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HISTOCHEMICAL EVALUATION OF THE GROWTH RATE OF CUTANEOUS PAPILLOMAS

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Abstract. This study aims to evaluate the growth rate of cutaneous papillomas using histochemical methods. Approximately 200 patients with various forms of skin papillomas were examined. Tissue samples were analyzed using histochemical staining techniques to assess cellular proliferation, metabolic activity, and structural characteristics. The results showed that increased proliferative activity and metabolic intensity were directly associated with accelerated papilloma growth. Histochemical markers revealed significant differences between slow-growing and rapidly progressing lesions. The findings highlight the importance of histochemical analysis in understanding the biological behavior of papillomas and improving diagnostic and therapeutic approaches.

Key Words. cutaneous papilloma, histochemistry, growth rate, proliferation, skin lesions

Annotatsiya. Ushbu tadqiqot teridagi papillomalarning o‘sish tezligini gistokimyoviy usullar yordamida baholashga bag‘ishlangan. Tadqiqotda turli xil teri papillomalari bilan og‘rigan taxminan 200 nafar bemor tekshirildi. To‘qima namunalariga gistokimyoviy bo‘yash usullari qo‘llanilib, hujayra proliferatsiyasi, metabolik faollik va strukturaviy xususiyatlar o‘rganildi. Natijalar shuni ko‘rsatdiki, proliferativ faollik va metabolik jarayonlarning kuchayishi papillomalarning tez o‘sishi bilan bog‘liq. Gistokimyoviy markerlar sekin va tez o‘suvchi papillomalar o‘rtasida sezilarli farqlar mavjudligini aniqladi.

Kalit So‘zlar. teri papillomasi, gistokimyo, o‘sish tezligi, proliferatsiya, teri kasalliklari

Аннотация. Данное исследование посвящено оценке скорости роста кожных папиллом с использованием гистохимических методов. В исследовании приняли участие около 200 пациентов с различными формами кожных папиллом. Образцы тканей были исследованы с применением гистохимических методов окрашивания для оценки клеточной пролиферации, метаболической активности и структурных особенностей. Результаты показали, что повышение пролиферативной активности и метаболизма связано с ускоренным ростом папиллом.

Ключевые Слова. кожная папиллома, гистохимия, скорость роста, пролиферация, кожные заболевания

INTRODUCTION. Cutaneous papillomas are benign epithelial tumors commonly encountered in dermatological practice. Despite their benign nature, their growth dynamics vary significantly among patients. Understanding the biological behavior of these lesions is essential for proper diagnosis and management. Histochemical methods provide valuable insights into cellular activity, metabolic processes, and tissue structure. Evaluating the growth rate of papillomas through histochemical analysis allows for a deeper understanding of their development and potential risk factors associated with rapid progression.

LITERATURE REVIEW. Previous studies have shown that the growth of papillomas is closely related to cellular proliferation and metabolic activity. Histochemical markers such as nucleic acid content, enzyme activity, and protein synthesis levels are widely used to assess tumor growth dynamics. Researchers have reported that increased mitotic activity and enhanced enzymatic

reactions are indicators of rapid tumor growth. Additionally, variations in keratinization and epithelial differentiation have been associated with different growth patterns of papillomas.

RESEARCH METHODOLOGY. This study involved approximately 200 patients diagnosed with cutaneous papillomas. Clinical examinations were conducted to assess the size, number, and localization of lesions. Biopsy samples were obtained from papillomas and subjected to histochemical analysis using standard staining techniques. These included methods for detecting nucleic acids, proteins, and enzyme activity. Microscopic evaluation was performed to determine the level of cellular proliferation and metabolic intensity. The obtained data were statistically analyzed to identify correlations between histochemical parameters and papilloma growth rates.

ANALYSIS AND RESULTS. The analysis revealed that papillomas with higher histochemical activity demonstrated significantly faster growth rates. Increased staining intensity for nucleic acids and proteins indicated elevated cellular proliferation. Enzyme activity was also found to be higher in rapidly growing lesions, suggesting intensified metabolic processes. In contrast, slow-growing papillomas showed lower levels of histochemical markers. Statistical evaluation confirmed a strong correlation between histochemical indicators and the growth rate of papillomas. These findings suggest that histochemical analysis can serve as a reliable method for predicting tumor behavior.

CONCLUSION AND RECOMMENDATIONS. The study confirms that histochemical characteristics play a crucial role in determining the growth rate of cutaneous papillomas. Increased cellular and metabolic activity is associated with rapid lesion progression. Histochemical evaluation should be considered an important diagnostic tool in dermatology for assessing tumor behavior. Early identification of rapidly growing papillomas can improve treatment outcomes. It is recommended to incorporate histochemical analysis into routine clinical practice and to conduct further research on molecular mechanisms underlying papilloma growth.

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