

EFFICACY OF AN OILY CALCIUM HYDROXIDE SUSPENSION IN THE TREATMENT OF HUMAN PERIODONTAL INTRA-OSSEOUS DEFECTS - A CLINICO - RADIOGRAPHIC STUDY

By

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Dissertation Submitted to the

Rajiv Gandhi University of Health Sciences, Bangalore, Karnataka

In partial fulfillment

Of the requirements for the degree of

MDS

In

Periodontics and Implantology

Under the guidance of

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2006-2009



Background and Objectives:

Bone grafts are widely used for the regeneration of the periodontium, predictably. Whether they truly regenerate periodontium is still quite an enigma. Hence, the aim of this study was to evaluate the efficacy of an Oily Calcium Hydroxide Suspension (OCHS) in the treatment of human periodontal intraosseous defects and to compare the same with open flap debridement (OFD).

Material and Methods:

Nineteen patients with clinical probing depth of ≥5mm and radiographic evidence of an angular defect were recruited and randomly divided into two groups of 15 sites each, group A to be treated by Open Flap Debridement (OFD) alone and group B Open flap debridement with Oily Calcium Hydroxide Suspension (OCHS). Clinical parameters of probing pocket depth (PPD), relative attachment level (RAL) and depth of defect (DOD) were recorded at baseline and at the surgical re-entry at the end of 9 months. Radiographs were taken at baseline and at the end of 9 months by standardized technique and subjected to AutoCAD analysis. Students paired t-test was applied to obtain the results.

Results:

At the end of 9 months, it was noted that there was a statistically significant difference in the PPD, RAL and DOD in comparison with baseline. There was a significant gain in the PPD in both the groups with a mean of 6.2mm at baseline to 4.13mm, p \le 0.00 (p \le 0.05). The mean for RAL at baseline was 7.33mm and 6.73mm at 9 months, p \le 0.00(p \le 0.05) which was statistically insignificant. Similarly, the mean for DOD at baseline was 9.53mm and 8.73mm at 9 months, which was statistically insignificant. The radiographic assessment was statistically insignificant at p \le 0.47(p \le 0.05).

Interpretation and Conclusion:

The use of OCHS provided no added advantage over open flap debridement. Thus we can conclude that OCHS seems to have limited regenerative properties.

<u>Keywords:</u> Intrabony defects; regeneration; Oily Calcium Hydroxide Suspension (OCHS; open flap debridement)