

MELANOMA – THE IMPORTANCE OF DIAGNOSIS AT ANY AGE

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Abstract

Melanoma is a malignant cutaneous neoplasm characterized by the uncontrolled proliferation of melanocytes. Importantly, melanoma does not exhibit distinct age, sex, or racial predilections, underscoring the need for diligence in the monitoring and early detection of suspicious lesions across all demographics. Dermoscopy, a non-invasive diagnostic technique that allows for enhanced visualization of pigmented skin lesions, plays a pivotal role in the early identification of melanoma. There are presented three cases of melanoma in situ in different groups of ages, emphasising the importance of detecting them in time, surgery excision and follow up. Collaboration of the dermatologist, oncologist and healthcare professionals is very important to defeat the diseases and to lower the morbidity of this malignancy.

Keyword: melanoma, dermoscopy, age, prognosis, follow-up

MELANOMA - RËNDËSIA E DIAGNOSTIKIMIT NË ÇDO MOSHË

Abstrakt

Melanoma është një patologji malinje e lëkurës, e karakterizuar nga një proliferim i pakontrolluar i melanociteve. Melanoma nuk shfaq prirje të dallueshme ndaj moshës, gjinisë apo racës, duke nënvizuar nevojën për monitorim dhe zbulim të hershëm të lezioneve të pigmentuara të lëkurës në të gjitha demografitë. Dermoskopia, një teknikë jo-invazive që lejon vizualizimin e lezioneve të lëkurës, luan një rol të rëndësishëm në identifikimin e hershëm të melanomës. Në këtë artikull janë paraqitur tre raste të melanomës in situ në grupmosha të ndryshme, duke theksuar rëndësinë e zbulimit në kohë të tyre, ekcizionit kirurgjikal dhe ndjekje në vazhdimësi. Bashkëpunimi i profesionistëve të kujdesit shëndetsor, dermatolog, onkolog dhe kirurg është shumë i rëndësishëm për të mposhtur patologjinë dhe për të ulur sëmundshmërinë e kësaj neoplazie.

Fjalë kyçe: melanoma, dermoscopia, mosha, prognoza, ndjekja.

Introduction

Melanoma is a malignant cutaneous neoplasm characterized by the uncontrolled proliferation of melanocytes, the pigment-producing cells of the skin. It presents a significant mortality risk due to its propensity for metastasis if not diagnosed and treated in its early stages (1). Importantly, melanoma does not exhibit distinct age, sex, or racial predilections, underscoring the need for diligence in the monitoring and early detection of suspicious lesions across all demographics

(2,3,6,7). Dermoscopy, a non-invasive diagnostic technique that allows for enhanced visualization of pigmented skin lesions, plays a pivotal role in the early identification of melanoma (1). Within this context, the presentation of three cases spanning diverse age groups underscores the pervasive nature of melanoma and the criticality of proactive surveillance and early intervention. Each case serves as a testament to the favourable outcomes achievable through vigilant monitoring and regular dermatologic assessments. By acknowledging the significance of these cases, we can appreciate the crucial impact of continuous follow-up and proactive engagement with dermatologists in mitigating the potential ramifications of melanoma.

Case 1: Youth Melanoma: A 21-year-old male presented with a new, rapidly enlarging pigmented lesion on his forth finger in left hand (Fig 1.1), which was noted by a random visit to dermatologist. Upon dermatologic evaluation and subsequent dermoscopic analysis (Fig1.2), the lesion exhibited concerning features, including irregular pigmentation and asymmetry. A prompt excisional biopsy confirmed the diagnosis of early-stage melanoma. Subsequent histopathologic assessment revealed in situ melanoma, underscored the insidious nature of melanoma progression, even in the absence of overt symptoms or alarming changes. The timely identification of this lesion allowed for a curative surgical resection and a positive prognostic outlook. Continued monitoring and adherence to scheduled follow-up appointments remain integral to ensuring the enduring well-being of this young patient.



Figure 1.1 Melanoma, present in the fifth finger, medially part in a young patient.



Figure 1.2 Melanoma, dermoscopy: asymmetry, atypical network, radial lines and pseudopods, blue-white veil

Case 2: Adult-Onset Melanoma: A 38-year-old female, previously unaware of the potential risks associated with melanoma, sought dermatologic consultation for a long-standing pigmented lesion on her arm (Fig 2.1) that had recently exhibited irregular changes in color and border. Utilizing dermoscopy, the lesion revealed features suggestive of melanocytic atypia (Fig 2.2), prompting prompt excision and histopathologic examination. The subsequent diagnosis of a superficial spreading melanoma with a Breslow thickness of 0.6 mm, indicative of a favorable prognosis. The successful early detection and management of this lesion averted the ominous specter of invasive disease, highlighting the pivotal role of dermoscopy in unmasking covert incipient melanomas. Continued surveillance and regular dermatologic assessments are paramount in safeguarding against potential recurrences or the emergence of new lesions in this susceptible individual.



Figure 2.1 et 2.2 (2.1) Melanoma, present in the arm of an adult patient, asymmetry in colour and shape. (2.2) Dermoscopy globules and periphery brown dots, atypical vascularisation, globules, blue-white, scar-like depigmentation

Case 3: Geriatric Melanoma: A 72-year-old female, mindful of the perils of sun exposure and the potential for cutaneous malignancies, maintained a conscientious regimen of self-examination, routinely scrutinizing her extensive collection of nevi (Fig 3.1) and pigmented lesions.



Figure 3.1 Melanoma in a geriatric patient. Asymmetry in shape, colour, more than 6 mm, present in the leg, anterior for a long time.

During her routine dermatologic visit, a previously inconspicuous lesion on her lower left leg underwent dermoscopic evaluation, revealing subtle alterations in pigment distribution and the emergence of atypical vascular structures (Fig 4.1, Fig 5.1).

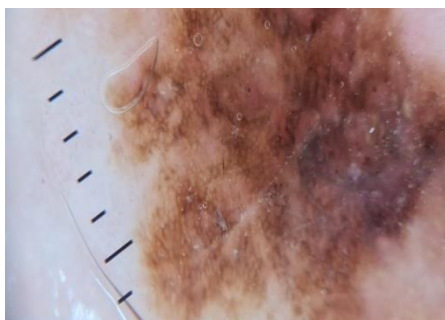


Figure 5.1 Dermoscopy of atypical melanocytic lesion (fig 3.1) in leg, atypical network, blue-white veil, periphery brown dots

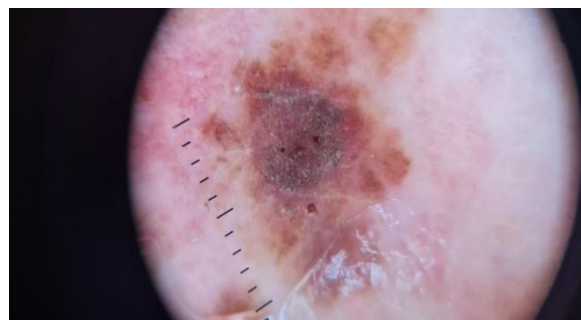


Figure 4.1 Dermoscopy of lesion (fig 3.1) atypical vascularisation, brown dots, negative and broad network.

Subsequent biopsy confirmed the diagnosis of early-stage melanoma, prompting expeditious surgical excision and sentinel lymph node evaluation. Despite the advanced age of the patient, the diligent surveillance and expeditious intervention yielded a favorable outcome, underscoring the enduring efficacy of regular dermatologic assessments in mitigating the potential morbidity of melanoma in the elderly population (Fig 6.1, Fig7.1).



Figure 7.1 several weeks after surgery of the case in fig 3.1



Figure 6.1 post-surgery of the case in fig 3.1.

Discussion

More than one million people are living with melanoma and one person dies from the diseases every hour. Incidence of cutaneous melanoma continues to increase each year. (1) Diagnosing at an early stage is very important. Periodic control of moles, especially in people with high predisposition (more than 100 moles, family and personal history of melanoma, unprotected sun exposure) helps to detect them in time. The cornerstone of the treatment are surgical free margin excision and histopathology/immunohistochemistry (1,2). The biopsy of sentinel lymph node (SNLB) is important in staging melanoma and in clinical practice. (4,9) It is recommended in all patients with melanoma stage T1b and above, along with a subtype of T1a patients with a high-risk. (5) Fortunately, the above cases were detected at an early stage: melanoma in situ, so except the biopsy/immunohistochemistry was no necessary to go further with the investigation. Follow up 6 months was recommended, because of the insidious nature of the diseases and self-check every month of the skin. According to the literature, the behaviour of melanoma does not change in different ages-group, but the incidence in younger is less compare with the adults.(2,6,7) Also, there are few report cases of melanoma in prepubertal ages. (3) These cases are the most difficult to detect because of atypical presentation of moles. (8) It is very important to emphasise that periodic control of the moles is necessary in every age, especially in the adults and the geriatric population.

Conclusion

The cases delineated above distinctly underscore the indiscriminate nature of melanoma's threat, transcending age groups and emphasizing the paramount importance of early detection through dermoscopy and sustained dermatologic surveillance. These cases also serve as poignant reminders of the success achievable through proactive engagement with healthcare providers and the enduring significance of continued follow-up in mitigating the morbidity associated with this formidable malignancy. Together, they reinforce the imperative of widespread awareness and vigilance in proactively addressing the potential morbidity of melanoma across all age demographics.

Conflict of interest: Authors declare that they have no conflict of interest.

References:

1. Susan M Swetter MD et. Al, AAD Guidelines of care for the management of primary cutaneous melanoma, Published 1 November 2018, J Am Acad Dermatol. 2019 Jan DOI: <https://doi.org/10.1016/j.jaad.2018.08.055>.
2. Paolo Del Fiore et al. Melanoma in Adolescents and Young Adults: Evaluation of the Characteristics, Treatment Strategies, and Prognostic Factors in a Monocentric Retrospective Study. Published online 2021 Sep 16, doi: 10.3389/fonc.2021.725523 PMID: PMC8482997, PMID: 34604064.
3. Papas, Athanasios et al. Cutaneous Melanoma in a 9-Year-Old Girl. Case Report and Review of Literature. <https://journals.lww.com/ijpd/toc/2020/21020>, Indian Journal of Paediatric Dermatology 21(2):p 81-86, Apr–Jun 2020.
4. Yasuhiro Nakamura et al. The Role and Necessity of Sentinel Lymph Node Biopsy for Invasive Melanoma. Published online 2019 Oct 22:6:231. doi: 10.3389/fmed.2019.00231.
5. John T Vetto et.al .Guidance of sentinel lymph node biopsy decisions in patients with T1–T2 melanoma using gene expression profiling. Published Online:29 Jan2019 <https://doi.org/10.2217/fon-2018-0912>.
6. Kelly G. Paulson, MD, PhD et al. Age-Specific Incidence of Melanoma in the United States Published online 2019 Nov 13. doi: 10.1001/jamadermatol.2019.3353 PMID: PMC6865303 PMID: 31721989, JAMA Dermatol. 2020 Jan; 156(1): 57–64.
7. Simone Ribero et al. Effect of Age on Melanoma Risk, Prognosis and Treatment Response. Acta Derm Venereol 2018 Jul 11; 98(7):624-629. doi: 10.2340/00015555-2944.
8. Paige H. Dean, BSc et al. Pediatric Melanoma: A 35-year Population-based Review Published online 2017 March 9. doi: 10.1097/GOX.0000000000001252 PMID: PMC5404437 PMID: 28458966
9. Shannon C. Trotter et al. SC Trotter · 2013 · Cited by 222 — *J Clin Aesthet Dermatol*. 2013 Sep; 6(9): 18–26. PMID: PMC3780800. PMID: 24062870. *A Global Review of Melanoma Follow-up*.
10. Aiswarya Lakshmi et al. Nice 2022 Guidelines on the management of melanoma: Update and implications. Published 19 July 2023 doi:<https://doi.org/10.1016/j.bjos.2023.07.026>. JPRAS, Volume 85, P401-413, October 2023.