Indian Journal of Pediatrics (November 2023) 90(11):1164
https://doi.org/10.1007/s12098-023-04762-y

CORRESPONDENCE

Treatment of Alopecia Universalis in a Child with Down Syndrome

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Received: 16 May 2023 / Accepted: 30 June 2023 / Published online: 3 August 2023

To the Editor: A 2-y-old Down syndrome (DS) boy had sudden-onset of hair loss that started at the age of 1 y. He initially had patchy hair loss on the scalp, which later progressed to involve the entire scalp and other parts of the body including the eyebrows and eyelashes. Examination revealed alopecia universalis (AU) (Supplementary Fig. S1A) and scrotal tongue. Karyotyping confirmed the diagnosis of DS.

He was treated with topical mometasone lotion 0.1%, 5 drops on the scalp once daily, tacrolimus ointment 0.03% in the evening and minoxidil lotion 2% twice daily. Sixty percent hair regrowth was observed within four months (Supplementary Fig. S1B). At the end of six months there was near complete regrowth of hair including the eyebrows (Supplementary Fig. S1C, D). After 9 mo, frequency of topical application was tapered down to alternate days and then biweekly. Within 3 mo parents noticed 2 small patches of partial alopecia. At which point parents were advised for alternate days of medication and he responded within few weeks. He is on regular follow-up and continues to show sustained improvement.

Children with DS and AU are often treated with systemic agents such as steroids, methotrexate, cyclosporin or JAK inhibitors, either alone or in combination [1–4]. Even with systemic therapy, response is variable and there is always a relapse [4]. Other limiting factors include side effects and high cost. Hence, we treated the child with a combination of topical mometasone and tacrolimus along with minoxidil 2%. Interestingly, the child had excellent response and significant regrowth of hair within four months with sustained improvement and good tolerability. A minor relapse upon tapering frequency was quickly addressed with subsequent improvement.

In conclusion, children with severe AU in DS can be treated with combination topical therapy as a safe, cost-effective and efficacious treatment before considering other systemic treatment options.

Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s12098-023-04762-y.

Declarations

Conflict of Interest None.

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