

TRICHORRHEXIS NODOSA CONFINED TO THE BEARD HAIRS

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Two cases of trichorrhesis nodosa confined to the beard region are reported and relevant literature reviewed.

Key words : Trichorrhesis nodosa, Beard, Hairs.

Trichorrhesis nodosa (TN) is characterised by tendency of the hair shaft to fracture transversely with node formation. Beigel¹ described two cases of this entity with illustrations of typical microscopic findings. Wilson² had described any condition in which hair tended to break and split as 'fragilitas crinium'. Kaposi³ is credited with coining the term trichorrhesis nodosa. It can be broadly divided into three types. The first and the commonest type is the result of physical and chemical trauma⁴. The second type consists of isolated inherited tendency for TN⁵. The third type occurs in association with other diseases *e.g.* (a) argininosuccinicaciduria⁶ in association with mental retardation and seizures; (b) trichothiodystrophy⁷ which includes sulfur deficient brittle hairs (trichorrhesis nodosa, banding and folding), mental and physical retardation, lamellar ichthyosis, ocular dysplasias, dental caries, and decreased fertility.

Observations on Indian patients⁸ indicate that almost all girls who have terminal splitting of their hair, also have typical nodes of trichorrhesis a few millimeters proximal to the split end. These nodes have a characteristic micro-

scopic appearance of TN. Under gentle traction, as also during routine combing, the hair easily breaks off at this node. This condition is extremely common, though some girls have more severe forms than others. It is however, seen only in those girls who do not trim their hair. Trichorrhesis is also seen in approximately one-third of the cases having alopecia areata.

Trichorrhesis nodosa involving the beard region is very rare. We report two cases of TN confined to the beard region.

Case Reports

Case 1

A 22 year old sikh boy complained of spontaneous breaking of beard hairs and tiny white nodulations on them, for the last few days. He denied any history of physical or chemical trauma or pruritus at the affected site. No family member was having such complaints. Careful examination revealed, tiny white or pale white nodules 0.1—0.2 mm in size in the circumscribed patches, on both sides of the face. In addition, several hairs showed broken frayed ends. Hairs bearing nodes could be easily broken at the nodes. The skin underlying those patches was normal and rest of body hairs were not involved. Microscopic examination of the hair revealed that the nodes were in fact points where hair had split into several fragments giving the appearance of two brooms pushed into each other (Fig. 1)

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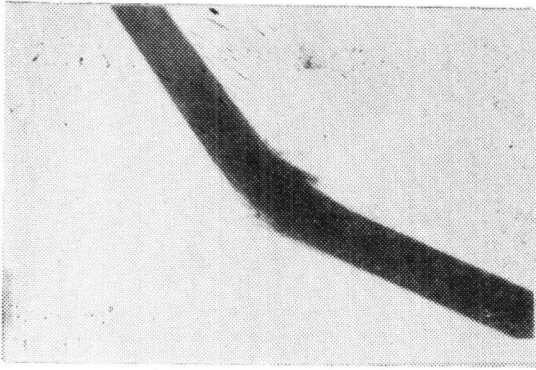


Fig. 1. Hair broken into multiple fragments at the site of the node.

Case 2

The second patient was a 35 year old sikh boy with one year history of easy breakability and white nodulations of the beard hairs. He had been shampooing his beard more vigorously since he noted the above changes. No other family member was affected. Examination showed multiple broken hairs and tiny nodules on hairs distributed diffusely in the beard. Hairs on rest of the body were unaffected. Microscopic examination showed changes identical to those in the first case.

General physical, systemic examination, routine investigations and tests for argininosuccinicaciduria did not reveal any abnormality in both the cases.

Comments

Trichorrhhexis nodosa commonly affects the scalp in females and genitocrural region in males. In a series of 49 cases described by Chernosky and Owens⁴, scalp was involved in 26 cases, genitocrural region in 20 cases, genitocrural region and scalp, genitocrural region and

extremities, extremities only in one case each. Leonard et al⁹ described a single case of generalised TN due to abnormal α -keratin chains because of low cystine content, but beard involvement was not mentioned. Sabouraud¹⁰ had described self limited circumscribed TN of scalp, beard and moustache. According to our information no case of TN involving the beard has been described from India.

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