Drug Influenced Gingival Hyperplasia Treatment and Recurrence: a Case Report

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Introduction

- Drug influenced gingival hyperplasia is an overgrowth of the gingiva due to medication side effects in a medically complex patient.
- Gingival overgrowth can compromise oral hygiene, mastication, lead to disfigurement, and possibly restrict the airway.
- Gingival hyperplasia is a known side effect of anticonvulsants, immunosuppressants and certain calcium channel blockers.
- Occurrence typically happens 1 to 3 months after patient has started taking the offending medication.
- Additional factors increase the likelihood of gingival hyperplasia, such as the presence of plaque and calculus.
- There has been a documented increase in gingival mass for those affected with drug induced gingival hyperplasia with exfoliation of primary teeth.
- Hyperplastic gingiva often appears first in the anterior labial interproximal gingiva before spreading to other areas of the mouth.


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Case Report

- July 2022, 11 year old male patient with gingival hyperplasia localized to the anterior mandibular gingiva
- Medical history significant for hypertensive cardiomyopathy with chronic heart failure from systolic dysfunction and left ventricular dilation secondary to hypertension in the setting of chronic oliguric renal failure
- Received kidney transplant in 2020
- Prescribed amlodipine until June 2022 , changed to Isradipine
- September 2022 initial gingival hyperplasia resolved
- February 2023 granulomatous like gingival overgrowth appreciated in the upper left quadrant
- OHI, prophylaxis with scaling and 0.12% chlorhexidine gluconate prescribed in attempts to control biofilm
- March 2023 increased expansion of gingival overgrowth in upper left quadrant and gingival swelling spread to all areas of mouth
- Gingivectomy and biopsy performed same month under general anesthesia and sent for histological examination
- Gingivecomy consisted of debulking and thinning of fibrotic gingiva
- Beveled incision and thinning of the tissue was performed
- Interrupted sutures, chromic gut 4-0, were placed

Conclusion

- Laboratory report positive for irritation fibroma. Gingival hyperplasia in July 2022 likely due to Amlodipine.
- Gingival hyperplasia in 2023 likely due to Tacrolimus and poor oral hygiene as patient was transitioning to adult dentition.
- Surgery and exfoliation of primary teeth likely facilitated a more cleansable area, aiding to better gingival health, less inflammation and thus no recurrence of overgrowth.
- Patient put on a 3 month recall schedule to improve oral hygiene in attempt to reduce recurrence of hyperplastic gingiva.

Resources

American Academy of Pediatric Dentistry. Classification of periodontal diseases in infants, children, adolescents, and individuals with special health care needs. The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry; 2023:493-507

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