

Gingival Desquamation seen with oral massaging of zandu balm- A rare clinical case report

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Introduction:

A gingival manifestation due to the use of herbal tooth paste and other herbs is not uncommon. Various reports have documented over the years, showing the association between use of the herbal medicines and gingivitis.¹ Traditional medicines or folklore medicines are household medicines, which are used to treat common diseases like common cold, fever, head ache etc. One of the ayurvedic preparations available which reduce head ache is zandu balm; which is advised to be used only topically over the skin. But here is an interesting case of its oral usage and its manifestations.

A B S T R A C T

Herbs and herbal preparations are used for various diseases as folklore medication in India since ages. Herbs are said to be mother's nature finest healers which cure the diseases without any hazardous side effects, which are commonly associated with the use antibiotics. But irrational use of these preparations may lead to unwanted side effects. This paper describes a case report which discusses the side effects of oral usage of herbal preparation, Zandu balm, which is a very renowned balm used extra orally for headache, cold, etc.

Key words: Gingival desquamation, Zandu balm, Herbs, Phytotherapy

Case report:

A 35 year old female patient reported to the Dental Panacea with the chief complaint of discoloration and burning sensation of gingiva. Clinically the patient presented with severe inflammation of the gingiva, which was diffuse in nature, extending from gingival margin to mucogingival junction, in both maxillary and mandibular arches.



Fig I FRONTAL VIEW SHOWING GINGIVAL DESQUAMATION

Patient was having poor oral hygiene and gingival bleeding was seen with slight provocation (Fig I). Gingiva appeared desquamated with sloughing present in both

maxillary and mandibular arches (Fig II)



Fig II LATERAL VIEW SHOWING GINGIVAL DESQUAMATION

No significant medical history was given. Patient was not a mouth breather and neither had any history of cutaneous eruptions, history of mouth breathing and nor reported change of any tooth paste. Only relevant history given by patient was zandu balm application on both upper and lower gums, which she massaged the gums regularly to get relief from itching and bleeding gums. After 10- 12 hours of application patient developed diffused gingivitis with epithelial desquamation. These lesions were pain full to touch and to hot spicy food. Patient was sent for complete haemogram which revealed increased IgE levels. Patient was not ready for biopsy and so histopathological report was not evaluated. Unfortunately patient did not turn up for further recall visits after initial treatment.

Discussion: Based on the history given by patient it was ruled out that, the allergen was zandu balm. The case presented here highlights the adverse effects and irrational use of herbal preparation (zandu balm) which is meant to be used extraorally to relieve pain like head ache. But due to lack of knowledge, patient used it intra orally with the misconception of getting relief from gingival bleeding and itching gingiva. She developed gingival lesion within 8-10 hours of the zandu bam application.

Clinically, it appears as a diffuse reddening and edematous swelling of the gingival with a sharp demarcation along the mucogingival border.² The inflammatory reaction is characterized by intense hyperemic and erythematous changes; and it is common for the affected patient to complain of “bleeding from mouth.”³

Zandu balm is commercially available product used for head ache, noseblock etc. it is purely for extraoral use. It is composed of Menthol-20% w/w+ Oil Gaultheria-10% w/w-base-q.s.⁴ **Menthol 20%:** Is an organic compound made synthetically or obtained from peppermint or other mint oils.⁵ Menthol's ability to chemically trigger the cold-sensitive TRPM8 receptors in the skin is responsible for the well known cooling sensation which increases when

inhaled, eaten, or applied to the skin.⁶ Menthol has analgesic properties that are mediated through a selective activation of κ -opioid receptors.⁷ Peppermint Oil is composed primarily of menthol and menthone. Oil is minimally toxic in acute oral studies. Short-term and sub-chronic oral studies reported cystlike lesions in the cerebellum in rats that were given doses of Peppermint Oil containing pulegone, pulegone alone, or large amounts (>200 mg/kg/day) of menthone.⁸ **Oil Gaultheria (oil of wintergreen):** Wintergreen oil is most often used in medicinal preparation for treating breathing congestion due to colds or as a refreshing alternative to eucalyptus and menthol in liniments. Experimentally, the essential oil of wintergreen (methyl salicylate) is analgesic, carminative (relieves gas and digestive problems), anti-inflammatory and anti-septic, also recommended for treating backache, corns, earache, hangovers, sciatica and sore throat. Wintergreen essential oil contains approximately 98-99% methyl salicylate, and is toxic in overdose. Oral intake of 4-6 grams of pure wintergreen oil can be fatal.¹⁰

Wintergreen is contraindicated for persons sensitive and/or allergic to aspirin and

aspirin-like compounds because Wintergreen leaf and oil can cause contact allergies.⁹

Conclusion:

This case report describes a clinical case of gingival desquamation, apparently associated with the use of a herbal balm preparation for extra oral use (zandu balm). This is composed of menthol and oil of wintergreen. Oil of wintergreen, which is associated with contact allergy, might be responsible for the gingival manifestations. As oil of wintergreen contains Methyl Salicylate, patient who are allergic to Aspirin may also show allergic reactions to the oil of wintergreen. Therefore, Patients should be cautioned regarding the use of such preparation irrationally without the prescription.

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