in the morbidity and mortality between open and laparoscopic approach. However, the authors did not report any oncologic results.

**Conclusions:** The results of treatment are bad, 1/3 of patients die in the first thirty days and half in the first postoperative year. Laparoscopic surgery is feasible and safe alternative to open surgery in the selected patients offering advantages of the minimal invasive surgery. However, further research is necessary because most of the studies are retrospective, often concerns patients operated in the last century, does not describe oncologic results and does not include any geriatric evaluation.

**Kategoria:** K1. Laparoscopia w nagłych stanach chirurgicznych / Laparoscopy in emergency surgical conditions