



Twenty Nail Dystrophy Associated with Alopecia Areata

Yirmi Tırnak Distrofisine Eşlik Eden Alopesi Areata

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Dear Editor,

Twenty-nail dystrophy (TND) (trachyonychia) is a nail disease with nail brittleness, longitudinal ridges, dull and rough appearance on the surface of the nails which also affects proximal nail matrix. Though usually idiopathic, TND can be accompanied by many other illnesses such as alopecia areata, lichen planus, and psoriasis (1,2). The number of affected nails and the rate of affection may vary from person to person. TND and alopecia areata association is a rare condition.

A forty-five year old male patient applied to our clinic with deterioration and loss in all his fingers and toes for five years. Physical examination revealed that the patient had nail brittleness, longitudinal ridges, and dull and rough appearance on the surface of all nails and toes along with alopecia areata around the beard area (Figure 1).



Figure 1. Nail brittleness, longitudinal ridges, dull and rough appearance on the surface of all the nails along with alopesi areata in the beard area

Some of the nails were afflicted by thickening while some had thinning. Potassium hydroxide examination

and fungal cultures were negative. It has been found out that the patient had alopecia areata for the past three years. There were no other dermatological diseases on physical examination. Laboratory tests were normal, as well. The alopecia areata diagnosis was considered in line with TND. The patient was treated with topical steroids in occlusion for 10 days. Not benefiting from occlusive treatment, the patients was further advised to take proximal and intralesional corticosteroids (triamcinolone acetonide) treatment at the bottom of the lateral nails twice a week. The patient, who refused the treatment, was decided to be checked in the follow-ups.

TND affects both genders. It is a clinical case and a spectrum describing nail plate abnormalities resulting in roughening nail surfaces (2).

TND is an inflammatory disease that affects proximal nail matrix with observable nail brittleness, longitudinal ridges, dull and rough appearance on the surface of the nails. Primarily an idiopathic disease, TND can accompany alopecia areata, lichen planus, psoriasis, atopy, ichthyosis vulgaris, selective IgA deficiency, vitiligo, and Graft-versus-host disease (1,2).

In TND, not all 20 nails may be affected; it can be just one or all the twenty. Nail dystrophy may occur simultaneously in the entire set of nails. In the literature, TND insidiously develops connected to eczema, psoriasis, and alopecia areata over a long period of time.

Isolated cases not associated with any diseases are rare (3-5). There is no dermatological or systemic diseases in our patient's own or family history.

Clinically, the degree of nail dystrophy severity can vary (6). Twenty-nail dystrophy in childhood was made known by Hazelrigg et. al. presenting a child with non-inherited trachyonychia on all his nails (7). In Saray et. al's study, out of 50 alopecia areata patients, 9 had nail pitting, 8 had leuconychia, 6 had longitudinal ridging, 5 were with beau lines, 2 had trachyonychia, and one of them was afflicted with the absence of lunula (8).

TND's etiology and pathogenesis is still unclear. There is no definitive treatment for TND. It is a self-limiting disease and is usually resolved spontaneously in children. Various treatment modalities have been tried so far. Among these treatment methods one can mention the administration of topical corticosteroids alone or in combination with salicylic acid and tretinoin; the use of intralesional or systemic corticosteroids (triamcinolone acetonide for 3-6 months; 0.5-1mg/kg/months intramuscularly administered); topical 5-fluorouracil, griseofulvin, tazorot and even topical PUVA treatment (2,3,7,9).

Our patient was treated with topical steroids in occlusion for 10 days. Occlusive treatment falling short, we recommended our patient intralesional corticosteroid therapy, the major factor in the treatment, 2 times a week, applying it at proximal and lateral nail bottom.

TND is a rare disorder. TND can develop in the absence of a dermatological and systemic disease. There are very few idiopathic cases reported in the literature. Developing very rapidly and severely, nail dystrophy may lead to losses and destruction in the entire matrix in a few months. We simply wanted to share the importance of early diagnosis and treatment of this disease with the readers.

Best regards.

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