Beware of the rinse: magic mouthwash as a rare cause of iatrogenic Cushing syndrome and secondary adrenal insufficiency

To the Editor: We read with interest the case of iatrogenic Cushing syndrome attributed to the use of clobetasol propionate-containing therapeutic mouthwash.[1] Topical corticosteroids, specifically clobetasol propionate-containing therapeutic mouthwashes, are far safer for chronic immune-mediated oral disorders, ameliorating symptoms such as pain and limiting morbidity without the harmful effects seen with the protracted use of systemic corticosteroids.[2,3] Of note, the term "magic mouthwashes" refers to hospital-specific, variably formulated mouthwashes, which contain saline and/or sodium bicarbonate and a topical anaesthetic for the relief of chemotherapy- or radiotherapy-related mucositis. Clobetasol propionate-containing therapeutic mouthwashes are an evidence-based, carefully formulated prescription medication, with proven superiority to other topical medicaments and essential for the safe management of oral lichen planus.[4] Nonetheless, monitoring for adverse side effects, which are rare,[1] is required of all prescribers.

Oral lichen planus is the most prevalent and persistent form of lichen planus; it affects 2% of the population, is active for 20–25 years, and causes significant morbidity, limiting patients to a bland diet free of any degree of spice, limiting talking and inhibiting essential oral hygiene, such as toothbrushing, required to prevent dental caries, gingivitis and periodontal disease, and for the maintenance of dental implants. Untreated, oral lichen planus can cause microstomia, secondary to the chronic scarring and fibrosis of the oral mucosa. Effective management of oral lichen planus is critical for the earlier detection of oral cancer, as subsites of patients with oral lichen planus not responsive to the clobetasol propionate-containing therapeutic mouthwash will elicit concern, meriting biopsy.

Several other factors likely contributed to the development of the iatrogenic Cushing syndrome. First, the inclusion of the topical anaesthetic, lignocaine, may have led to inadvertent swallowing of the mouthwash. Second, the patient's sensitivity to exogenous steroids. Empirically, clobetasol propionate-mouthwash may be up to ten to 20 times more potent than 0.1% dexamethasone mouthwash, which equates to only 6–12 mg prednisone daily, and only if all of the mouthwash has been swallowed. Alternatively, different therapeutic mouthwashes could also have been trialled, such as 0.1% dexamethasone mouthwash, 0.03% tacrolimus mouthwash[5] or even the clobetasol propionate-mouthwash but at a lower concentration of 0.025%.

In closing, science, not magic, informs the use of clobetasol propionate-containing therapeutic mouthwashes.

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