

## SCIENTIFIC PRESENTATION 24

**CALPROTECTIN IN GINGIVAL CREVICULAR FLUIDS CORRELATES WITH CLINICAL  
PARAMETER AND WITH THE COUNT OF BLACK-PIGMENTED ANAEROBES BACTERIA  
ON THE AGGRESSIVE PERIODONTITIS**

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**Introduction:** Calprotectin is a calcium and zinc-binding cytosolic protein which is expressed in neutrophil during inflammatory event in the initial steps of inflammation. Plasma level of calprotectin is elevated in patient with bacterial infection. It exerts profound microbiostatic and modest microbicidal activities such as black-pigmented anaerobes. The black-pigmented anaerobes are found predominantly in deep periodontal pocket. In this study, we investigated the correlation between gingival crevicular fluid (GCF) calprotectin level with the clinical indicator (probing depth) and with the count of black-pigmented anaerobes bacteria. **Methods:** Probing depth at 12 sites of 12 subjects with aggressive periodontitis were examined, then GCF sample were collected using 2 sterile paperpoints for 30 seconds. The black-pigmented anaerobes were cultivated in the blood agar medium for 7-14 days. The calprotectin level was analyzed using ELISA. **Results:** The GCF calprotectin level increased approximately in proportion to probing depth (3-7 mm) and showed a significant positive correlated with probing depth ( $p < 0.05$ ). Black-pigmented anaerobes bacteria stimulates calprotectin release from neutrophil, and there were also positive correlations between the total content of calprotectin and the count of black-pigmented anaerobes bacteria ( $r = 0,669, p < 0.05$ ) **Conclusion:** The calprotectin level in GCF correlates well with the probing depth and black-pigmented anaerobes bacteria of aggressive periodontitis and it was suggested that calprotectin may be useful for evaluating the extent of periodontal inflammation.

**Keywords:** Calprotectin; Probing Depth; Black-Pigmented Anaerobes Bacteria; Aggressive Periodontitis.



## SCIENTIFIC PRESENTATION 25

**INTENTIONAL ENDODONTIC TREATMENT IN MAXILLARY SECOND  
MOLAR AS AN ABUTMENT TEETH FOR FIXED PARTIAL DENTURE**Devy Noviana<sup>1</sup> and Dr. Ratna Meidyawati<sup>2</sup>*<sup>1</sup> Postgraduate Department of Conservative Dentistry,**<sup>2</sup> Department of Conservative Dentistry, University of Indonesia*

The decision to extract a tooth is a part of the treatment planning and performed after collecting data about the advantages and disadvantages. Failure to replace a missing teeth is assumed to disrupt the balance of the stomatognathic system and trigger a host of adverse consequences. Extracting a tooth without replacement not only impaired the chewing ability but also extrusion of an unopposed tooth into the edentulous space and tilting of the teeth adjacent. A case of intentional root canal treatment of a 65 years old female due to extrusion of an unopposed maxillary second molar will be discussed. Root canal treatment will guarantee the prognosis of the tooth as an abutment for fixed partial denture and treatment planning for the tooth to support the success of fixed partial denture. In this case prophylactic dowel is necessary.

**Keywords:** consequences of removal teeth, intentional root canal treatment, fixed partial denture