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## MORPHOLOGICAL EPIDERM ANALYZE FOR DIAGNOSIS

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The aim of the study was to identify structural characteristics of melanocytic nevi. In this context using microscope, could be possible a good description related melanocytic nevi, referring to youth patients. Good to mention that in a human individual life, play a significant role, genetic, epigenetic, microbiomic, and proteomic factors together with others. Future directions refers to preventive and prophylactic methods.

The author made a conclusion that prevention and educational methods, are important. More than early detection in melanocytic nevi is a great point in order to try to treat and to avoid maybe possible malignancy degeneration. Techniques for the laboratory diagnosis that are implications in monitoring previously pathological status, are implied and conduct to a proper quality of life in patients diagnosed with melanocytic nevi. In this direction, implication of an interprofessional team strategies is one of the proper conditions.

*Key words:* patients, epiderm, structure, analyse, melanocytic nevi

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### INTRODUCTION

In order to define a disease, must have in attention a lot of different factors such as historical points, or social and cultural, but not only. Results of research studies, show us that some connective cells such as fibroblasts, lose their identity, in pathological conditions [8]. Another specific cells, namely melanocytes are known that having a specific structural point that is consider important in structural pathological description [12]. Referring to melanocytic nevi, in medical specific field, various pigmented lesions of the epiderm, known as nevi, could be observe in different part of the body, specific for pathology including solar lentigo [14]. In medical analyze, an atypical nevus, can be biopsied [13]. Is important to practice a biopsy beside the extended clinical evaluation in melanocytic nevi. Specialists, are usually looking also for changes that surrounding nevi. A great point in this field of research, could be possible the genetic susceptibility [7]. A complete medical examination, play a great point for establishing the medical conduct, for healthy status improving [4, 15]. Structural analysis describe specific cells namely melanocytes as aggregated in «nests», which conduct forming the nevus cells [18]. To the human persons with different age, these specific cells knowing as melanocytes could be found in various areas of the skin of the parts of the body [16, 17]. Theoretical and practical studies, show that melanocytic nevi developing *in utero* present genetical

differences from those that appear later [10, 11]. From scientific literature, that are known information, referring to specific nevi [2]. Also from literature and from practicum are known different informatiuons about extending melanocytic nevi, having specific scientific names [14]. We can mention that currently, because are many cases in all of the world, the proper treatment of epidermal nevi is challenging [3, 5, 9, 17, 20]. Congenital melanocytic nevi it is known as a study subject that offer controversy [1]. Clinical monitoring in congenital melanocytic nevi is important for diagnosis and for possible medical treatment strategies applications [19].

For **the purpose of the study** we can mention a little bit about laboratory technique used and bout the materials needed.

### MATERIAL AND METHODS

From the realization of permanent microscopic preparations was knowing the steps from the classic method, using a standard. Hematoxylin & Eosin staining technique. The samples were drawn from male and female gender patients, children before mature age, from urban and rural home environment. In order to assist medical staff in understanding the concerns outlined, a series of digital images have been prepared. The operative pieces are intended to bring in the pathological anatomy service for macroscopic examination for diagnostic purposes. This are examined by performing the microscopic analysis.

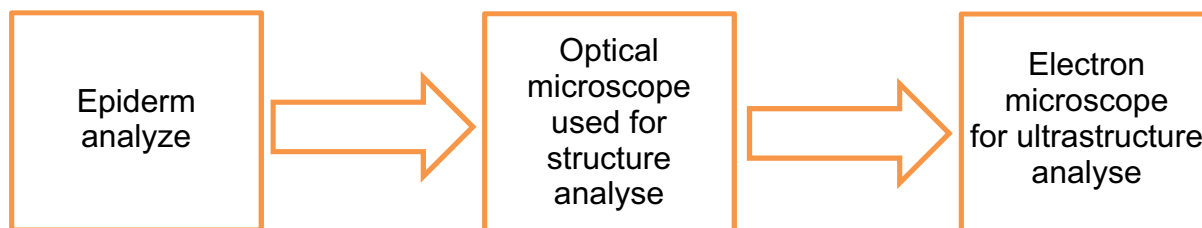


Figure 1 – Epiderm analyze techniques

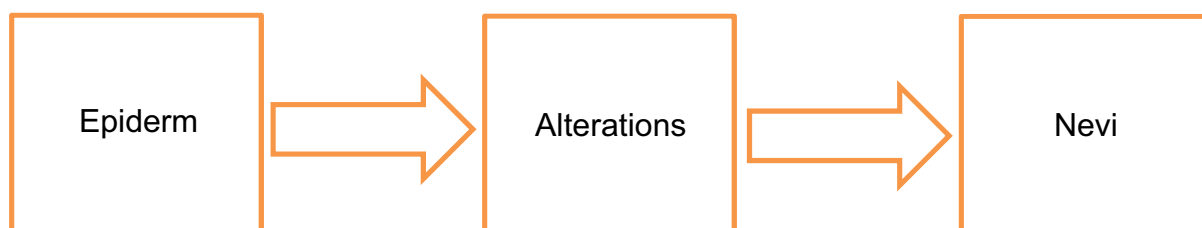


Figure 2 – Epiderm compounds – normal vs pathological

## RESULTS

Skin protect us during the life, from different factors. For epiderm analyze, structural and ultrastructural characteristics could be able to be describes, using optical and electron microscope. Structural analyze of the epiderm, using color laboratory techniques, is able to describe the specific layers with their characteristics. Using electron microscope, filaggrin knowing as an important epidermal protein and tight junction located in the granular layer of the epiderm, could be observed. For this purpose, transmission electron microscope examination, is consider one proper method for analyze. Scanning electron microscopy is also a modern method for analyze, which offer results that demonstrate abnormalities in the epiderm

ultrastructure (figure 1). The body is covers by skin and the epiderm contains different types of glands, as sebaceous glands and sudoripar glands. It is known a specific physiopathologic mechanism in the functionality of the body and epidermal compounds and their body surroundings.

Histopathological analyze describe to the melanocytic nevi located on various regions of the body, with asymmetry, irregular form, cytologic atypia, and mitotic activity. Medical specialists, describe and conclude that to benign melanocytic nevi, could be possible to describe atypical pathological characteristics and more important good to mention characteristics when benign nevi are traumatized (figure 2). Dermoscopy play a role for a proper

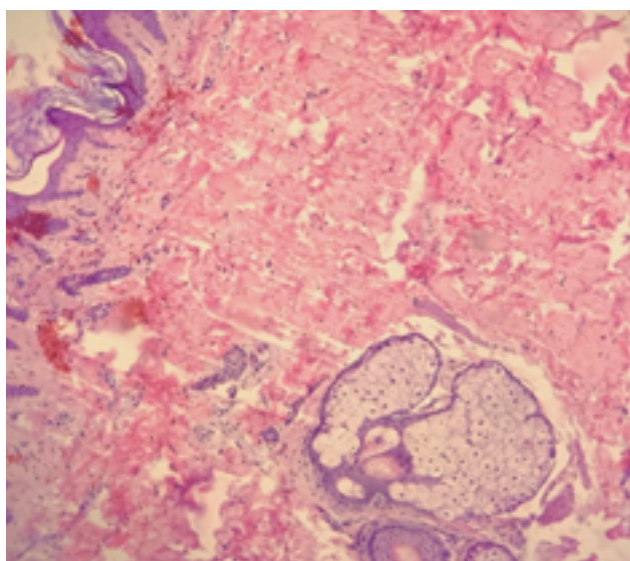


Figure 3 – Epiderm and annex glands. Magnification x10. Staining: Hematoxylin &Eosin

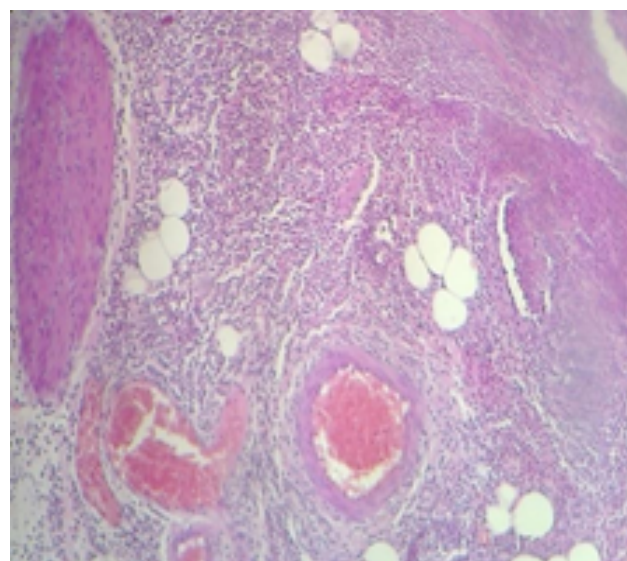


Figure 4 – Traumatic pigmentar nevus and adjacent region

diagnostic important in practice to all ages, including, youth age and children. Epiderm is a barrier, but is able for conducting to an illness status if include modifications in structural compounds (figure 3).

Histopathological analyze describe to the melanocytic nevi located on various regions of the body, with asymmetry, irregular form, cytologic atypia, and mitotic activity. More than, medical specialists, describe and conclude related to structural aspect in benign traumatized melanocytic nevi (figure 4). In this field, dermoscopy play a role for a proper diagnostic.

### DISCUSSIONS

Great interest in knowing epidermal compounds. So, the epiderm is composed of a number of specific layers. Specific cells are known. One of the roles of the epiderm is implication in different injuries. Alterations in the compounds of the epiderm layers, contribute to the visual signs of pathologic conditions. One research direction, refer to the role of benign melanocytic lesions with alterations, which conduct to malignant cutanated melanoma. Related to melanocytic nevi, in some circumstances, could be possible that the prognosis be poor having in attention the health of the patients having comorbidities.

### CONCLUSIONS

Prevention and educational methods, are important. More than early detection in melanocytic nevi is a great point in order to try to treat and to avoid maybe possible malignancy degeneration. Techniques for the laboratory diagnosis that are implications in monitoring previously pathological status, are implied and conduct to a proper quality of life in patients diagnosed with melanocytic nevi. In this direction, implication of an interprofessional team strategies is one of the proper conditions.

**Contribution of the authors.** Sole authorship.

**Conflict of interest.** No conflict of interest is declared.

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## TRANSLITERATION

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## МОРФОЛОГИЧЕСКИЙ АНАЛИЗ ЭПИДЕРМИСА ДЛЯ ДИАГНОСТИКИ

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Целью исследования было выявление структурных особенностей меланоцитарных невусов. В этом контексте микроскопия позволяет получить хорошее описание меланоцитарных невусов у относительно молодых пациентов. Следует отметить, что значительную роль играют генетические, эпигенетические, микробиомные и протеомные факторы вместе с другими. Будущие направления относятся к превентивным и профилактическим методам.

## Теоретическая и экспериментальная медицина

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Автор статьи приходит к выводу о том, что важны методы профилактики и просвещения. Раннее выявление меланоцитарных невусов – это не только важный момент для того, чтобы попытаться провести лечение и избежать возможного злокачественного перерождения. Методы лабораторной диагностики, которые используются для мониторинга предшествующего патологического состояния и способствуют надлежащему качеству жизни пациентов с меланоцитарным невусом. В этом направлении одним из необходимых условий является использование стратегий межпрофессиональной команды.

*Ключевые слова:* пациенты, эпидермис, структура, анализ, меланоцитарные невусы

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### ДИАГНОСТИКА ҮШІН ЭПИДЕРМИСТІҢ МОРФОЛОГИЯЛЫҚ ТАЛДАУЫ

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Зерттеудің мақсаты – меланоцитарлы невустардың құрылымдық ерекшеліктерін анықтау. Бұл тұрғыда салыстырмалы микроскопия жас пациенттерде меланоцитарлы невустарды жақсы сипаттауға мүмкіндік береді. Адамның жеке өмірінде басқалармен қатар генетикалық, эпигенетикалық, микробиома және протеомдық факторлар маңызды рөл атқаратынын атап өткен жөн. Болашақ бағыттары превентивтік және профилактикалық әдістерге қатысты.

Мақала авторы алдын алу және ағарту әдістері маңызды деген қорытындыға келді. Меланоцитарлық невусты ерте анықтау емдеуді жүзеге асыру және ықтимал қатерлі дегенерацияны болдырмау үшін маңызды сәт қана емес. Алдыңғы патологиялық жағдайды бақылау үшін қолданылатын зертханалық диагностикалық әдістер меланоцитарлық невус диагнозы қойылған науқастардың өмір сүру сапасына ықпал етеді. Бұл бағытта қажетті шарттардың бірі-кәсіби команданың стратегияларын қолдану.

*Кілт сөздер:* науқастар, эпидермис, құрылым, талдау, меланоцитарлы невус