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Iatrogenic Cushing's Syndrome in Eosinophilic Esophagitis: A Rare Complication of Swallowed Topical Corticosteroids

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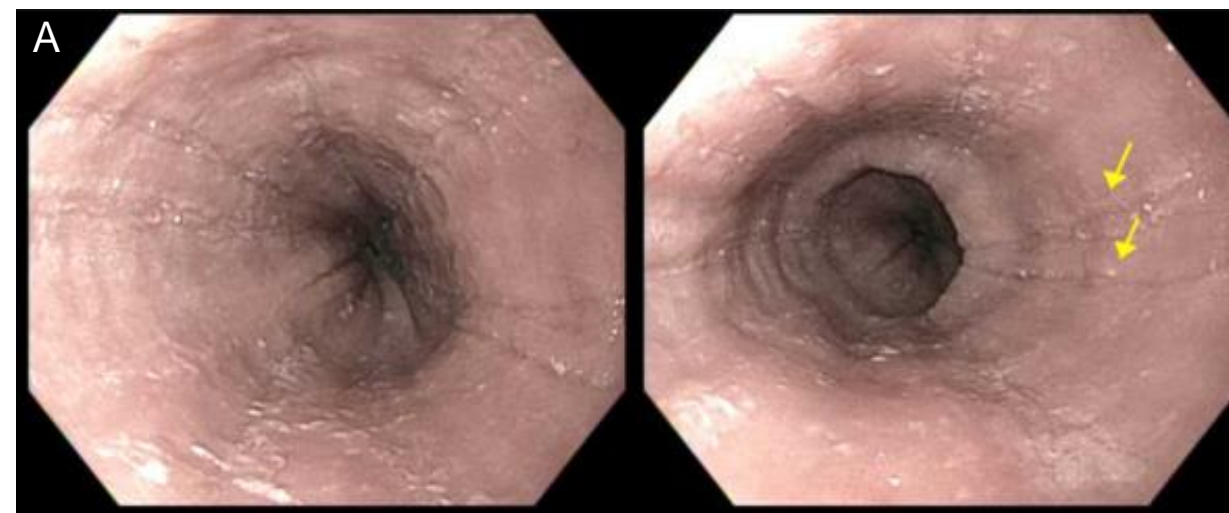


INTRODUCTION

- Topical corticosteroids (TCS) are a first-line treatment for eosinophilic esophagitis (EoE).
- Data supporting clinically significant adrenal insufficiency in EoE are lacking and risk of this complication is thought to be low.
- We describe a unique case of iatrogenic Cushing's syndrome associated with chronic TCS therapy in EoE.
- This case represents a rare complication for a common EoE treatment, as well as an opportunity for steroid-sparing treatment.

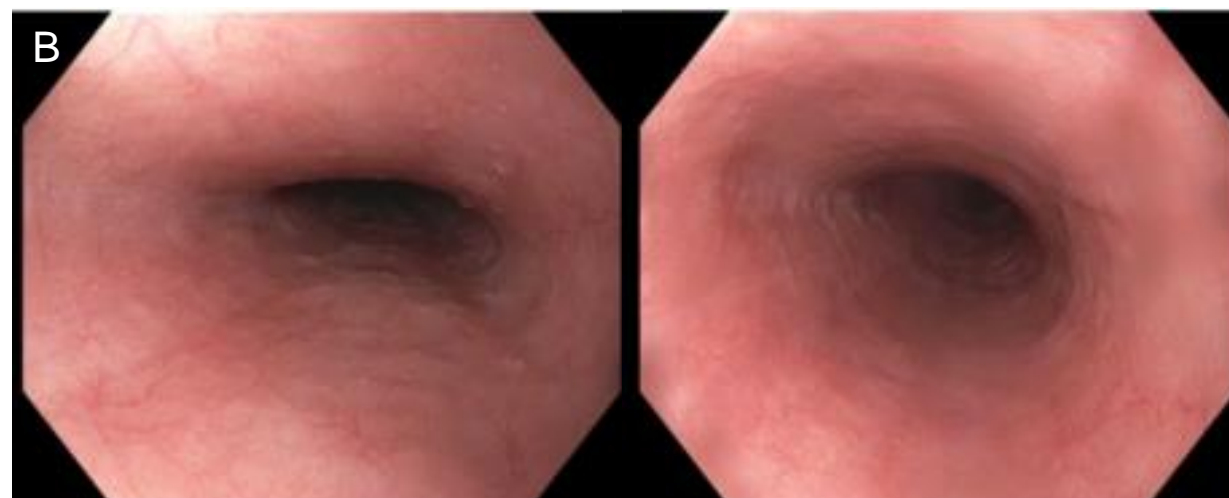
CASE DESCRIPTION

- A 27-year-old woman with a 7-year history of EoE refractory to proton pump inhibitor, 6-food elimination diet, and swallowed fluticasone (FP).



A) Active disease on FP 660mcg daily
Ed1 R1 Ex1 F1 S0
Proximal esophagus > 50 eos/hpf
Distal esophagus > 50 eos/hpf

- Disease remission was attained with high-dose oral viscous budesonide (OVB) 4mg. Rapid recurrence of dysphagia, endoscopic findings, and esophageal eosinophilia occurred with lower OVB doses.



B) Disease remission on OVB 4mg daily
Ed0 R1 Ex0 F0 S0
Proximal esophagus: 0 eos/hpf
Distal esophagus: 3 eos/hpf

- After using FP for 5 years, then transitioning to OVB for 18 months, she developed cushingoid features including prominent pathologic striae on the abdomen, breasts, and thighs, facial rounding, supraclavicular fullness, central obesity, and a dorsocervical hump.



- Given known exposure to exogenous steroids, features consistent with iatrogenic Cushing's syndrome, and assumed hypothalamic-pituitary-adrenal axis (HPAA) suppression, OVB was discontinued.
- Steroid-sparing treatment was initiated with subcutaneous dupilumab 300mg/2mL weekly.

Initial outcome

- After OVB taper to 2mg daily over two months, repeat assessment (ACTH, morning cortisol, 24-hour urine cortisol) was normal, consistent with HPAA recovery.

Ongoing clinical plan

- The patient reports complete resolution of dysphagia on dupilumab 300mg weekly.
- A repeat endoscopy to monitor response is pending.

DISCUSSION

- Topical steroids such as OVB are commonly used and recommended for long-term management of EoE with rare reports of adrenal insufficiency.
- As data supporting biochemical adrenal suppression with TCS use in EoE is limited to observational studies with heterogenous testing for AI and lack of patient symptom assessment, the risk of clinically relevant AS is likely low.
- Systemic effects of TCS may be understated, particularly with high compliance and prolonged use of high doses.
- Clinicians should counsel patients on the non-negligible risk of AS when prescribing TCS for EoE, and consider assessment of the adrenal axis or use of steroid-sparing agents in those reliant on chronic TCS for disease control.

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