

Blue nevus on the scalp: Clinical and dermoscopic features

Dear Editor,

Blue nevus, also referred to as blue neuronevus, blue moles, and dermal melanocytomas, represents a form of melanocytic nevus resulting from arrested melanocytes deep within the reticular dermis. Here in, we present a case of a 48-year-old Saudi woman, known to have hypertension, knee osteoarthritis and psoriatic arthritis on Humira 40 mg, presented to the dermatology outpatient clinic with a solitary, well-demarcated, firm, round 2 cm x 2 cm, smooth surfaced dark blue plaque on the scalp for 6 years with occasional tenderness and recent change in size but no itching [Figure 1]. A possibility of combined nevus, histiocytoma/dermatofibroma, pilomatricoma, nodular melanoma or blue nevus was kept. Dermoscopic features show a nevus with a uniform blue colored pigmentation exhibiting some blue-brownish globules and dots within the lesion with a diffuse blue-white veil over the entire surface and a well-defined border that fades into the outer skin [Figure 2]. A 4 mm punch biopsy was taken for histopathologic examination and revealed collection of poorly mineralized dendritic melanocytes in the dermis which was consistent with a diagnosis of common blue nevus. The patient had the scalp lesion surgically removed because of its size in order to prevent cancerous growth.

The differentials of a blue nevus may include combined nevus, dermatofibroma, vascular lesions such as (venous lake), pilomatricoma, glomus tumor, angiokeratoma and nodular melanoma.^[1,2] Blue nevi, also known as blue neuronevus, derives



Figure 1: Single, distinct, firm, 2 cm x 2 cm, smooth-surfaced, dark blue plaque on the scalp

from the incomplete migration of melanocytes from the neural crest, the blue color is explained by melanocytic arrest deep in the reticular dermis.^[2] They are more prevalent in women and Asians, and are commonly found on the distal extremities (hands and feet) and rarely present on the scalp.^[3] Large (>1-3 cm), changing and newly appearing lesions warrants an excisional biopsy of the nevus as a preventative measure for histologic evaluation to exclude melanoma and malignant changes.^[1,3] Dermoscopy/trichoscopy features of the lesion were consistent with typical characteristics of blue nevi.^[4] Scalp lesions are removed as a precaution due to challenges in keeping them under continuous revision. Yearly follow-ups are advisable for any recurrence.^[1,5,6]

This case study highlights the importance of surgical excision for scalp lesions, offering insights to aid primary care physicians in timing preventive interventions. The inclusion of a diverse list of potential diagnoses provides a systematic framework for precise diagnosis and tailored management. Additionally, advocating for annual follow-ups assists in monitoring recurrence, providing a pragmatic protocol for ongoing patient management. The incorporation of clinical images and dermoscopic features enhances diagnostic accuracy, equipping healthcare professionals, including family physicians and dermatologists, with valuable knowledge for informed decision-making in clinical practice. Overall, this study empowers healthcare professionals to effectively diagnose, manage, and follow up on blue nevi cases. This knowledge equips them to make informed and judicious decisions in their routine clinical practice.

Acknowledgments

The patients in this manuscript have given informed consent to the publication of their case details.

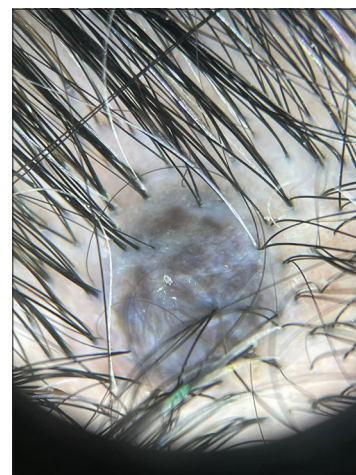


Figure 2: Dermoscopy of the nevus reveals a uniform blue appearance, some blue-brownish globules within the lesion, a diffuse blue-white veil over the entire surface, and a well-defined boundary that gradually fades into the outer skin

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Khalid Nabil Nagshabandi¹, Asem Shadid², Abdullah H. AlHargan³

¹Department of Dermatology, College of Medicine, King Saud University and King Saud University Medical City (KSUMC), Riyadh, Saudi Arabia, ²Department of Dermatology, King Fahad Medical City (KFMC), Riyadh, Saudi Arabia, ³Department of Dermatology, Prince Sultan Military Medical City, Riyadh, Saudi Arabia

Address for correspondence: Dr. Khalid Nabil Nagshabandi, 12482, Almugharazat, Riyadh, Kingdom of Saudi Arabia.
E-mail: khaloed23@gmail.com

References

1. Sardana K, Sagar V. Blue nevus on the scalp. *Indian Pediatr* 2014;51:84.

2. Zembowicz A, Phadke PA. Blue nevi and variants: An update. *Arch Pathol Lab Med* 2011;135:327-36.
3. DermNet NZ. Blue Naevus. New Zealand Dermatological Society Incorporated; c1996-2023. Available from: <https://dermnetnz.org/topics/blue-naevus>. [Last accessed on 2023 Jan 31].
4. DermNet NZ. Blue Naevus Dermoscopy. New Zealand Dermatological Society Incorporated; c1996-2023 [cited 2023 Jan 31]. Available from: <https://dermnetnz.org/topics/blue-naevus-dermoscopy>. [Last accessed on 2023 Jan 31].
5. Md JC, Leslie Smith Jr J. Malignant blue nevus. *Cancer* 1991;67:2653-7.
6. Borgenvik TL, Karlsvik TM, Ray S, Fawzy M, James N. Blue nevus-like and blue nevus-associated melanoma: A comprehensive review of the literature. *ANZ J Surg* 2017;87:345-9.


This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Received: 10-10-2023

Revised: 02-01-2024

Accepted: 04-01-2024

Published: 22-04-2024

Access this article online	
Quick Response Code: 	Website: http://journals.lww.com/JFMPC
	DOI: 10.4103/jfmpe.jfmpe_1665_23

How to cite this article: Nagshabandi KN, Shadid A, AlHargan AH. Blue nevus on the scalp: Clinical and dermoscopic features. *J Family Med Prim Care* 2024;13:1586-7.

© 2024 Journal of Family Medicine and Primary Care | Published by Wolters Kluwer - Medknow