

IMAGES IN CLINICAL MEDICINE

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Brittle Nails and Hair Loss in Hypothyroidism



A 41-YEAR-OLD WOMAN PRESENTED TO THE ENDOCRINOLOGY CLINIC with nail changes that had occurred over several months and hair loss that had progressively worsened over 2 years. Physical examination revealed dry skin, thickened and brittle nails with horizontal ridges (Panel A), marked hair loss with coarse hair (Panel B), and a diffusely enlarged thyroid gland. The results of laboratory evaluations were notable for a thyrotropin level of 30.5 μ IU per milliliter (reference range, 0.5 to 5.0) and a serum free thyroxine level of 0.4 ng per deciliter (5.7 pmol per liter; reference range, 0.9 to 1.7 ng per deciliter [11.6 to 21.9 pmol per liter]). Findings from further testing showed an antithyroglobulin antibody level of 793 IU per milliliter (reference value, \leq 55) and an antithyroid peroxidase antibody level of 2439 IU per milliliter (reference value, \leq 9). Ultrasonography revealed diffuse goiter with heterogeneous internal echogenicity. Hypothyroidism due to Hashimoto's (chronic lymphocytic) thyroiditis was diagnosed. Hypothyroidism should be considered in the differential diagnosis of thickened and brittle nails and hair loss, although this extreme presentation is atypical. Five years after the initiation of levothyroxine therapy, the nail changes and hair loss had resolved (Panels C and D, respectively).

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