Brief Report

Morphologically Melanocytic Nevi Analyze in Young Peoples

Antonella Chesca *

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Brief Report

Morphologically Melanocytic Nevi Analyze in Young Peoples

Antonella Chesca

Transylvania University of Brasov, Romania; anto.chesca@gmail.com

Abstract

The purpose of the study is to analyse and to identify structural characteristics reffering to melanocytic nevi, in youth patients. Using both optical and electronic microscope, could be possible a better describtion related specificity in melanocytic nevi characteristic. Epiderm is composed by specific layers, functions and implications in the life Research studies described possibles malignant status in nevi, in time. Future trends, are important key points in management, including preventive and prophylactic methods.

Keywords: normal epiderm; nevi; young peoples; analyse; diagnostic

Introduction

In order to define a disease, must have in attention a lot of differents 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] Refering 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 pars 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 informatiuons about extending melanocytic *nevi*, having specific scientific names.[14] Because are many cases in all of the world, diagnosed as melanocitic nevi, we can mention that currently, the proper treatment of epidermal nevi is challenging. [15–18]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 acompaniament 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 melanocitic nevi from a possible melanoma. [26,27] . An earlier diagnosis of the melanoma play a great role in idea that neoplasic lessions could be develop from pre-existing nevi in many cases. [28] Unfortunately, the epidermal melanoma is growing faster., depending of various conditions. [29,30]

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Melanocytic Nevi Considerations

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 birdh and also to puberty. Them presence is in concordance with hormonal changes. Research studies described possibles malignant status in Ota's nevus, rarely in Ito's nevus. [31,32]This twoo previously mentioned types of nevi, namely Ito and Ota, do not differ from histologically point of view. Ito's nevus and Ota's nevus are distinguished by specific location on the body. So, tipically,Ito nevus occurs in the arm region and Ota nevus could be find on the face. [33,34]Ota's nevus could also found in the supply areas of the first two branches of the trigeminal nerve. [34–37] 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 puberty.[38] It is know that a specific sign of melanoma within the existing Ito's nevus as a typical nodule. [39] In rarely malignancy cases in patients diagnosed with Ito's nevi have been reported in adition, tipical nodules.[40,41]

From birth age, congenital melanocytic nevi (CMN) it is know as one of the frequent skin lesion. [42] From research results and conclusions, could be find rarely medical namely,neuroid differentiation. To a specific analyse, is possible to observe specific areas of cells with myxoid stroma in adition. Possible resemble later than, as neurofibromas.[42]

From a curently research pespective we can mention that in utero, specific stem cells from the neuroectoderm play a signifiant role such as migration to the skin as melanoblasts. Mechanism refers to a differentiate process into melanocytes. In addition, mutations arising in specific cells can occur to well known mosaicisms. Good to know that in the early embryogenesis, multipotent progenitor cells can be affected, leading to the presence of multiple congenital melanocytic nevi and also to extracutaneous alterations..[43,44]

In adition to previously above metioned idea, congenital melanocytic nevi occur as a result of in-utero somatic mutations. In this idea, genes play a great role. So there are know the mitogen-activated protein kinase (MAPK) pathway (mainly NRAS and BRAF). More than,their specific mutations refers to damages in the development of cutaneous and/or extracutaneous previously mentioned mosaicisms.[45] Aditionally to congenital melanocytic nevi, proliferative nodules (PN) constitute nodular lesions. [46] All described epidermal alterations, arel factors incriminate in differentiating proliferative nodule from melanoma.

Good to mention that neurocutaneous melanosis is a disease where congenital melanocytic nevi are associated with melanocyte proliferation. Beside, satellite lesions are especially at risk. Clinically are signs and specific symptoms So could be descibe neurological symptoms,with possible intracranial pressure.[47] From literature data there are know a lot of types of melanocytic nevi.[48] Then possible surgical intervention and pathologically diagnosis we can take into consideration. [49] Management directions play also a significant role as future directions.[50] From medical point of view we can mention that in case of an atypical nevus could be practice a proper biopsied. [51] Using this previously mentioned procedure is important to extend tissue excision in the un affected structure.[51] We can mention a lot about possible complications that include in pre-existing immune disorders, new exacerbations.[52]

Histologycally and Pathologycally Key Points of Epiderm

Normal epiderm is composed by specific layers, functions and implications in the human life. There are known a number of layers, namely basale stratum, spinosum stratum, granulosum stratum, lucidum stratum and corneuous stratum. In abnormally conditions, depending on divers factors, epidermal layers could possible to be affected structurally. Morphologically, specific cellularity, cell organelles, jonctions, and not only suffer dameges. Knowing this and reffering to epidermal nevi, previously mentioned possible damages play a role in pathologically status aparence, including nevi in youth patients. From another perspective, in a normal epiderm, there are known four cell populations. Namelly of specific cells are keratinocytes, melanocytes, Langerhans and Merkel cells.

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Refering to keratinocytes we can mention that comprise the bulk of the epiderm. [53,54] Melanocytes are interesting cells by them function. So this cells synthesize and store pigment namely melanin in specific organelles known as melanosomes. The role of melanocytes is the transfer of melanosomes via dendrites, primarily to keratinocytes.[55] Langerhans cells are antigen-presenting cells found in the epiderm. [56] Merkel cells are neuroendocrine origin. This cells are known by the implication as adapting mechanoreceptors.[57,58 , Figure 1]. [Figure 2]. Also important to found and to know a little bit about cause of developing the nevi in young peoples. [59] Genetical causes is important in that cases..[60]

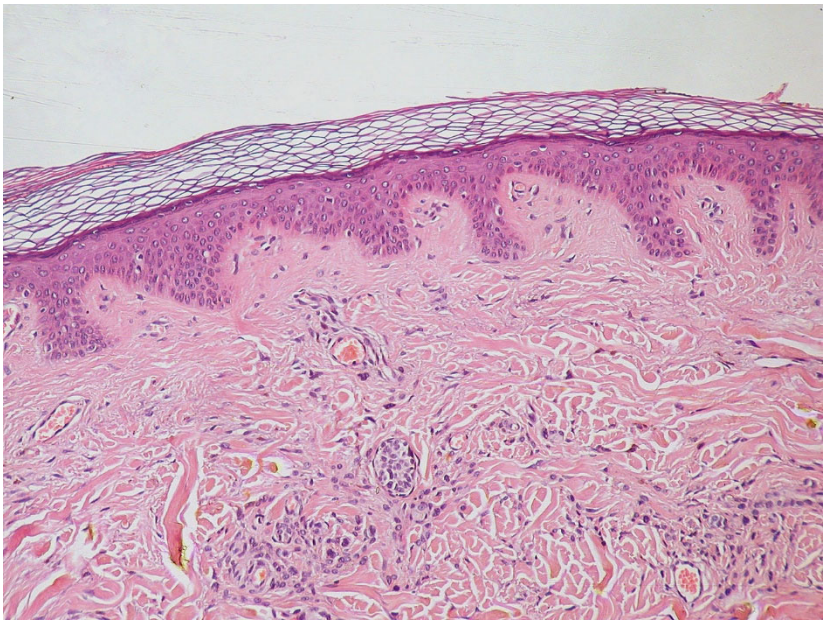

Figure 1. Layers of the normal epiderm. https://en.wikipedia.org/wiki/Epidermis#/media/File:Normal_Epidermis_and_Dermis_with_Intradermal_Nevus_10x.JPG.

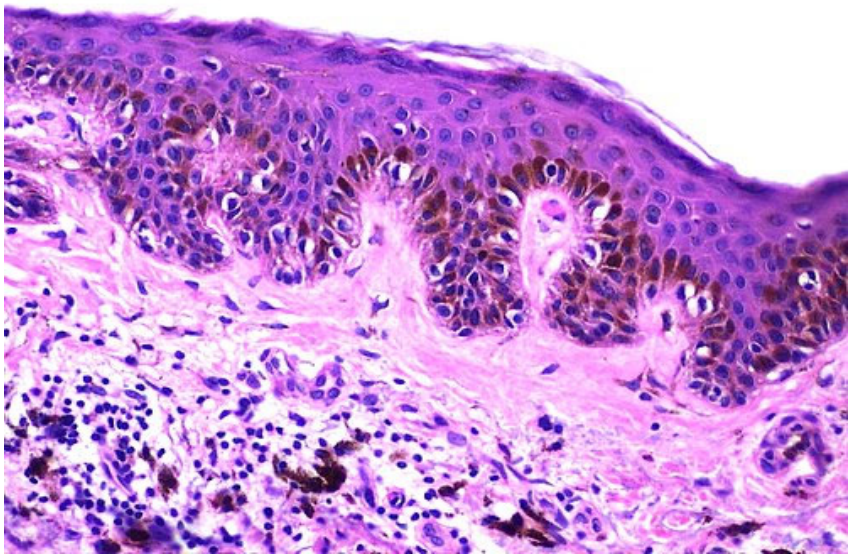

Figure 2. Lentiginous melanocytic naevus. https://en.wikipedia.org/wiki/Melanocytic_nevus.

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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, were 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. This are examined using the optical microscope. In adition can be used also specialized microscopes and electron microscopes. The operative pieces are intended to bring in the pathological anatomy service for macroscopic examination for diagnosis.

Results

Epiderm protect us during the life, from different factors. For a morphological analyse, structural and ultrastructural characteristics could be describes, using optical and electron microscope. Structural analyse of the epiderm, 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 knowing as an important epidermal protein and/or 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 analyse. Scanning electron microscopy is also a modern method for analyse, which offer results that demonstrate abnormalities in the epiderm ultrastructure. The human body is covers by skin and the epiderm contein differents types of glands, as sebaceous glands and sudoripar glands. In this study direction, it is known a typical physiopathlogic mechanism for the functionality of the body, including epidermal compounds and their body sorroundings. Histopathological analyse describe 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 describtion for atypical pathological characteristics of nevi and more important to mention characteristics when benign nevi are traumatized. Epiderm is a barrier, but is able for conducing to an illness status if include modifications in structural compounds. Histopathological analyse describe the melanocytic nevi

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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, d**ermoscopy 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. Immunohistochemistry (IHC) method has limitations from variability in sensitivity and specificity. (Tables 1 and 2.)

Table 1. IHC method in diagnostic.

Immunohistochemistry (IHC)	**a process that involves using of selective antibodies to target and stain antigens**
Immunohistochemistry (IHC)	known to be specific to a particular condition.
Immunohistochemistry (IHC)	a process that creates a color signal that can be visualized on light microscopy.

Table 2. Light microscopy implications in epidermal nevi.

Light microscopy	The 100x magnification usually requires a medium between the lens and the slide, such as oil immersion
Light microscopy	Most microscopes used in dermatopathology are compound microscopes.
Light microscopy	Is the primary means for the magnified examination of tissue blocks.
Light microscopy	Generally shows cells as colorless, necessitating the need for various stains. Most tissue is initially stained with hematoxylin and eosin (H&E).

Education Activity Outcomes and Management Strategies

Disease diagnostic and future trends, are important key points in management directions.As future directions good to mention idea including preventive and prophylactic methods. For each patient is important to improve a skin evaluation.In this context a simple clinical skin evaluation could be accompanied by biopsy, excision, surgical practice and other accopaniyng activities. (Table 3)

Table 3. Nevi characteristics for management directions.

Review the management options available for melanocytic nevi.	Describe the presentation of a patient with melanocytic nevi.
Identify the risk factors for melanocytic nevi.	Outline interprofessional team strategies for improving care coordination and communication to advance the management of melanocytic nevi and improve outcomes.

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Discussions

Great interest in knowing epidermal compounds. So, the epiderm, is composed of a number of specific lyers. Specific cells are known. One of the role of the epiderm is implication in differents injuries. Alterations in the compunds 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 cutanat 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 reffering to melanocytic nevi located on differents 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 reffering to differentiate benign melanocytic nevi from malignant melanoma. This is important in order to avoid unnecessary surgical intervention or a treatment. Management and a better clinical evaluation, is a key point for a proper next time abordation in epidermal pathologically compounds as nevi. Structural analyze to the epidermal alterations is important for diagnosis. Next point is dermatological diagnosis. (Table 4)

Table 4. Nevi characteristics for differential diagnostic.

Atypical mole	Basal cell carcinoma	Café au lait spots
Cutaneous melanoma	Nevi of Ota and Ito	Nevus spilus
Cockade nevus	Nodular lesions	Pyogenic granuloma

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. Congenital melanocytic nevi are pigmented lesions that are usually present a birth. They are generally benign, but a small percentage (especially the larger ones) can potentially transform into malignant melanoma.Future trends, new laboratory methods and techniques for diagnosis. are in attention, for the next coming period of time.

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