

UNIVERSITATEA DE MEDICINĂ ȘI FARMACIE

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ȘCOALA DOCTORALĂ

DOMENIUL MEDICINĂ

**THE INFLUENCE OF MESORECTUM LYMPHATIC
INVASION ON LOCALLY RECURRENCE OF RECTAL
CANCER**

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Abstract

Introduction

The management of colorectal cancer still remains a challenge. The aim of this study is to identify the impact of mesorectal nodal invasion and its influence on prognosis and survival in patients with rectal cancer compared to patients with negative nodes, the necessity or not of adjuvant chemotherapy and the combination of chemotherapy considered standard bay for patients with positive nodes and complete nodal resection in all international guidelines (ESMO Clinical Practice guideline for rectal cancer, Guideline of the American Society of Colorectal Cancer.

Materials and methods

Retrospective, observational, non-randomized study on a sample of 156 patients with rectal neoplasm, diagnosed and treated in the General Surgery Clinic of the "Colțea" Clinical Hospital in Bucharest led by Prof. Dr. Traean Burcos, during January 1, 2014 - December 31, 2018, representative sample for a population of patients diagnosed and treated in a center specializing in oncologic surgery, the cross-section of the study being the date of May 1, 2020. Local recurrence (LR) was defined as a recurrence in the pelvis, including recurrence at the level of the anastomosis and at the site of the perineal wound. Histological verification was not performed for all patients and was not a prerequisite for the diagnosis of LR. Growth of a new tumor observed macroscopically on radiographic or scintigraphic examinations, or persistent pain occurring postoperatively during the pain-free period were recorded as LR. Time to LR was measured from the date of surgery until the recurrence was diagnosed. In patients without recurrence, the observation time was defined as the time from surgery to the last outpatient visit. Distant recurrence was defined as radiological and/or scintigraphic demonstration of metastases. The methods used were the analysis of survival curves - Kaplan-Meier and Cox regression.

Results

Of all the patients included in the study, 23 were over 75 years old. Of them, only one survived at 60 months, a percentage of 4.3% of cases. Up to the age of 75, 24 cases (18.2%) survived at 60 months, which confirms that patients with the age category over 75 years have a 4.2

times lower survival rate compared to the age category up to 75 for years. Of 156 patients included in the study, 125 cases were diagnosed at T3-T4 stages. Among the 25 patients diagnosed with stage T2, the survival rate was 24%. Out of 73 cases diagnosed in T3 stage, the survival rate was 17% and out of 52 cases diagnosed in T4 stage, the survival rate was noted to be 11%. Patients with more than 6 reactive nodes had a 18.75% lower percentage of deaths and a 10.30% higher restrictive survival average compared to patients with 6 or less reactive nodes, the effect being statistically significant ($p < 0.05$). Poorer survival was statistically related to the presence of lymph nodes. Overall, local recurrence rates were 5% (8/148) in patients without distant metastases and 15% to 21% in patients with positive lymph node metastases. Positive lymph nodes, N2 disease, with vascular and lymphatic invasion, and perineural invasion were independently associated with significant risk for local recurrence. Independently, the presence of more than 6 reactive nodes decreases the risk of death by approximately 50% ($p < 0.05$), while the presence of more than 2 metastatic nodes increases the risk of death by 328% ($p < 0.01$).

Conclusions

The relapse rate in the group of patients followed and for the stages studied corresponds to international findings regarding the probability of relapse depending on the stage. It is necessary to establish a National Cancer Registry with a separate section for colorectal cancer that makes it possible to objectively estimate the overall incidence and survival due to rectal cancer.