Unusual cause of Cushing's syndrome in a child.

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Local application of potent glucocorticoid (GC) ointments/lotions/creams for a prolonged period and in high doses has been reported to cause Cushing's syndrome (CS) in young children[1,2]. We describe a case of 14 months old male baby who was brought with the concern of excessive hair growth over his face from the previous two months. His parents had been applying clobetasol propionate (CP) ointment, approximately 20 gm (0.05% w/w) per day, over his buttocks since the age of 1 month for diaper rash. On examination, he had diffuse villous hair over his face/forehead and thin skin (Figure). BP 87/46 mmHg (50th percentile). His height was 68 cm (SDS -3), and his weight was 17 kg (SDS +3.3). His 8 am cortisol was 0.04 ug/dl, and ACTH was 3.8 pg/ml. After replacement with physiological hydrocortisone, his HPA axis recovered at three months (8 am serum cortisol 19.6 ug/dl) (Figure 1B).

CP is high potency GC and is recommended not to use more than 50 gm ointment (0.05% w/w or 25 mg of active drug) per week, not exceeding two weeks[2]. In addition, children have large surface areas relative to adults, leading to increased systemic absorption of GC, and are at higher risk for iatrogenic CS and suppression of the HPA axis, which may take months and years to recover[3].

Conclusion: Knowledge and awareness among parents and healthcare providers about the potential risks of potent GC applied locally are central to this case. Besides, the over-counter sale of these products should be prohibited.



Fig. 1A: Typical Cushing facies of child at presentation.

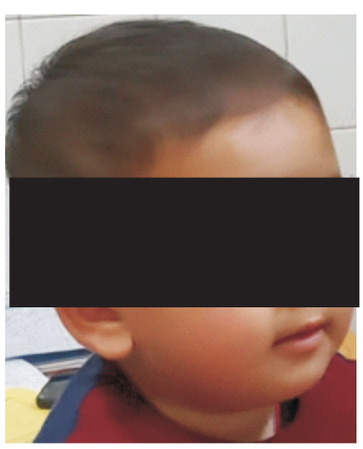


Fig. 1B: Facial appearance 6 months after stopping steroids.

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