

### **An Overview of Five-Year Survival in Rectal Cancer in Relation to Lymph Node Status**

Zalán Benedek<sup>1</sup>, Szabolcs Todor Boér<sup>2</sup>, Orsolya Bauer<sup>1</sup>, Kálmán Sárdi<sup>3</sup>, Attila Todor<sup>4</sup>, Nicolae Suciú<sup>1</sup>, Marius Florin Coros<sup>1</sup>

<sup>1</sup>Surgical Clinic, Mureş County Emergency Hospital, "G.E. Palade" University of Medicine, Pharmacy, Science and Technology, Târgu Mureş, Romania

<sup>2</sup>Surgery Clinic, Mureş County Clinical Hospital, Târgu Mureş, Romania

<sup>3</sup>2nd Surgery Clinic, Mureş County Emergency Hospital, Târgu Mureş, Romania

<sup>4</sup>"G.E. Palade" University of Medicine, Pharmacy, Science and Technology, Târgu Mureş, Romania

#### **Abstract**

*Introduction:* Lymph node metastasis is regarded as an important prognostic factor for predicting disease recurrence and survival in patients with colorectal cancer. Several studies suggest that the lymph node ratio has a greater importance in survival than the number of metastatic lymph nodes. The scope of this study is to examine the 5-year survival of rectal cancer patients, examining several prognostic factors with emphasis on lymph node status.

*Material and methods:* A retrospective study was conducted at single surgical clinic from Romania, using data from patients who have been treated for rectal cancer between January 2009 and December 2014. Patient present status and regarding the multimodal treatment was assessed through telephonic method, data was extracted from the electronic database of the clinic and histopathological reports.

*Results:* A total number of 144 patients affected by rectal cancer were assessed. Statistical analysis of the variables showed that age ( $p=0.001$ ), T stage ( $p=0.049$ ), N stage ( $p=0.005$ ), LNR ( $p=0.006$ ), type of surgery ( $p<0.001$ ), presence of vascular invasion ( $p<0.001$ ), metastases ( $p<0.001$ ), to be significant prognostic factors for survival.

*Conclusions:* The 5-year survival of the patients we included in the study was 63,9%. Nodal status, expressed by lymph node ratio proved to be a significant prognostic factor of patient survival.

**Key words:** rectal cancer, prognostic factors, survival, lymph node status