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Effect of full-mouth-disinfection in the treatment of drug-induced gingival overgrowth

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Introduction

Several drugs, such as cyclosporin A (CsA), calcium channel blockers and phenytoin can cause gingival overgrowth (GO). The traditional periodontal therapy of GO comprises professional tooth cleaning and surgical reduction of the overgrown gingival tissue.

Objectives

The clinical effects of non-surgical periodontal therapy according to the concept of full-mouth-disinfection (FMD) was evaluated retrospectively in patients with drug-induced GO.

Material and Methods

Fig.1: Patient (female) with drug-induced (CsA) gingival overgrowth; clinical situation at baseline

Fig.2: Same patient as shown in fig.1: clinical situation 2 months after full-mouth-disinfection

Fig.3: Same patient as shown in fig.1: clinical situation 6 months after full-mouth-disinfection

Fig.4: Same patient as shown in fig.1: clinical situation 22 months after full-mouth-disinfection

Patients

- 10 patients (7 female), age between 32 and 73 years
- medicated with CsA and/or calcium channel blockers

Treatment

- all patients received antiinfective therapy (AT), including oral hygiene instructions, professional tooth cleaning followed by subgingival scaling and root planning (SRP) of all quadrants within 24 hours according to the concept of "full-mouth-disinfection" (FMD)
- After AT patients rinsed with 0.12% CHX solution and brushed with 1% CHX gel for the following 2 weeks

Clinical examinations

- plaque control record (PCR), gingival bleeding index (GBI), probing pocket depth (PD) were recorded at baseline, reevaluation and the last supportive periodontal therapy (SPT) visit
- at 6 sites per tooth (mb, b, db, do, o, mo) PD, using a rigid periodontal probe (PCPUNC 15, Hu Friedy, Chicago IL, USA) at baseline and reevaluation and SPT
- reevaluation of the clinical situation approximately 4 months after FMD

Reevaluation

- after completion of FMD, 9 patients were assigned to SPT and monitored for a mean of 24 months
- 1 patient received further periodontal surgery (flap surgery including gingivectomy)

Statistical analysis

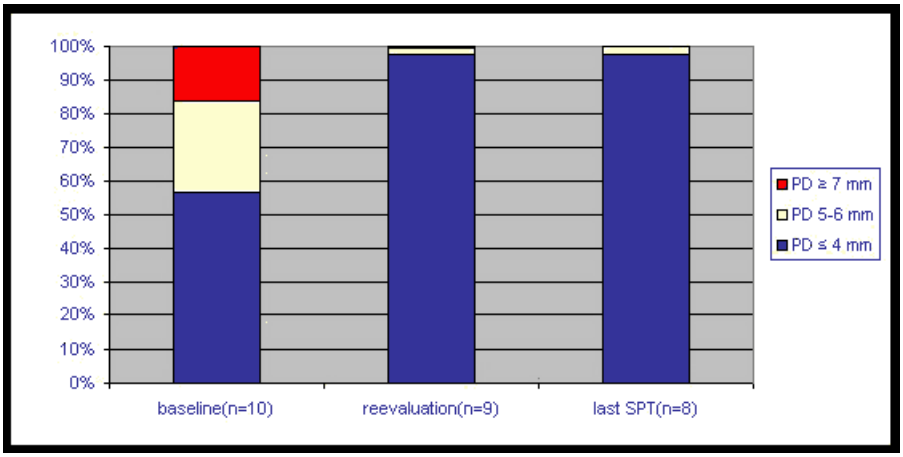
- PD sites were stratified as follows: ≤ 4mm, 5-6 mm and ≥ 7mm

Results

Results I

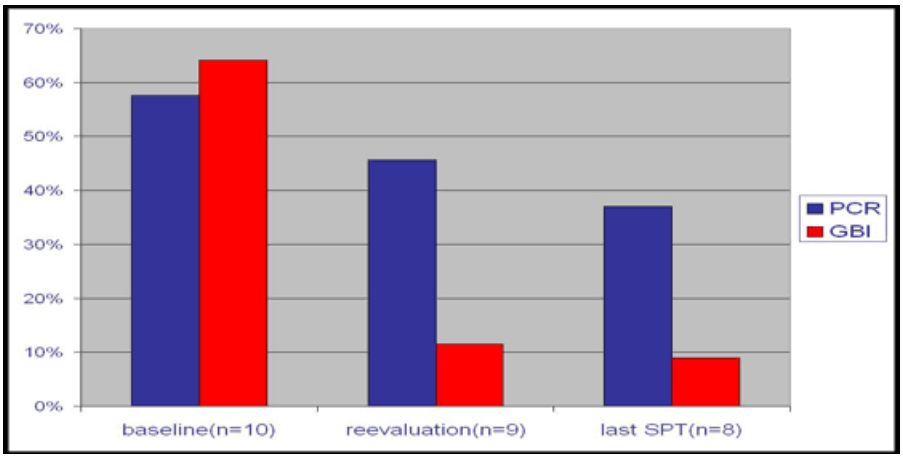
- the number of sites with PD ≤ 4mm was increased significantly after FMD (56.5 to 97.4%)
- concomitantly sites with 5-6 mm and ≥ 7mm decreased in the same interval (27.1 to 2.2%, 16.4 to 0.4% respectively)
- PCR and GBI also declined significantly compared to baseline
- all clinical variables remained stable over SPT
- further surgical therapy was only necessary in one case

Results II



Tab.1: Clinical parameters (PD at baseline, reevaluation, last SPT)

Results III



Tab.2: Clinical parameters (GBI/PCR)

Conclusions

Conclusion FMD and regular SPT were effective in resolving inflammation and reducing the need for further surgical treatment in patients with drug-induced gingival overgrowth. The clinical situation remained stable over the average follow-up period of 24 months.

This Poster was submitted by Dr. Joerg K. Krieger.

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Aim

Several drugs, such as cyclosporine A (CsA), calcium channel blockers and phenytoin can cause gingival overgrowth (GO). The traditional periodontal therapy of GO comprises professional tooth cleaning and surgical reduction of the overgrown gingival tissue.
The clinical effects of non-surgical periodontal therapy according to the concept of full-mouth-disinfection (FMD) was evaluated retrospectively in patients with drug-induced GO.

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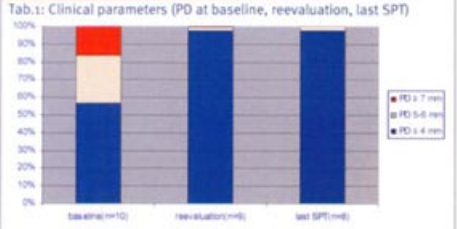

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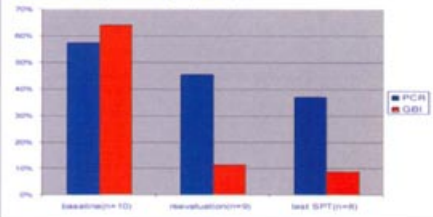

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