



Phenytoin-Induced Gingival Enlargement

Satvinder Singh Bakshi 

A 12 year-old male presented with complaints of generalized swollen gums associated with bleeding since 3 years (Fig. 1). His medical history revealed epilepsy since childhood, which was controlled with phenytoin 100 mg BID. Oral examination revealed poor hygiene with pale pink, enlarged, and firm gingiva that bled on probing. A diagnosis of generalized drug-induced gingival enlargement was made. The patient was treated with complete oral prophylaxis and substitution of phenytoin with gabapentin. He has been on regular follow-up for 4 months, and the gingival enlargement has been slowly reducing. Gingival enlargement is a well known consequence of the administration of certain anticonvulsants, immunosuppressants, and calcium channel blockers (1), and oral plaque, male gender, and young age are the known risk factors. The pathogenesis is unclear, but genetic predisposition, collagenase inactivation, and plaque-induced inflammation have been implicated in the etiology (2). Patients seek treatment due to decreased esthetics, gingival bleeding, or difficulty in speech or mastication. Treatment comprises changing the offending drug, plaque removal, and good oral hygiene maintenance; however, resistant cases may require gingival surgery (3).



Figure 1. Patient with gingival enlargement and poor oral hygiene

Informed Consent: Informed consent was taken from the father of the patient.

Peer-review: Externally peer-reviewed.

Conflict of Interest: The author have no conflict of interest to declare.

Financial Disclosure: The author declared that this study has received no financial support.

REFERENCES

1. Anand AJ, Gopalakrishnan S, Karthikeyan R, Mishra D, Mohapatra S. Immunohistochemical Analysis of the Role Connective Tissue Growth Factor in Drug-induced Gingival Overgrowth in Response to Phenytoin, Cyclosporine, and Nifedipine. *J Int Soc Prev Community Dent* 2018;8(1):12–20.
2. Gurgel BC, de Moraes CR, da Rocha-Neto PC, Dantas EM, Pinto LP, Costa Ade L. Phenytoin-induced gingival overgrowth management with periodontaltreatment. *Braz Dent J* 2015;26(1):39–43. [[CrossRef](#)]
3. Priyadarshini V, Belure VV, Triveni MG, Tarun Kumar AB, Mehta DS. Successful management of phenytoin and phenobarbitone induced gingival enlargement: A multimodal approach. *Contemp Clin Dent* 2014;5(2):268–71. [[CrossRef](#)]

Cite this article as:

Bakshi SS.

Phenytoin-Induced Gingival Enlargement. *Erciyas Med J* 2019; 41(2): 220.

Dept of ENT and Head & Neck Surgery, All India Institute of Medical Sciences Mangalagiri - ENT Guntur Andhra Pradesh, Mangalagiri, India

Submitted
15.03.2019

Accepted
25.03.2019

Available Online Date
09.05.2019

Correspondence

Satvinder Singh Bakshi,
House 1A, Selvam Apartments,
71 Krishna Nagar Main Road,
Krishna Nagar, Pondicherry
605008, India
Phone: +9698420998
e.mail: saty.bakshi@gmail.com