

## Cutaneous Manifestations in Thyroid Disorders

AJAY PAL SINGH, O.P. JATAV AND SHILPI SIKARWAR

### ABSTRACT

#### Background:

Thyroid disorders commonly have dermatologic manifestations. The association of thyroid disorders with cutaneous manifestations is complex. Both hypothyroidism and hyperthyroidism are known to cause these changes. Of all the endocrinopathies that may have cutaneous findings, thyroid disease is probably the one most likely to be seen by the practicing physician since the skin readily reflect the functional capacity of the thyroid gland. We aimed to study the cutaneous changes in thyroid patients.

#### Materials and Methods:

In order to study the association of skin changes in relation to thyroid disorders, 51 patients who had skin complaints and symptoms of thyroid disorders were enrolled in the study and parameters were noted regarding history, cutaneous signs, thyroid function test and associated diseases.

#### Results:

We found dry and coarse skin (52.94%), diffuse alopecia (41.17%), pigmentary disorders (25.49%), pruritus (23.52%), hyperhidrosis (15.68%), keratoderma (15.68%) and urticaria (13.72%) to be the common skin manifestations. Possible autoimmune manifestations were vitiligo (5.88%), urticaria (13.72%) and alopecia (45.09%).

#### Conclusion :

This study shows that there definitely exists association between cutaneous signs with thyroid disorders.

See end of the article for authors' affiliation

AJAY PAL SINGH,  
Department of  
Medicine, G.R. Medical  
College, GWALIOR  
(M.P.) INDIA

### Key words :

Thyroid,  
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Thyroid disorders have a high prevalence in medical practice; they are associated with a wide range of disease with which they may or may not share etiological factors. One of the organs which best share this wide range of clinical signs is the skin (Niepomniszcz and Amad, 2001). Cutaneous findings may be the only clue to otherwise silent thyroid disease. Skin changes may precede other clinical and

laboratory evidence of thyroid malfunction by months or years. Thus, the skin not only aids in the diagnosis of thyroid dysfunction, but also helps the physician to select those high-risk patients in whom thyroid abnormalities may later develop. Dermopathies associated with thyroid abnormalities may be considered categorically as (Dogra *et al.*, 2006; Heymann, 1992) (Table 1).

**Table 1: Classification of the cutaneous manifestation of thyroid disease**

A. Specific lesions: Thyroglossal duct cyst Cutaneous metastasis from thyroid malignancies.
B. Non-specific lesions of hypothyroidism: Congenital hypothyroidism Generalized myxedema. (a) Textural alternation. (b) Xerosis and keratoderma (c) Carotenemia (d) Alopecia (e) Brittle nails. Miscellaneous disorders
C. Thyroid disorders associated with other dermatological and/systemic disease: Immunologically mediated disorders - (a) Alopecia areata. (b) Anaemias (c) Bullous disorders-Pemphigus, Bullous Pemphigoid, Herpes gestationalis, Dermatitis herpetiformis. (d) Connective tissue diseases - Dermatomyositis, Lupus erythematosus, Endocrinopathies. (e) Pigmentary disorders - Vitiligo, Melasma. Miscellaneous disorders Complications related to the treatment of thyroid disease.

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