

Gaw, G., Wemyss, C. and Goodall, C. (2021) Steroid cover. *British Dental Journal*, 231(10), p. 604.

(doi: [10.1038/s41415-021-3689-1](https://doi.org/10.1038/s41415-021-3689-1))

This is the Author Accepted Manuscript.

There may be differences between this version and the published version. You are advised to consult the publisher's version if you wish to cite from it.

<https://eprints.gla.ac.uk/268035/>

Deposited on: 31 March 2022

Letter to Editor

Steroid Cover

Gemma Gaw, Callum Wemyss, Christine Goodall

Sir,

Patients with Addison's disease are at risk of an adrenal crisis and require consideration for steroid cover during dental procedures. Adrenal suppression secondary to systemic glucocorticoid use is the most common cause of adrenal insufficiency. Most recent evidence suggests that patients taking 5mg prednisolone or more, for one month or longer, may be at risk¹. Approximately 7 in 1000 people are prescribed long term glucocorticoids, creating a large population of patients that require further consideration in dentistry².

Guidance for the management of patients with Addison's disease and other forms of adrenal insufficiency in the dental setting was proposed by Gibson et al in 2004³ and remains a primary reference for dentists.

In 2020, guidelines for the management of glucocorticoids during the peri-operative period for patients with adrenal insufficiency were published by the Association of Anaesthetists. This guidance provides a framework for prevention of adrenal crisis in at risk patients undergoing surgery⁴, however dental surgery is not considered.

We wish to bring the recently published Addison's Disease Self Help Group Surgical Guidelines to the attention of your readers⁶. Interpretation of this guidance suggests that patients should have 100mg IM hydrocortisone administered prior to all dental extractions in patients with or at risk of adrenal insufficiency. This guidance does not allow dentists to assess the invasiveness of the procedure, as most dental extractions are considered to be minor surgery that does not result in significant surgical stress.

This guidance has implications for the management of patients at risk of adrenal crisis within the dental setting. It is widely accepted that the risk of adrenal insufficiency for dental treatment under local anaesthetic is low, and the vast majority of these patients are managed safely within primary dental care.

There is a lack of evidence on this clinical problem and advice given to patients. We would welcome a joint dentist and endocrinologist led review on the prevention of adrenal crisis in at risk patient groups, and recommendations that considers the most appropriate steroid cover regime for procedures routinely performed in primary and secondary care dentistry.

1. Husebye ES, et al. Consensus statement on the diagnosis, treatment and follow-up of patients with primary adrenal insufficiency. *Journal of Internal Medicine* 2014; 275: 104–15.

2. Gudbjornsson B, et al. Prevalence of long-term steroid treatment and the frequency of decision making to prevent steroid induced osteoporosis in daily clinical practice. *Annals of Rheumatic Diseases* 2002; 61: 32–6.

3. Gibson N, Ferguson JW. Steroid cover for dental patients on long-term steroid medication: proposed clinical guidelines based upon a critical review of the literature. *Br Dent J*. 2004 Dec 11;197(11):681-5. doi: 10.1038/sj.bdj.4811857. PMID: 15592544.
4. Woodcock T, et al. Guidelines for the management of glucocorticoids during the peri-operative period for patients with adrenal insufficiency: Guidelines from the Association of Anaesthetists, the Royal College of Physicians and the Society for Endocrinology UK. *Anaesthesia*. 2020 May;75(5):654-663. doi: 10.1111/anae
5. <https://www.addisonsdisease.org.uk/surgery> accessed 6th October 2021.