

Extended Abstract

Atypical Gingival Swelling Unrelated to Plaque and Tartar: Diagnostic Difficulty and Conservative Treatment [†]

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[†] Presented at the XV National and III International Congress of the Italian Society of Oral Pathology and Medicine (SIPMO), Bari, Italy, 17–19 October 2019.

Published: 12 December 2019

1. Introduction

In recent years, works have shown that probiotics have beneficial localized effects. Probiotic treatment is effective against diseases and infections of the skin and mucous membranes [1]. Several studies on the probiotic *Lactobacillus Reuteri* (L. Reuteri) have demonstrated anti-inflammatories and antimicrobials effects [2].

2. Materials and Methods

A 48-year-old female patient with non-plaque and tartar gingival papilla swelling between the upper incisors 1.1–1.2, went to our observation (Figure 1). She takes drugs for hypertension and vitamin D supplement, suffers from periodontal diseases in a good state of maintenance and was subjected to professional oral hygiene sessions every 4 months. It was decided to perform a biopsy, scheduled 2 weeks later. To restore the oral probiotic microbiota L. Reuteri have been suggested. Tablets of *Lactobacillus Reuteri* DSM 17938 ATCC PTA 5289 have been prescribed as home therapy twice a day, for two weeks, dissolving them slowly in the mouth after careful oral hygiene, taking care to rub the tablet with the tongue against the swollen papilla. At the check the gum appeared during the normalization phase, so the treatment was prolonged for another two weeks, and the biopsy has been postponed (Figure 2).



Figure 1. Patient before using probiotics *L. Reuteri* DSM 17938 ATCC PTA 5289.



Figure 2. Patient 4 weeks after therapy with *L. Reuteri* DSM 17938 ATCC PTA 5289.

3. Results

4 weeks of follow-up were carried out. The gingival papilla is completely healed after treatment with *L. Reuteri*.

4. Discussion and Conclusions

Oral treatment with tablets containing the probiotic strain of *L. Reuteri* induces in most patients a significant reduction in the proinflammatory cytokine response and an improvement in clinical parameters [3]. *L. Reuteri* is known for its secretion of 2 bacteriocins, reuterine and reutericyclina, which inhibit the growth of a wide variety of pathogens; it also has a strong ability to adhere to host tissues with localized anti-inflammatory and antimicrobial effects [2]. Probiotics present a new ray of hope in periodontal therapy with a proven track record of safety and efficacy [2,3]. The use of

topical probiotics in the treatment of gingival hypertrophy could be considered a valid alternative to conventional treatments. Further studies must be performed to confirm this starting result.

Conflicts of Interest: The authors declare no conflict of interest.

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