Sir,

We described an untypical form of monilethrix with discreet symptoms of disease and keratosis pilaris who was observed at the age of 6 years after fever.

A 6-year-old girl born of a nonconsanguineous marriage. Her hair was an easy fragmentation and thinning [Figure 1]. After fever was noticed hair loss in large quantities. She had normal hair initially after which it got replaced with short and sparse hair.

Macroscopic study of the scalp showed thinning enhanced on the left and the sewing head, but the hair was easily breakable on all head area. Hair was short, sparse, and dry. On cutaneous examination, was described stubby with multiple keratotic hyperpigmented papules all over the scalp. Hairs were bent regularly at multiple locations and had a tendency to fracture at construction sites.

We found keratosis pilaris on the extensor arm.

Hair pull test was positive.

Trichoscopy examination revealed the presence of few empty follicles, small broken hairs, black dots, and hair with uniform nodal dilatations with intermittent constrictions at which there was shaft breakage [Figure 2]. The hairs were of varying lengths; many were broken. Hairs with normal morphology were seen interspersed within this beaded hair. The beaded hair showed bending in different directions with a tendency to break at internodes (regularly bend ribbon sign) observed follicular keratotic papules on the scalp. This was consistent with monilethrix.

On light microscopic examination, hair [Figures 3a-d] revealed elliptical nodes resulting in a beaded appearance of the hair shafts; characteristic alternating fusiform or spindle-shaped swellings (nodes) and constrictions (internodes).

Trichogram showed 81% hair in the anagen phase.

Eyebrows and eyelashes were without evidence of disease. There was no nail, dental, or sweat gland abnormality found after thorough physical examination.

Routine laboratory screenings were within range. Her mental and physical growth was normal.
Her parents and her brother and sister were examined with no findings of hair abnormalities.

In this child was prescribed pharmacological “made mix” (hydrocortisone, pilocarpine, tincture Capsici, and Chinae). After 2 months, mother and we observed improvement in hair density, but the symptoms of monilethrix still persisted and also in subsequent visits. Diagnosis in monilethrix based on clinical, microscopy, trichoscopy, and genetic or histology study.

Several genetic studies have suggested that monilethrix is caused by a hair keratin mutation. Was suggested mutations in the human hair basic keratins hHb1 and hHb6 in this disorder. The most common mutation is the E413K mutation in hHb6.[1,2] Mutations in the keratin genes KRT81, KRT83, and KRT86 lead to autosomal dominant monilethrix whereas mutations in the desmoglein 4 gene cause an autosomal recessive form.[1,3]

The hair defect may occur in isolation but usually associated with keratosis pilaris presenting as keratotic papules. In our case, there were also keratotic papules on the extensor arm.[4]

We presented a 6-year-old girl with monilethrix with the de novo mutation. The parents noticed the excessive fragility and hair loss after an episode of fever in the child in 6-year-old. Moreover, due to an involvement of only a small number of hair follicles trichoscopy was a decided diagnostic tool.

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Conflicts of interest
There are no conflicts of interest.