

Lymphovascular Invasion in the Evolution of Colon Cancer: A Single Center Experience and Analysis of the Specialized Literature

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Abstract

Introduction: Histopathologically confirmed lymphovascular invasion (LVI) requires the identification of tumor cells either within a duct delimited by the endothelium or the elastic lamina. Small-caliber vessels that cannot be classified as lymphatics or venules can be identified as angiolymphatic vessels. Tumor invasion of small non-muscularized vessels can be represented by invasion of postcapillary lymphatics or venules, both variants described as negative prognostic factors. Many studies have established LVI as a potential prognostic indicator for the evolution of the patient with colon cancer, regardless of the stage of the disease.

Material and Method: In the present article, we report a retrospective observational study over a 5-year period, conducted between 2015 and 2019, within the General Surgery Clinic of Colțea Clinical Hospital in Bucharest, where we collected and analyzed data from patients diagnosed with colon cancer.

Results: 241 cases of colon cancer diagnosed and operated on in the General Surgery Clinic of Colțea Clinical Hospital in Bucharest were identified, in different stages of evolution, represented by 116 cases (48.13%) male patients and 125 cases female patients, representing a percentage of 51.86% of the total studied group.

Conclusions: The most frequent localizations of LVI were in the ceco-ascending and sigmoid colon, and the moderate degree of differentiation G2 was the most frequently encountered, followed by well-differentiated adenocarcinoma G1.

Keywords: lymphovascular invasion LVI, colon cancer, degree of tumor differentiation