

TREATMENT OF PERIODONTAL DISEASE WITH HIGH FUNCTIONAL PASTE MADE FROM NANOEMULSION GEL “NBF”



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INTRODUCTION

The term “Nanoemulsion” refers to a thermodynamically stable isotropically clear dispersion of two immiscible liquids, such as oil and water, stabilized by an interfacial film of surfactant molecules. NBF gel is a high functional nanobiofusion gel containing propolis, vitamin C, E and herb extract which has antioxidant, antibacterial and anti-inflammatory effects and it protects intraoral soft tissues and facilitates rapid healing. Because of its nano-complex nature when applied on oral tissue, it gets directly absorbed into the tissue and also stays on the tissue as bio-active protective film. As a result, the wounds heal very fast without any side effects. It is confirmed that NBF gel have excellent effect not only on wound healing but also for treatment of ulcer-like lesion in oral cavity. So here I report 3 cases of periodontal diseases with review of literatures.

NBF GEL IS USED FOR PROTECTION AND PREVENTION IN VARIOUS ORAL CONDITIONS

- Gingival and periodontal diseases, gingivitis and periodontal disease, dental plaque and in case of halitosis.
- Ulcerative conditions, aphthas, erosions, xerostomia (dry mouth), white lesions on the mucosa, wounds that are poorly healing, denture stomatitis (decubitus) or other traumatic ulcers.
- It is particularly useful for mucosa protection after tumor-radiation or chemotherapy (mucositis).
- Patients with dry, chapped lips, or precisely to patients with cheilitis – lips inflammation.
- Post-surgical condition: teeth extraction, alveolitis, after implants placement, perimplantitis, apicoectomies, sinus grafts, For protection after periodontal dental treatment as scaling and

Abstract

Aim: to study the effect of NBF gel ‘Nanoemulsion’ on gingival and periodontal tissue.

Material and method: 3 patients with periodontal diseases (acute infection) were included in this study. Under local anaesthesia, scaling and curettage was done and NBF gingival gel was applied immediately after the procedure and also advised them to apply at home after every meal.

Results: It was observed that within 24hrs inflammatory signs were significantly reduced and signs of healing were seen..

Keywords : NBF Nanoemulsion, Gingival, Mucosa.

root planing, curettage of periodontal pocket, flap surgery, after laser treatment on the oral mucosa and gingiva, and in case of wounds/ burnings after laser applications, after treatment of periodontal abscess and etc.

MATERIAL AND MATERIAL

Three patients with complains of halitosis, spontaneous bleeding and gingival recessions were included in this study. Under local anaesthesia scaling and gingival curettage for one patient was done and post scaling NBF gel was applied on dry gums for 4 to 5 minutes. All patients were advised to apply gel 3 to 4 times a day. We reviewed these patients after 24 hours, 48 hours and 7 days.

RESULTS

It was observed that in all three cases, within first 24hrs signs of inflammation were significantly reduced with accelerated healing, without any usage of antibiotics (oral or topical) and anti-inflammatory medications.



Fig 1: (A) Periodontitis

(B) Results after 24 hours



Fig 2: (A) Localized Gingivitis

(B) Post Op 24 hours



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DISCUSSION AND CONCLUSION

It is difficult to treat gingival and periodontal diseases due to a unique environment of oral cavity and wide range of microorganism. The most important issue in treatment of gingival diseases is rapid transportation of the drug material and its retention in oral cavity because of various factors. In order to fit into these characteristics there have been numerous researches on nano materials in the field of medicine.

In the treatment of gingival diseases antibiotics and NSAIDs are often used. These medications can be divided into oral and topical medication. Oral medication often has systemic side effects like gastrointestinal discomfort. Topical medications are usually not very effective as it is hard to retain in mouth due to a highly humid intraoral environment.

So there is always a need for an effective local agent which will protect oral lesions and facilitate healing

NBF gel is high functional nano-bio fusion gel, created with a new technology named nano-bio fusion, a combination of two newer technologies (nano-technology, and medical biotechnology). Which contains vitamin C, E, and Propolis. Nanovitamin C and E are already biocompatible, and they are known to act in immunity and antioxidation. Studies on Propolis have proved its antimicrobial and anti-inflammatory effects. Because of its nano-complex nature, NBF gel gets directly absorbed into the tissue and also forms a bio-active protective film. This film protects the lesion from moist oral environment and absorbed gel contents facilitate healing because of antioxidant and anti-inflammatory effects. Favourable results of healing and protection were obtained which were reported in this study.

In conclusion, we have gained confidence that nanoemulsion containing nano vitamin C, E and propolis has very high Antibacterial effect against bacteria in oral. And it made us guess that inflammation of gingival reduces after decreasing interleukin-1 β . Thus, we expect that nanoemulsion containing nano vitamin C, E and propolis gives good effects to patient having gingival/periodontal disease

REFERENCES

1. Suri SS, Fenniri H, Singh B: Nanotechnology-based drug delivery systems. J Occup Med Toxicol 2007 Dec 1; 2(1):16.
2. Studen-Pavlovich D, Ranalli DN: Periodontal and soft tissue prevention strategies for the adolescent dental patient. Dent Clin North Am 2006 Jan; 50(1):51-67.
3. Trusheva B, Popova M, Bankova V, Tsvetkova I, Naydensky C, Sabatini AG. A new type of European propolis containing bioactive labdanes, Rivista-Italiana. EPPOS 2003; 36:3-7.
4. Grange JM & Davey RW, Antibacterial properties of propolis (bee glue), J Res Soc Med, 1990;83:159-60

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