

## **TOPICAL DOXYCYCLINE ADMINISTRATION ADJUNCTIVE TO MECHANICAL DEBRIDEMENT IN PATIENTS WITH PERSISTENT OR RECURRENT PERIODONTITIS: 3 MONTHS RESULTS OF A PERSPECTIVE COHORT STUDY**

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### **Introduction:**

Residual periodontal pockets after non-surgical therapy are conventionally candidate for surgical treatment. Since these failures depend from an uncomplete decontamination of the pocket due to local anatomical factors, the use of local highly concentrated antibiotic could represent a further step in “not surgical treatment”.

### **Aims:**

To evaluate the effect of a session of SCRCP + local antibiotic in the management of residual or recurrent periodontal pockets.

### **Methods:**

3 months perspective, cohort study on patients referring to authors' private practice who during supportive periodontal therapy with at least 1 site showing PPD  $\geq$  5 mm and BoP +

Participants should be cooperative adults, systemically healthy without known hypersensitivity to tetracyclines; FMPS and FMBS < 25%.

Parameters: PPD, BoP, REC.

Procedure: thoroughly SCRCP by mean of hand instruments, ultrasonic and airflow devices followed by application of a doxycycline gel.

### **Results:**

21 patients (9 male, 12 female, average age 62, 18 non smokers) were enrolled providing 45 sites. At baseline mean PPD was 7,0 mm, 54 % ranging between 4 and 6 mm and 46 % >6mm. According to inclusion criteria all the sites were BoP +.

At 3 months, PPD = 3,9mm (-3,1 mm); 57% of the sites showed a PPD < 4mm, 41% ranging between 4 and 6 and only 2 % still > 6. Furthermore no sites showed worsening, 3 sites (7%) did not improve; 43 (93%) improved at least 1 mm. Recession increased 0,8 mm as an average.

For what concern BoP, 54% of the sites resulted to be negative at the end of the study.

### **Conclusions:**

Thus, from the data of the present investigation it appears that tested procedure was effective in promoting healing of residual and recurrent pockets in well controlled maintenance patients.

Lack of a control group precludes a full understanding of the role of the antibiotic but the evident reduction in the number of bleeding sites and in PPD is encouraging and needs further investigations.