nail deformity in the left great toe in a 57-year-old man who was treated successfully with widening of the nail bed without matricectomy. This method is an effective surgical technique preserving the nail matrix for the correction of pincer nail deformity.

키워드 : Widening of nail bed, Pincer nail deformity

**P187**

Identification of a novel U2HR mutation in a Korean woman with Marie Unna Hereditary Hypotrichosis

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Marie-Unna hereditary hypotrichosis (MUHH) is a rare autosomal dominant hair loss disorder with progressive alopecia. Recently, researchers have identified mutations in U2HR, an upstream regulator of the Hr gene, as genetically responsible for MUHH. So far, 14 mutations in U2HR gene have been identified as far as we know. We report a novel heterozygous missense mutation within U2HR of the Hr gene was identified in a Korean woman with MUHH. A 24-year-old woman presented with progressive hair loss. Since puberty, she showed decreased hair density and coarse hair texture on vertex and occipital scalp. Her eyebrows, eyelashes, and pubic hairs were scanty. But there are no other ectodermal abnormalities or psychological impairments. On her pedigree, at least 6 people of her family members, including her father, had similar symptoms. Light microscopy and scanning electron microscope revealed increased hair shaft diameter, longitudinal grooves and irregular hair shaft twists which are characteristics of MUHH. Sequencing of the upstream ORF U2HR in the 5’UTR of the hairless gene resulted in the identification of a novel heterozygous missense mutation (c.80C>T) that has not been yet reported worldwide.

키워드 : Marie Unna Hereditary Hypotrichosis, U2HR mutation

**P188**

Localized hair thinning due to hair shaft weakness

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A 37-year-old female who was admitted in hospital due to hemorrhagic cellulitis on her left leg showed incomplete hair loss patch on her vertex area mimicking trichotillomania. Beside the present cellulitis, the patient was treated with hemodialysis for chronic renal failure for the past 3 years. Close observation of the alopecic area revealed many broken hair shafts. Biopsy study showed normal scalp tissue. Hemoglobin and iron level were decreased to 8.8 g/dl and 23 ug/dl (normal value: 49-151 ug/dl) each. The average diameter of the epilated hairs were 75 μm (88.5 μm in normal Korean female). The hair shaft fragility was measured by dynamometer, which shows degree of pulling force upon hair shaft by deformation of a spring. The hairs of affected area broke at the average of 0.35N whereas normal control hairs broke at 0.7N. With those findings, it was apparent that the alopecic patch was due to impaired hair shaft, which may be related to iron deficiency of the patient undergoing hemodialysis.

키워드 : Hair, Shaft, Weakness, Localized

**P189**

Alopecia during anti-estrogen therapy in patients with breast cancer

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Hormonal therapy using anti-estrogen drugs is widely used in the management of estrogen dependent breast cancer. It can sometimes cause abnormal hair conditions such as hair thinning, discoloration and androgenetic alopecia, but hormonal therapy related hair loss is rarely evaluated by dermatologist. We report 5 cases of male or female pattern alopecia during anti-estrogen therapy in patients with breast cancer and speculate on its pathogenesis. Among them, 2 patients received selective estrogen receptor modulators, 2