

Three Cases of Heterochromia of the Scalp Hair

Thaer Douri,* MD

Address: Ministry of Health, Hama, Syria

E-mail: dermatol2003@yahoo.com

* Corresponding Author: Dr. Thaer Douri, Ministry of Health, Hama, Syria

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Abstract

Observation: Heterochromia of the scalp hair is described as the presence of tufts of hair of a different color than that of the rest of the hair. Pubic, axillary hair, eyebrows and eyelashes are often darker than scalp hair in a fair-haired person. Rarely, a circumscribed patch of scalp hair of different colors occurs. We described 3 cases of congenital isolated tuft of heterochromia in the scalp hair.

Introduction

Heterochromia of the scalp hair is described as the presence of tufts of hair of a different color than that of the rest of the hair. We described 3 cases of congenital isolated tuft of heterochromia in the scalp hair.

Case Reports

A 10- year-old boy with dark brown hair had one tuft of light brown hair of the right part of scalp (**Figure 1**). The patient was in a good health. There is another case in his family.

A 5-year-old boy with dark brown hair had one tuft of light brown hair of the right part of scalp. The patient was in a good health. There are two similar cases in his family.

A 9- year – old boy with dark brown hair had one tuft of light brown hair of the right part of scalp (**Figure 2**). The patient was in a good health. No similar case in his family.

In the three cases the physical examination did not reveal hypo- or hyperpigmentation patches or spots on the body, as well as the examination of

the scalp under the heterochromatic tuft did not reveal skin hyper- or hypopigmentation, thus excluding the diagnoses of melanocytic nevi, halo nevi, and vitiligo. Hair pigmentation was homogeneous along the length of the hair shaft and thus segmented heterochromia was excluded, so the diagnosis of heterochromia hair was put in our three cases.

Discussion

Heterochromia of the scalp hair is described as the presence of tufts of hair of a different color than that of the rest of the hair [1]. While segmented heterochromia of scalp hair is characterized by the irregularly alternating segmentation of hair into dark and light bands and is known to be associated with iron deficiency anemia [2] and could be reversible after treatment. *Kyeong Han Yoon* et al described a case of 11-year-old boy with segmented heterochromic hair associated with iron deficiency anemia which recovered completely after 11 months of iron replacement [2].



Figure 1. A 10- year-old boy with dark brown hair had one tuft of light brown hair of the right part of scalp



Figure 2. A 9- year – old boy with dark brown hair had one tuft of light brown hair of the right part of scalp

Poliosis is the presence of white hair because of a lack of pigmentation in a group of adjacent follicles. Poliosis is relatively common and may be related to genetic abnormalities of melanocyte migration (piebaldism, Waardenburg syndrome, tietez syndrome. Neurofibromatosis, tuberous sclerosis [3, 4, 5, 6] but also it is found in association with regressing melanoma, vitiligo, and Vogt-Koyanagi syndrome. It may be seen in alopecia areata when the new hair grow [3].

Lucia Restano et al had report 5 patient who presented stable bands of hair of a different color with respect to the surrounding hair. In 4 patients this was an isolated finding. One patient also had diffuse linear skin hypopigmentation and other abnormalities. He hypothesize that these 5 cases represent a distinct type of hair heterochromia, possibly because of somatic mosaicism for genes affecting pigmentation [7].

Matilde Iorizzo et al. report 4 patients with isolated congenital tufts of heterochromia in the scalp hair following the Blaschko lines of the head [1]. Finally Amit K.Malhotra et al. described a 5-year-old girl of eyelash heterochromia.

Our 3 cases are isolated scalp hair heterochromia in healthy children, with 2 cases with similar family history.

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