

## Visual Treats in Dermatology

# Loose anagen syndrome masquerading woolly hair

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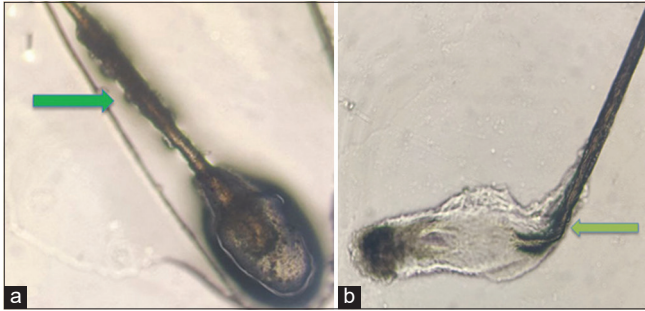
Loose anagen hair syndrome (LAS) is characterized by non-scarring alopecia with increased hair shedding due to a defect of keratinization typically diagnosed in girls who present with hair that “will not grow.”<sup>[1]</sup> It is inherited in an autosomal dominant fashion with incomplete penetrance or as sporadic cases.<sup>[1]</sup> Herein, we present two female children of around 10 years of age who presented with complaints of diffuse thinning of hair and hair that does not grow beyond a particular length [Figure 1a and b] for the past 5 years. Family history was not significant. Scalp examination revealed lusterless and curly hairs with diffuse thinning which are easily pluckable without any pain. There was no abnormality in eyebrows, eyelashes, nail teeth, or skin. On hair pull test, >10 anagen hairs being pulled out, rest systemic examination was unremarkable, On light microscopy of hair shaft, there is a ruffling of the cuticle “floppy sock sign” [Figure 1a] and bending of hair bulb at an angle resembling “rat tail” [Figure 2b] was seen. Hence, on clinical, physical, and microscopic examination, a diagnosis of LAS mimicking woolly hair was made as both the cases presented as curly, lusterless, and light-colored hair similar to woolly but these can be differentiated on light microscopy as woolly hair shows ovoid cross sections, 180-degree longitudinal twisting, trichorrhexis nodosa, and pili annulati and trichoscopic features include “crawling snake” appearance and trichoptilosis<sup>[2]</sup> while in LAS, trichoscopy reveals solitary yellow dots, rectangular black granular structures, and a high degree of follicular units with single hairs.<sup>[3]</sup> Parents of both the children were counseled regarding the natural course of the LAS and topical minoxidil 5% was given.



**Figure 1:** (a and b) Clinical images of children showing lusterless and curly hair with diffuse thinning.

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**Figure 2:** (a) Ruffled hair cuticle (green arrow) “floppy sock sign.” (b) Bending of hair bulb at an angle (green arrow) resembling “rat tail.”

#### Declaration of patient consent

Patient’s consent not required as patients identity is not disclosed or compromised.

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#### Conflicts of interest

There are no conflicts of interest.

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