

Case Report

Gingival Bleeding With Over The Counter Sedatives- Case Report Of A Rare Entity

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ABSTRACT

Context: Availability of scheduled drugs as OTC drugs with lax regulatory oversight is leading to unwanted side effects and bizarre presentations not looked-for usually. **Case Report:** We report here a rare entity – spontaneous gingival bleeding in the absence of any local disease like gingivitis or periodontitis and with negligible contributory local factors and caused surprisingly by self medication with an OTC sedative, Phenobarbitone, for the past four years. The patient was treated with non surgical periodontal therapy and supplementation for the agranulocytosis like reduction in blood values followed by effective psychiatric counseling for drug dependence. Reviewed at the end of two months patient

showed a cessation of bleeding and improvement in blood values. **Conclusion:** Gingival bleeding, spontaneously, should be considered as a warning sign for drug dependence.

Key Words: Gingival Bleeding, Drug Dependence, Adverse Effects Phenobarbitone, OTC Sedatives, Agranulocytosis, Lax Regulation OTC Drugs.

INTRODUCTION

Gingival Bleeding is an objective, easily assessed sign of inflammation that is associated with several diseases. Gingival Bleeding is primarily due to oral diseases like gingivitis and periodontitis but occasionally systemic diseases with oral manifestations like Hemorrhagic Diatheses,

Hemophilia, Vit. C deficiency, Purpuras, Hemangiomas etc. produce bleeding from the gingiva. Gingival bleeding is also seen rarely in general pathologies like Bronchitis, Peptic Ulcer and Malignancies. And finally, very rarely Gingival Bleeding is encountered in Drug induced Agranulocytosis, Thrombocytopenia, etc. as presented in this case.

CASE REPORT

A 26 year old male patient reported to the Department of Oral Health, ISOG and Madras Medical College Chennai, with a complaint of bleeding gums for the past fifteen days. He gave a history of self-medication using Phenobarbitone

(100mg/day) since four years as a sedative for his profession as a Police Constable resulted in irregular sleep pattern's necessitating a sedative which he was able to obtain easily as an over-the counter drug. On clinical examination his gingiva was Pale-Pink in colour, with irregularly pigmented areas. There was profuse bleeding from the gingiva on probing. Also noticed was the presence of minimal local factors and maintenance of good oral hygiene by the patient. On further examination purpuric patches and splinter hemorrhages on his soft palate was observed [Fig.1].



Figure - 1

Further history ruled out the possibility of a self-inflicted trauma or a thermal or chemical insult to the soft palate region. On Routine Blood Investigations being done, the blood picture was illuminating and revealed a moderate Neutropenia and severe thrombocytopenia.

Patient was referred to the Medicine O P

Department for physician's opinion before periodontal management. Patient was advised Anti-oxidants, Multivitamins and Ferrous Sulphate supplementation and given a fitness for non-surgical periodontal procedures by the Medical Out Patient Department of Govt. General Hospital and Madras Medical College, Chennai-3,

and also further referred onto the Psychiatry Department of Govt. General Hospital, Chennai-3 for counseling and management of his drug dependency problem. When Patient was reviewed back in the oral health department a full mouth Scaling/Root Planning was completed in a single sitting and patient prescribed local styptics and ice-pack for local application. Patient was subsequently reviewed every fifteenth day over the next eight weeks. Also Patient underwent intense Psychiatric counseling sessions at the Psychiatry Department of Govt. General Hospital, Chennai-3 and his drug intake was tapered off slowly to 30 mg/day for the

first 15 days and then 15 mg/day for the next 30 days as per his report. Repeated investigations revealed at first a small and then an abrupt rise in her Leukocyte and Thrombocyte count and also in his Hemoglobin levels. Patient was also maintaining a good oral hygiene regimen throughout the treatment period. When reviewed at the end of eight weeks with a recent blood investigation report, clinical examination revealed a marked improvement in gingival health concomitant with an elevated neutrophil and thrombocyte count. Hence drug dependency should also be considered as a factor in gingival bleeding.

Table 1 - Investigations Report

Investigations	Baseline	8 weeks later
T.C	5,800	7,200
D.C	PMN's - 2,784 (48%), L-1,624 (28%), E-1334(23%).	PMN's-4,896 (68%), L-2,088 (29%), E- 216(3%).
Bleeding Time	5'6" mins	3'6" mins
Clotting Time	7'1mins	6'4" mins
Hemoglobin	9.6 gm/dl	11.2 gm/dl
Platelet Count	86,000 cells	146,000 cells

DISCUSSION

Gingival Bleeding is usually a reliable sign of inflammation of the gingival connective tissues and is often the first noticeable sign of periodontitis. Gingival bleeding occurs because of frequent micro-ulcerations in the

epithelium that lines the soft-tissue wall of a periodontal pocket. But gingival bleeding is not a diagnosis as it is not pathognomonic of only periodontitis and can also occur in wide variety of other conditions like Hemangiomas, Bleeding disorders like hemophilias and

purpuras, Nutritional deficiencies like Scurvy and neoplasms like leukemia.

In the present case we diagnosed the gingival bleeding as caused by a persistent drug dependency habit for a period of over four years. The drug was obtained by the patient as an OTC drug without prescription and used indiscriminately and without thought of side effects. The drug implicated in this case Phenobarbitone is a long acting (6-8hrs) barbiturate given in the usual dosage of 80-130mg/day in divided doses. The hypnotic effect appears within 15 to 30 mins and is maintained for 4 to 5 hours. There is a decrease in the duration of REM sleep and a prolongation of NREM sleep resembling natural sleep. The usual adverse effects include motor incoordination, distortion of judgement and an impaired vigilance to external stimuli.

The mechanism of action^[1] of Phenobarbitone is a reversible depression of neuro-transmission in the C.N.S., presumably by interacting with the beta subunit of the GABA-A receptors to open chloride ion channels and hyperpolarize neuronal membrane. It also inhibits the calcium current in the neurons and depresses the polysynaptic responses and delays the synaptic recovery. It results, depending on the dose in a wide range of effects- from a mild sedation through hypnosis to general anaesthesia. One major adverse effect of Phenobarbitone is the development of tolerance on repeated

administration^[2] due to an increased hepatic inactivation and increased adaptation of the nervous tissue to the drug. Repeated administration has also been noticed to cause drug dependence.

The treatment of barbiturate addiction is purely symptomatic. Generally the withdrawal should be gradually tapered over 10 days to 3 weeks depending upon the severity of dependence. If necessary a replacement drug like diazepam (10mg) may be given for a short period to prevent acute withdrawal symptoms anxiety, tremors and restlessness. Also supplementation therapy^[3] with folic acid and vitamins should be instituted to treat the blood loss and agranulocytosis. Patient should also undergo supportive counseling therapy during the withdrawal period to prevent relapse of drug habit.

CONCLUSION

We report here a very rare entity – a case of gingival bleeding in the presence of minimal local factors caused by an agranulocytosis- like reduction in the thrombocyte and leukocyte counts by a persistent drug dependency habit for a period of over four years. Hence, in cases of profuse gingival bleeding with a paucity of contributory local factors other considerations like drug abuse should also be investigated thoroughly. Also easy availability of scheduled drugs like sedatives as OTC drugs should be regulated strictly.

CONSENT

Patient was informed about intention to publish and written informed consent was obtained from the patient for publication of this Case report and any accompanying images.

References

1. Sinha S, Kamath V, Arunodaya GR, Taly AB. Phenobarbitone induced gingival hyperplasia. *Journal of Neurology Neurosurgery and Psychiatry* 2002;73: 601
2. Jeelani Z, Shafiq TA, Razdan S. Monitoring of phenobarbitone and incidence of adverse drug reaction of antiepileptic agents in Kashmiri population. *Indian Journal of Pharmacology* 1990,20; 4: 226-230.
3. Neilsen's Hematology, 6th edition, 2013. Churchill Livingstone.



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