

Review

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Epidermal Compounds Analyse and Diagnosis

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Review

Epidermal Compounds Analyse and Diagnosis

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Abstract: The purpose of the study is to analyse and to identify specific structural characteristics of melanocytic nevi, to youth patients. Using the optical microscope, could be possible a proper description related melanocytic nevi. In this study play a significant role, different factors, such as genetic, epigenetic, microbiomic and proteomic factors. Future directions refers to preventive and prophylactic methods. Disease diagnostic and management directions are also important key points.

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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.. Results of research studies, show us that some connective cells such as fibroblasts, lose their identity, in pathological conditions. [1] Another specific cells, namely melanocytes are known that having a specific structural point that is consider important in structural pathological description. [2] Referring to melanocytic nevi, in medical specific field of study and of research, various pigmented lesions of the epiderm, known as nevi, could be observe in different parts of the body. [3] For a proper diagnostic, an atypical nevus, can be biopsied. [4] In this direction, is important to practice a biopsy beside the extended clinical evaluation in melanocytic nevi. A great point in this field of research, could be possible the genetic susceptibility for morphological and functional alterations, in nevi with that surrounding nevi changes. [5] A complete medical examination, play a great point for establishing the medical conduct, for a healthy status improving. [6][7] Structural analysis describe specific cells namely melanocytes as aggregated in 'nests', which conduct forming the nevus cells. [8] To the youth patients researchers found specific cells knowing as melanocytes. This specific cells could be found in areas of the epiderm of the parts of the body. [9][10] Theoretical and practical studies, show that melanocytic nevi developing *in utero* present genetical differences from those that appear later. [11][12] In the present field, we can mention about various informations from scientific literature, referring to specific nevi. [13] Also from literature and from practicum actually are known different scientific informations about extending melanocytic *nevi*, having specific scientific names. [14] Because are many cases in all of the world, diagnosed as melanocytic nevi, we can mention that currently, the proper treatment of epidermal nevi is challenging. [15] [16-18] Congenital melanocytic nevi it is known as a subject of research that offer controversy. [19] Clinical monitoring in congenital melanocytic nevi is important for diagnosis and for possible medical treatment strategies applications. [20] A complete examination of the human body, during a medical examination, is important. [21][22] Best to mention that the nowadays higher incidence in melanoma is in accompaniment of the nevi existence of the body and of the increase exposure to the ultraviolet light. [23] [24] Practical biopsy is important for diagnosis. [25] One of an important point in the diagnosis of melanocytic nevi is to differentiate melanocytic nevi from a possible melanoma. [26] [27] . An earlier diagnosis of the melanoma play a great role in idea that neoplastic lesions could be develop from pre-existing nevi in many cases. [28] Unfortunately, the epidermal melanoma is growing faster., depending of various conditions. [29] [30]

From many types of nevi, in the next short written text, we will describe a little bit on Ito's nevus and Ota's nevus. This two types of nevi, could be observe in pregnancy, at birth and also to puberty.

Their presence is in concordance with hormonal changes. Research studies described possible malignant status in Ota's nevus, rarely in Ito's nevus. [31][32] These two previously mentioned types of nevi, namely Ito and Ota, do not differ from a histological point of view. Ito's nevus and Ota's nevus are distinguished by specific location on the body. So, typically, Ito's nevus occurs in the arm region and Ota's nevus could be found on the face. [33][34] Ota's nevus could also be found in the supply areas of the first two branches of the trigeminal nerve. [34][35-37] Structurally, Ito's nevus presents as a slate-blue/gray-blue macula in the shoulder/breast and lateral arm region in the supply area of the brachial nerve, in infants or prior to puberty. [38] The most important clinical sign of melanoma within the existing Ito's nevus was a typical nodule. [39] In malignancy cases in patients with Ito's nevi have been reported specific nodules. [40][41]

Material and Methods

For the purpose of the study we can mention about classic laboratory technique used and about the materials needed. In the specific laboratory, we followed the steps of the classic method, using Hematoxylin & Eosin staining. The samples used were from male and female youth patients, before mature age, from urban and rural residence. These are examined by performing the optical microscopic analysis. The operative pieces are intended to bring in the pathological anatomy service for macroscopic examination for diagnostic purposes.

Results

The epidermis protects us during life, from different factors. For a morphological analysis, structural and ultrastructural characteristics could be described, using optical and electron microscope. Structural analysis of the epidermis, using colour laboratory techniques, is able to describe the specific layers with their characteristics. More than, using electron microscope, specific compounds as filaggrin which is known as an important epidermal protein and/or tight junction located in the granular layer of the epidermis, could be observed. For this purpose, transmission electron microscope examination, is considered one proper method for analysis. Scanning electron microscopy is also a modern method for analysis, which offers results that demonstrate abnormalities in the epidermis ultrastructure. (figure 1)

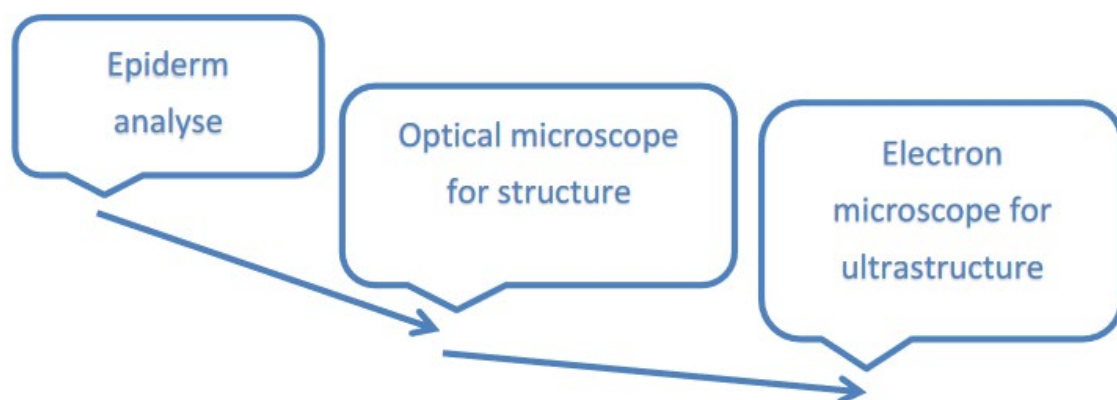


Figure 1. Methods for epidermis analysis.

The human body is covered by skin and the epidermis contains different types of glands, as sebaceous glands and sudoripar glands. In this study direction, it is known a typical physiopathologic mechanism for the functionality of the body, including epidermal compounds and their body surroundings. Histopathological analysis describes various modifications to the melanocytic nevi aspect, located on various regions of the body. So we can mention asymmetry, irregular form, cytologic atypia, and mitotic activity. Medical specialists describe and conclude that to benign melanocytic nevi, could be possible a description for atypical pathological

characteristics of nevi and more important to mention characteristics when benign nevi are traumatized.(figure 2)

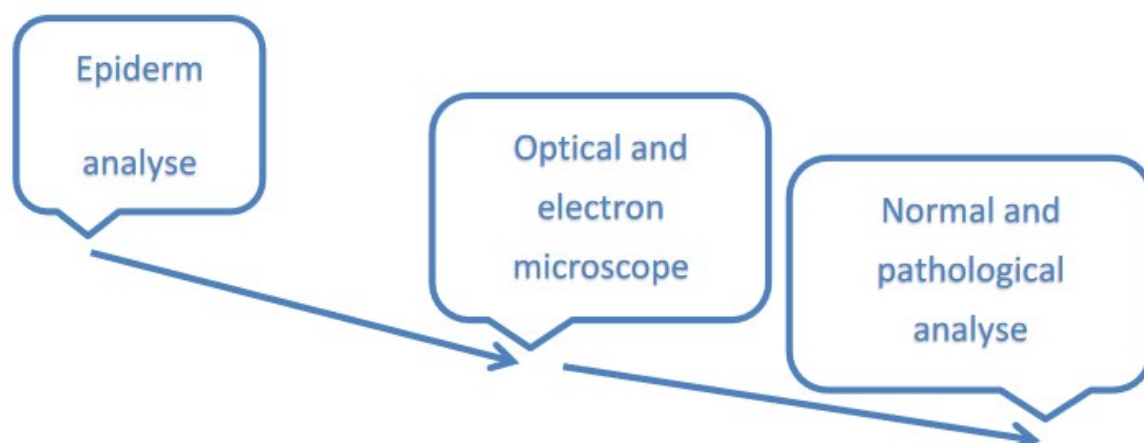


Figure 2. Changes in epidermal compounds - from normal to pathological.

Epiderm is a barrier, but is able for conducting to an illness status if include modifications in structural compounds. Histopathological analyse describe 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 the structural aspects in benign traumatized melanocytic nevi. **In this field, dermoscopy** play a role for a proper diagnostic. Dermoscopy play a role for a proper diagnostic important in practice to all ages, including, youth age and children.

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 role 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 cutaneous melanoma. Related to melanocytic nevi, in some circumstances, could be possible that the prognosis be poor having in attention the healthy of the patients having comorbidities. Pathological analyse and diagnosis referring to melanocytic nevi located on different regions from the body can find asymmetry, irregularity, cytologic atypia, and mitotic activity. Medical team including dermatologists, pathologists and dermatopathologists play a great role, in idea referring to differentiate benign melanocytic nevi from malignant melanoma. This is important in order to avoid unnecessary surgical intervention or a treatment.

Conclusions

Techniques for the laboratory diagnosis, as a key point in monitoring pathological status to patients diagnosed with melanocytic nevi, conduct to a proper quality of life. Implication of an interprofessional team is a condition that play a great medical role. Future trends, new laboratory methods and techniques for diagnosis. are in attention, for the next coming period of time.

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