

and those with normal level in terms of the periodontal parameters and DMFT.

**Summary and conclusions:** Diabetes mellitus negatively affects oral health as reflected by the higher DMFT scores in diabetic patients. There was also a greater prevalence and severity of periodontitis in diabetic subjects than in nondiabetics.

FC195

#### Estimation of Interleukin-1 $\beta$ in Relation to Periodontal Disease

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**Aim and purpose:** The aim of this study is to quantify the IL-1 $\beta$  levels of gingival tissue in Chronic & Aggressive Periodontitis patients and to correlate its levels with the clinical parameters.

**Materials and method:** A total of 154 sites were selected & gingival tissue samples were obtained from 13 patients with Chronic Periodontitis (25 healthy & 34 diseased sites samples), 13 patients with Aggressive Periodontitis (40 disease & 28 healthy sites); 13 Periodontally healthy individuals (27 healthy tissue) was harvested for study. Clinical parameters like Plaque index, Gingival index, Gingival Bleeding index, Probing pocket depth & Clinical attachment level were recorded for the selected sites. The assessment of IL-1 $\beta$  was done using ELISA.

**Results:** IL-1 $\beta$  was observed in 100% of the diseased sites of Chronic and Aggressive Periodontitis cases. The IL-1 $\beta$  concentration of diseased sites of Chronic as well as Aggressive Periodontitis was significantly higher than the healthy tissues of Periodontitis as well as of periodontally healthy individual. The plaque & the gingival index of the diseased sites as well as healthy sites of Chronic Periodontitis significantly correlated with IL-1 $\beta$  concentration and a highly significant correlation was observed between Plaque index in Periodontally healthy subjects & IL-1 $\beta$  levels ( $p < 0.001$ ). A highly significant correlation was observed between IL-1 $\beta$  levels & Gingival bleeding index for both the diseased & healthy sites of subjects with Chronic & Aggressive Periodontitis.

**Summary and conclusions:** The results of the study indicate a more specific role for IL-1 $\beta$  in the pathogenesis of periodontal disease, suggesting IL-1 $\beta$  may have diagnostic utility, as well as dependable aid in monitoring periodontal disease activity.

FC196

#### Periogen Oral Rinse Study to Determine the Effect of Periodontal Disease

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**Aim and purpose:** The cause of periodontal disease is bacterial film known as plaque. Bleeding upon probing (BUP) is usually the first sign of periodontal disease. The purpose of the study is to determine the effect of Periogen oral rinse on plaque index (PI),

probing depth (PD), BUP and calculus after 90 days of daily Periogen use.

**Materials and method:** A total of 53 systemically healthy subjects enrolled and randomly assigned in this double blinded and placebo-controlled clinical trial. At baseline, and at 90th day, PI, BUP, PD and photographs were taken and recorded. Participants were instructed to rinse with the assigned oral rinse twice daily using Waterpik ultra WP100 oral irrigator. BANA (Benzoyl-DL-Arginine Naphthylamide) chair side periodontal test were performed to detect presence of oral bacteria in plaque.

**Results:** PI, BUP and PD in Periogen oral rinse group had more significant improvement as compared to placebo group after 90 day used of the product. However, visible calculi were not much significant difference between groups especially true for subjects who have Calculi Bridge for many years. Overall improvement in PI, BUP, PPD were seen in Periogen group as compared to placebo group.

**Summary and conclusions:** After using for 90 days, plaque index, bleeding upon probing, and periodontal pocket depth were reduced more in Periogen oral rinse group compared to the placebo. However, no significant difference was found between groups. In conclusion, Periogen oral rinse is significantly better in reducing periodontal disease as compared to just using waterpik oral irrigator alone.

Free Communication Session 49 – Room 215 | 2015-09-24 | 12:30-13:30

#### Theme: Dental Treatment & Restorative Dentistry – Prosthetics

FC201

#### New Era in Treatment of Badly Broken down Endodontically Treated Teeth "Materials and Techniques"

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**Aim and purpose:** Evaluation of the fracture resistance of three different post materials: polyethylene post (Ribbond) post, fiber composite posts (Everstick) post and (Rely-X) post at two different post lengths.

**Materials and method:** Thirty extracted mandibular bi-cuspid teeth were collected. Each sample had their crown sectioned 2 mm coronal to the C.E.J then were endodontically treated. After obturation, roots of the samples were coated with pink wax 2 mm in diameter saving space for periodontal substitution then, acrylic resin block was constructed for each sample. Periodontal substitution was done inside the space left by wax. A ferrule was prepared for each sample using a milling machine. After that, the samples were divided into three main groups according to the type of post placed (group A: Rely-X (control), group B: Everstick post, group C: Ribbond post). Each main group was subdivided into 2 subgroups according to post length at 6 mm and at 8 mm. Each sample received static axial load from a universal testing machine and data were collected and statistically