

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

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### **Abstract**

*Introduction:* Intensely published in the last decade, the dynamics of tumor spread along nerve pathways is not fully known, there are numerous molecular mechanisms that intervene and favor perineural invasion. Currently, this pathological entity does not benefit from the existence of a specific treatment.

*Material and Method:* The present material represents a retrospective observational study conducted over a period of 5 years. Throughout the study, data were collected and analyzed on patients with colon cancer, hospitalized and operated on within the General Surgery Clinic of Colțea Clinical Hospital in Bucharest. The study involved careful analysis of surgical protocols, clinical observation sheets, clinical and paraclinical investigations performed during hospitalization and especially the histopathological reports of the resected specimens.

*Results:* The present study identified 34 (14,1%) cases of perineural invasion out of 241 enrolled patients.

*Conclusions:* PNI prevalence was highest in histopathological differentiation grades G1 (52.9%) and G2 (38.2%). Most cases were identified in stage III B (9 cases), representing 26.4% of the total positive PNI group.

**Keywords:** perineural invasion (PNI), colon neoplasm, degree of tumor differentiation