



CASE REPORT

Sudden eruption of multiple Meyerson naevi

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Abstract: We present a case of a young patient presenting with a six-month history of multiple squamous pink and light brown papules surrounded by symmetrical eczema on the trunk. Dermoscopy revealed light brown structureless and avascular lesions with an erythematous scaly halo. The patient denied the presence of naevi on the sites of the newly emerging changes. Histopathology revealed acanthotic epidermis and linear clusters of morphologically normal naevi cells in the upper dermis, infiltration of lymphocytes, plasma cells, eosinophils and mild spongiosis in the dermis. Topical betamethasone/gentamicin ointment twice daily for 10 days was prescribed. The erythematous scaly area around lesions completely disappeared on the follow-up visit after six months. This is a unique case of a sudden appearance of newly formed multiple benign dermal naevi with Meyerson phenomenon—the sudden eruption of multiple Meyerson naevi.

Keywords: Meyerson phenomenon; halo eczema; multiple Meyerson naevi

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Introduction

Meyerson phenomenon (MP), also called halo eczema or halo dermatitis, is a rarely reported halo of inflammation around a pre-existing melanocytic or nonmelanocytic lesion, affecting one or more lesions at the same time. When MP occurs around a benign pigmented nevus, it is called Meyerson naevus^[1-3]. MP has been reported encircling different lesions including naevus flammeus^[4,5], acquired melanocytic naevus^[1], congenital melanocytic naevus^[6,7], seborrhoeic keratosis, stucco-keratosis, keloid, benign lentigo, insect bite, basal cell carcinoma, squamous cell carcinoma^[8], dermatofibroma^[9], atypical naevus^[10], and melanoma^[10-13]. The pathogenesis of MP is still not well understood. Some reported data suggest that the mechanism includes the

interaction between CD4+ T-cells and increased expression of intercellular cell adhesion molecule 1 (ICAM-1)^[14] as well as the involvements of Langerhans cells^[10] and the T-lymphocytes lacking the interleukin-2 receptor^[15].

Case presentation

An 18-year-old male patient presented with a six-month history of multiple (15 lesions) scaly, pink and light brown papules (diameter 1–2 mm) surrounded by symmetrical eczema (2–4 mm) on the trunk (**Figures 1 and 2**). Dermoscopy revealed light brown structureless and avascular lesions with an erythematous scaly halo (**Figure 3**). Severe itching occasionally occurred. The patient denied the presence of naevi on the sites of the newly emerging changes. His past medical record was

unremarkable, he had no personal or family history of atopy, and he was not on any medication. Our differential diagnoses were guttate psoriasis, pityriasis rosea, and *pityriasis lichenoides et varioliformis acuta*. In order to determine the correct diagnosis, we performed a biopsy of the lesion on the back. Histopathology revealed acanthotic epidermis and linear clusters of morphologically normal nevi cells in the upper dermis, infiltration of lymphocytes, plasma cells, eosinophils and mild spongiosis in the dermis (Figures 4 and 5). The diagnosis of multiple eruptions of Meyerson naevi was confirmed, and topical betamethasone/gentamicin ointment twice daily for ten days was prescribed. The erythematous scaly area around the lesions completely disappeared on the follow-up visit after six months.

Discussion

Only a few cases in the literature report multiple benign Meyerson naevi in young adults, but in all cases, MP occurred on pre-existing melanocytic lesions^[1,14]. We present a unique case of a sudden appearance of newly formed multiple benign dermal naevi with MP—the sudden eruption of multiple Meyerson naevi. Although MP is a mostly benign and transient condition, close examination of every lesion should be performed so that malignant lesions are not missed.

Author contributions

All authors have made individual contributions to the writing of the article, have been involved in the patient's care and gave final approval of the version to be submitted.



Figure 1. Clinical findings: scaly, pink and light brown papule surrounded by symmetrical eczema on the trunk



Figure 2. Clinical findings: pink and light brown papules surrounded by symmetrical eczema on the trunk



Figure 3. Dermoscopic view: light brown structureless and avascular lesion with an erythematous scaly halo

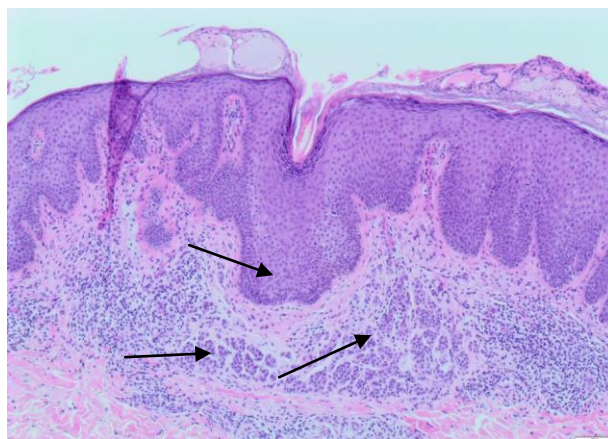


Figure 4. Histopathology: linear clusters of morphologically normal nevi cells in the upper dermis, acanthotic epidermis, and infiltration of lymphocytes, plasma cells, eosinophils and mild spongiosis in the dermis [Hematoxylin and Eosin stain (H&E) 10X]

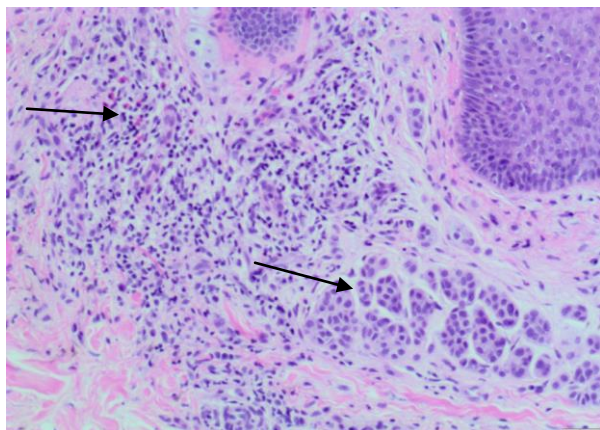


Figure 5. Histopathology: infiltration of lymphocytes, plasma cells, eosinophils and mild spongiosis in the dermis (H&E 40X)

Conflict of interest

The authors declare no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

References

1. Brenan J, Kossard S, Krivanek J. Halo eczema around melanocytic nevi. *Int J Dermatol* 1985; 24(4): 226–229. doi: 10.1111/j.1365-4362.1985.tb05766.x.
2. Worret WI. Halo eczema and nevus cell nevi (Meyerson nevi). *Hautarzt* 1990; 41(5): 262–264.
3. Schepis C, Siragusa M. The Meyerson phenomenon in a teenager. *Dermatol Online J* 2008; 14(2): 28.
4. Pavlovic MD, Adamic M. Eczema within port wine stain: Spontaneous and laser-induced Meyerson phenomenon. *Acta Dermatovenerol Alp Pannica Adriat* 2014; 23(4): 81–83.
5. Simon V, Hartschuh W, Flux K. Meyerson-Phenomenon hides a nevus flammeus. *J Dtsch Dermatol Ges* 2011; 9(4): 305–307. doi: 10.1111/j.1610-0387.2010.07502.x.
6. Langer K, Konrad K. Congenital melanocytic nevi with halo phenomenon: Report of two cases and a review of the literature. *J Dermatol Surg Oncol* 1990; 16(4): 377–380. doi: 10.1111/j.1524-4725.1990.tb00051.x.
7. Rolland S, Kokta V, Marcoux D. Meyerson Phenomenon in children: Observation in five cases of congenital melanocytic nevi. *Pediatr Dermatol* 2009; 26(3): 292–297. doi: 10.1111/j.1525-1470.2009.00931.x.
8. Tegner E, Björnberg A, Jonsson N. Halo dermatitis around tumours. *Acta Derm Venereol* 1990; 70(1): 31–34.
9. Gallais V, Lacour JP, Perrin C, Halioua B, Ortonne JP. Halo eczema around a histiocytofibroma: The Meyerson phenomenon. *Ann Dermatol Venereol* 1993; 120(9): 617–620.
10. Oliveira A, Arzberger E, Massone C, Fink-Puches R, Zalaudek I, *et al.* Dermoscopy, reflectance confocal microscopy and immunohistochemical analysis in melanocytic lesions with Meyerson’s phenomenon. *Dermatology* 2014; 229(4): 297–305. doi: 10.1159/000365657.
11. Sezer E, Öztürk Durmaz E, Çetin E, Şahin S. Meyerson phenomenon as a component of melanoma in situ. *Acta Dermatovenerol Croat* 2016; 24(1): 81–82.
12. Rodins K, Byrom L, Muir J. Early melanoma with halo eczema (Meyerson’s phenomenon). *Australas J Dermatol* 2011; 52(1): 70–73. doi: 10.1111/j.1440-0960.2010.00698.x.
13. Ferneiny M, Pansé I, Schartz N, Battistella M, Verola O, *et al.* Phénomène de Meyerson périnaevique disséminé révélateur d’un mélanome (French) [Disseminated melanoma-revealing peripheral Meyerson phenomenon]. *Ann Dermatol Venereol* 2012; 139(2): 137–141. doi: 10.1016/j.annder.2011.10.413.
14. Loh J, Kenny P. Meyerson phenomenon. *J Cutan Med Surg*. 2010; 14(1): 30–32. doi: 10.2310/7750.2009.08065.
15. Fernández Herrera JM, Aragües Montañés M, Fraga Fernández J, Diez G. Halo eczema in melanocytic nevi. *Acta Derm Venereol* 1988; 68(2): 161–163.