

Meeting abstract

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## Colorectal cancer surgery in the elderly: oncologic results from our experience

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### Aim

Colorectal cancer is a disease of elderly people, since over 70% of cases occur in patients aged 65 years or older, and is a major cause of morbidity and mortality. The purpose of this study is to evaluate the outcome of surgical treatment in this population referred to our institution.

### Methods

A retrospective analysis of a geriatric population (>65 years) was proposed to review the risks and the benefits of surgery for colorectal cancer (2006–April 2008). Measures of the effectiveness of surgery included overall survival and disease-free survival with emphasis to age-related risk factors.

### Results

A total of 100 patients with the diagnosis of colorectal cancer were identified. Of these, 71 patients were 65 years of age or older. Gender: 45 Male/26 Female. The median age was 75.3 years. Sixteen (11%) patients were octogenarians. Fifty-seven patients (78%) showed pre-existing co-morbidities age-related: diabetes mellitus, cardiopulmonary disease, and chronic renal disease. Most clinical cases presented with obstructive ileum symptoms and anemia. Combined neoadjuvant therapies based on radio-chemotherapy protocols (RT-CHT) were carried out successfully in 9 patients. Surgery was performed in emergency in 4 cases (6%). Most patients had left-sides tumors and underwent to low anterior resection (29 cases: 20.5%), 4 cases of left hemicolectomy, 3 patients showed

an advanced rectal tumor that required Hartman colostomy, 12 cases of sigmoidectomy, 5 abdominal perineal resection, and 2 cases of subtotal colectomy. Sixteen patients (11.4%) had right-sided tumors and underwent to right hemicolectomy. In 29 cases was realized a stoma (10 colostomies and 19 loop ileostomies). Laparoscopic approach was proposed in 11 patients, carried out in 7 cases successfully. In 14 patients, a synchronous hepatic metastasis was diagnosed, 4 lung metastasis and 1 case of peritoneal carcinosis. In 3 patients combined resection of the primary tumor together with liver metastasis was performed with cyto-reduction intent.

The majority of tumors presented type II cell grading (G2). MSH-2 and MLH-1 gene products were expressed in 97% of all tissue specimens. The serum analysis of tumor antigens (Ca 19-9, CEA, AFP) was negative in 47 cases (66%).

According to Astler and Collier's staging of neoplastic disease, this was the pathological founding: Stage A 33%, B1 27%, B2 1%, C1 13%, C2 6% and D 20%. A surgical resection with tumor-free microscopic margins (RO) was archived in 70 cases. Postoperative complications occurred in 48 patients (68%). Of these, 53% concerned medical complications. The major complications were analyzed in according to the American Society of Anesthesiologists (ASA) physiological status scoring system. ASA score, strongly depending to clinical functional status, was

a preoperative parameter able to determine the surgical morbidity.

Perioperative mortality rate was 5%. Hospitalization was in media of 15 days and the follow-up for an average of 24 months. Considering the analysis of overall survival and disease-free survival at 24 months, a better trend in term of prognosis was observed in a geriatric cohort of patients with age >70 years. The overall survival at 24 months was 81.4% for patients >70 years vs 70.9% for the younger group. The disease-free survival at 24 months was 81.4% vs 60.6% respectively. Kaplan-Meier curves for the overall survival and disease-free rates showed no statistically significance (p: ns log-rank).

### Conclusion

Recent studies demonstrated that elderly patients often received sub-optimal surgical and medical treatments because of unacceptable prejudices. The relationship between age and outcomes is complex and depend by differences in tumor-stage and pre-existing co-morbidities. Chronological age alone does not provide sufficient guidance for surgical effectiveness. Key parameters in the surgical risk assessment are represented by biological indexes of each patient. The oncologic results and the morbidity rates of our experience confirm that surgery is a safe therapy in most elderly patients when operative risk and associated diseases evaluation has been careful calculated. The role of surgery in colorectal cancer geriatric patients is well defined in the scientific literature. More comprehensive insights in oncologist surgery of elderly population will derive from the better understanding of the physiology of aging and combined therapies.

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