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### High resolution imaging techniques for trichodystrophies in Netherton syndrome.

*Gencia I, Doroftei F, Ghitulescu P, Solovan C. RoJCED 2016; 3(2):104 - 108*

#### **ABSTRACT**

**Introduction:** The pathognomonic trichodystrophy in Netherton's syndrome is trichorrhexis invaginata. This hair shaft anomaly is not constantly present and it can be associated with other anomalies like trichorrhexis nodosa or pili torti. **Methods:** We retrospectively analyzed hair samples from patients diagnosed with NS over the past 10 years in the Dermatology Clinic Timisoara by using scanning electron microscopy. The samples were of scalp hair, eyebrows, eyelashes and pubic hair. We also evaluated some of these samples with trichoscopy and confocal microscopy. **Results:** The scanning electron microscopy results showed that trichorrhexis invaginata was evident in all cases, followed by trichorrhexis nodosa and pili torti respectively. In these patients there was more than one type of trichodystrophy present at the same time. All of these modifications were perceptible with the confocal scanning microscope and by trichoscopy. **Discussion:** The electron microscopy helps by supplying three-dimensional images of the hair shaft, thus enabling the observation of the hair samples with a greater clarity and sharpness than through classical methods. Also reflectance confocal microscopy and trichoscopy have proven to be very useful in the diagnosis of hair shaft anomalies.