Yellow nail syndrome- A case report

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Abstract
We report a case of yellow nail syndrome in a young female, who had associated respiratory disorder, shortening and thickening of nails of upper and lower limbs. There were no signs of lymphedema. Patient responded well to topical applications.

Key words: Yellow Nail Syndrome, Chronic sinusitis, Lymphedema

Introduction:
Yellow nail syndrome (YNS) is an extremely rare disorder characterized by yellow dystrophic nails, peripheral lymphedema and bronchiectasis with recurrent lower respiratory tract infections.¹ It usually affects older adults. The exact cause of yellow nail syndrome is not known. Occasionally yellow nail syndrome has been reported to run in families suggesting that genetic factors may play a role in the development of the disorder in these cases.²

YNS has been associated with autoimmune disorders like thyroiditis, systemic lupus erythematosus and rheumatoid arthritis and malignancies like cancer of the breast, larynx, lung, endometrium, gall bladder, metastatic sarcoma, metastatic melanoma, Hodgkin's disease and mycosis fungoides. The characteristic finding associated with yellow nail syndrome is the development of yellow, thickened, and excessively curved nails with almost complete stoppage of nail growth.²

Loss of the strip of hardened skin at the base and sides of a fingernail cuticles may also occur. Separation of the nails from the nail bed (onycholysis) may cause the nails to fall out. Some individuals may develop paronychia. Pleural effusion is the most commonly associated respiratory condition, others being bronchiectasis, chronic sinusitis, bronchial hyperresponsiveness and recurrent pneumonia.

Lymphedema is present in the vast majority of patients with YNS. It is non-pitting and typically involves the lower extremities in a symmetric fashion.³ Lymphedema has also been described in the upper extremities, face and occasionally in the peritoneal cavity with ascites.⁴

We report a young female with yellow nail syndrome.

Case report:
A 19 year old female complained of thickening and shortening of nails of both upper and lower limbs since three years. According to her there was decreased growth rate of all the nails. Patient gave past history of being treated for respiratory illness which was clinically diagnosed as chronic allergic rhinitis by local chest physician. On examination nail plates of fingers and toes were thick, light yellow in color with transverse over curvature. Few nails showed transverse ridging. There were no other significant clinical findings and family history of similar illness. Routine laboratory investigations were normal and serum ANA was negative.

Patient was started on local therapy with application of Nitroglycerine ointment 4% twice daily along with application of clobetasol 0.05% at night for 5 days a week. Patient was regularly followed up and by the end of four months the condition improved. The nails appeared unremarkable and started growing, normally (figure 1).

Discussion:
Yellow nail syndrome is a rare disorder; where the patient needs medical consultation because of the abnormality noticed in the nails.

Piraccini et al (4) studied the medical records of 21 patients with yellow nail syndrome, encountered over three decades. Most patients had involvement of all the 20 nails. 16 patients had respiratory manifestations and only 6 patients had lymphedema. Similarly the...
present case did not have lymphedema and respiratory complaints. Similarly the present case did not have lymphoedema and yellow nails responded to local steroid therapy. D susan et all reported two patients in whom there was spontaneous clearing of nail changes, but without resolution of respiratory involvement suggesting that nail changes may not result from systemic manifestations. The diagnosis of this condition is purely based on presence of characteristic clinical features of which nail abnormalities are important, without which it is difficult to diagnose.

Nail manifestations often improve without specific treatment, though topical steroids and vitamin E are being used. Since this syndrome is associated with various diseases, patient has to be followed up and investigated thoroughly to find out the underlying cause for the same.

Topical Nitroglycerine has not been used in YNS, but it has been successfully used in treatment of Perniosis. Yellow nail syndrome is primarily a disease of lymphatic obstruction leading to lymphoedema. Topical Nitroglycerine by its vasodilatory effect may also improve lymphatic flow along with vascular flow.

**Conclusion:** Yellow nails are important cosmetic problem which can make somebody depressed. Present cases showed a significant improvement with topical Nitroglycerine and topical steroid. Further studies are required to prove it efficacy.

**References:**

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**Fig.1**Before therapy - After local therapy

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