

THE IMPORTANCE OF STUDYING THE PROLIFERATION MARKER KI-67 IN PRECANCEROUS CONDITIONS AND EARLY LARYNGEAL CANCER

*Slaviša Radosavljević¹, Miško Živić^{2,3}, Boris Đinđić^{2,4},
Milan Stanković^{2,3}, Dragan Mihailović^{2,5}, Marija Conić-Miletić³*

Primary Healthcare Center Obilić, Obilić, Serbia¹
University of Niš, Faculty of Medicine, Niš, Serbia²
ENT Clinic, Clinical Center Niš, Niš, Serbia³
Internal Clinic Clinical Center Niš, Niš, Serbia⁴
Center for Pathology and Pathological Anatomy, Clinical Center Niš, Niš, Serbia⁵

Contact: Slaviša Radosavljević
Primary Healthcare Center Obilić, 15 000 Obilić, Serbia
E-mail: radosavljevicslavisa@yahoo.com

The incidence of malignant tumors and therewith malignant laryngeal tumors necessitates the study of pathogenesis, histology and diagnostic methods for early laryngeal cancer with the aim of eradication and treatment, and especially early detection of lesions that give rise to laryngeal cancers. The estimation of Ki-67 proliferation in biopsies of precancerous lesions in the larynx is potentially useful to determine the advancement of these lesions into laryngeal carcinoma.

The subjects of this research were patients of the ENT Clinic, Clinical Center Niš. Prospective investigation included 121 patients with precancerous conditions and laryngeal cancer.

The mean age of all examinees was 64.90 ± 10.28 years, with age range from 48 to 87. No statistically significant difference in age between female and male examinees was found ($p = 0.608$).

There was a statistically significant difference in the values of Ki-67 index in the examineed groups ($p < 0.001$). A further analysis found a statistically significant difference between the normal mucosa and dysplasia grade II ($p = 0.05$), the normal mucosa and dysplasia grade III ($p < 0.001$), and the normal mucosa and laryngeal cancer ($p < 0.001$). In addition, statistically significant differences between laryngeal papillomatosis and laryngeal cancer was determined ($p = 0.05$).

The study of Ki-67 as a marker of proliferation in precancerous conditions and early laryngeal cancer is a relevant method for: a) planning therapeutic strategies b) prognosis c) evaluation of therapeutic results d) exchange of information e) continuous research and follow-up of the nature of the human laryngeal cancer.

There were statistically significant differences in Ki-67 as a marker of proliferation between the normal mucosa and dysplasia grade II, the normal mucosa and dysplasia grade III, and the normal mucosa and laryngeal cancer. *Acta Medica Medianae 2017;56(1):24-30.*

Key words: Ki-67, cancer, larynx