

Black Piedra in an Amerindian Girl with Oculocutaneous Albinism Type 2

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Case Presentation

A 9-year-old Piaroa girl with oculocutaneous albinism type 2 hailing from Venezuelan Amazonian, presented with multiple 1 to 2-millimeter blackish small nodules attached to her scalp hair (Figure 1A). Microscopic examination of the hair shafts revealed brown to black firmly concretions (Figure 1B). Culture on Sabouraud agar at 25 °C showed after two weeks, slow growth of compact, domed black colonies. Microscopic examination of culture isolated shows asci and ascospores of *Piedraia hortae* confirmed the black piedra diagnosis.

Oral and topical antifungal are frequently unsuccessful and shaving or clipping the hair is the most accepted alternative, but this may not be considered cosmetically or socially acceptable. When we suggest to our patient the possibility

of cutting her hair to cure the disease; the patient showed us how when rubbing the hair with the sand from the river the nodules were detached easily. In the city, cleanser scrubs can be used as an alternative.

Teaching Point

Black piedra, caused by the dematiaceous filamentous fungus *Piedraia hortae*, is usually seen in the tropics worldwide. Consists of black-colored, firm, irregular nodules, located in the hair cuticle. Sources of infection are soil- and environment-related in tropical rainforest [1]. Differential diagnosis includes pediculosis capitis, white piedra and trichorrhhexis nodosa. Dermoscopy should be included as a part of the clinical inspection to avoid unnecessary invasive investigation or diagnostic delay [2].

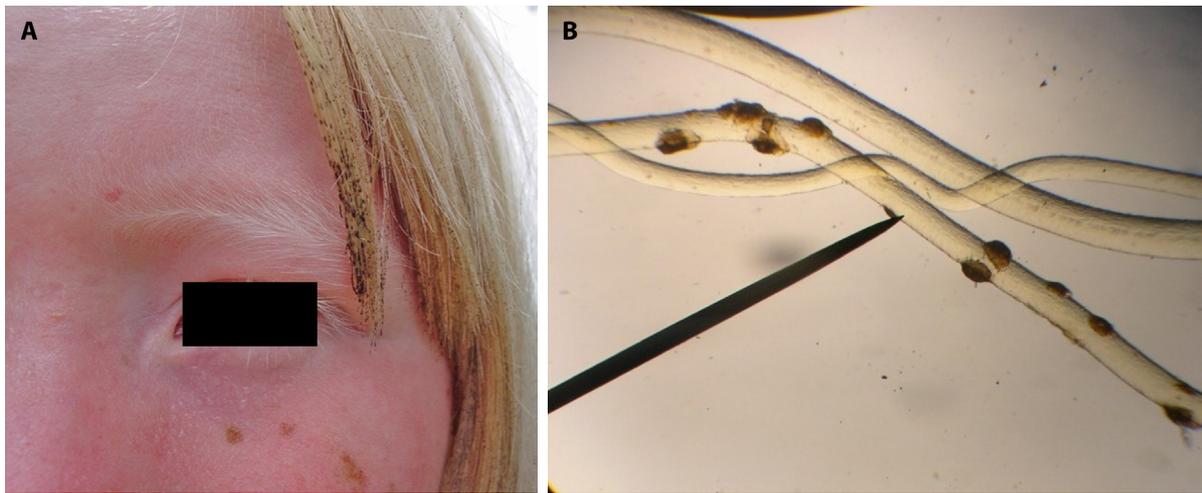


Figure 1. (A) Multiple 1 to 2-mm blackish nodules attached to the hair shaft in a OCA-2 patient. (B) 10X microscopic examination of the hair shafts revealed brown to black firmly concretions.

References

1. Veasey JV, Avila RB, Miguel BAF, Muramatu LH. White piedra, black piedra, tinea versicolor, and tinea nigra: contribution to the diagnosis of superficial mycosis. *An Bras Dermatol.* 2017;92(3):413-416. DOI: 10.1590/abd1806-4841.20176018. PMID: 29186263. PMCID: PMC5514591.
2. Piccolo V. Update on Dermoscopy and Infectious Skin Diseases. *Dermatol Pract Concept.* 2019;10(1):e2020003. DOI: 10.5826/dpc.1001a03. PMID: 31921490. PMCID: PMC6936624.