



IMAGES IN PAEDIATRICS

Trichothiodystrophy, playing with optical microscope

Tricotiodistrofia, jugando con el microscopio óptico

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Available online 29 October 2024



A 5-year-old boy with a history of hydrocephalus, cortical and cerebellar atrophy, hypospadias, cryptorchidism, psychomotor retardation, renal hypoplasia, high myopia and nystagmus presented to the dermatology department with sparse, dry and brittle hair and ichthyosis sparing the palms and soles. His hair did not grow and had never been cut. He did not have photosensitivity.

On light microscopic examination, the hair strands appeared normal, but upon setting the polarized light filter and rotating it slowly, alternating light and dark transverse bands could be seen (Fig. 1 and Appendix A, video).

This key finding led to the diagnosis of trichothiodystrophy, a hair dysplasia that is part of a complex neuroectodermal syndrome.



Figure 1 Alternating light and dark bands ("tiger tail" pattern) on polarized light microscopy.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.anpedi.2024.07.003>.

DOI of original article:

<https://doi.org/10.1016/j.anpedi.2024.07.003>

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