

PREDICTIVE IMPORTANCE OF TUMOR BUDDING, LYMPHOVASCULAR AND PERINEURAL INVASION IN COLORECTAL CARCINOMA

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Colorectal cancers comprise a heterogeneous group of malignant intestinal tumors that have various mechanisms of onset, based on different combinations of genetic and epigenetic alterations. Many authors suggest that the TNM staging most accurately determines the prognosis of each case of colorectal cancer, however other parameters that indicate the aggressive behavior of the tumor are required as well. Such parameters involve perineural invasion, lymphovascular invasion, and tumor budding. The aim of this paper was to examine association between perineural invasion, lymphovascular invasion, and tumor budding with the tumor stage in colorectal cancers. The study included histopathology cases of 142 large bowel cancers removed at the Surgical Clinic in Niš during the period of one year (2016). The tumor stages were determined based on the TNM classification recommended by AJCC. Perineural invasion, lymphovascular invasion, and tumor budding were relatively common finding: 20.4, 40.1, 44.4 percent of examined cases, respectively. Univariate logistic regression analysis revealed a statistically significant correlation between high grade tumor budding, lympho-vascular and perineural invasion and the advanced stage of tumor disease. The evaluation method, according to the International Tumor Budding Consensus Conference (ITBCC), should be used to evaluate/define biological aggressiveness of a tumor, and may represent the basis of a routinely used staging system in patients with colorectal cancer.

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