

protein. So the aim of this study was to evaluate the moesin expression in chronic periodontitis. **Methods:** Gingival tissue samples were collected from 20 individuals with clinically healthy gingiva and 25 patients with chronic periodontitis. After homogenizing the gingival tissues, RNA was extracted by RNA isolation kit. Then cDNA was synthesized and the expression of moesin was evaluated by Real-time PCR. **Results:** We found significant higher expression of moesin in chronic periodontitis in comparison with healthy samples ( $P < 0.05$ ) and also found positive correlation between moesin expression and CAL. It was a positive correlation between expression of CXCR4 and CAL and PD in periodontitis ( $P < 0.05$ ). **Conclusion:** Based on our results, It is concluded that moesin may function as a LPS recognizing receptor in chronic periodontitis, of course more studies are needed in order to define its precise role in this regard.

**Keywords:** Moesin, Chronic periodontitis

## Poster Presentations:

2761 P

**Correlation between gingival expression of different isoforms of osteopontin (OPN) and periodontal disease.**

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**Background:** Periodontal disease is a bacterial infection of periodontal tissue which can lead to bone resorption and in severe cases, causes tooth loss. Both innate and adaptive immune responses develop during the disease process. Osteopontin is one of the soluble factors which increased at the site of inflammation such as periodontitis. Since there is no study which was done on the correlation between the expression or the level of osteopontin and periodontitis, the aim of this study was to compare the gingival expression of OPN between chronic and aggressive periodontitis. **Methods:** For this purpose, gingival tissue samples were collected from 20 patients with chronic periodontitis and 20 patients with aggressive periodontitis. After homogenizing the gingival tissues, RNA was extracted by RNA isolation kit. The expression of OPN was evaluated by Real-time PCR. **Results:** Lower expression of OPN was found in aggressive periodontitis in comparison with chronic periodontitis ( $P < 0.05$ ). In addition we found lower expression of OPN in cases with higher tissue destruction in both groups ( $P < 0.05$ ). **Conclusion:** It is concluded that OPN probably has some protective role against periodontopathic bacteria, but with progression of the disease its expression can be more decreased due to the death of the cells which produce it.

**Keywords:** Periodontal disease, Chronic periodontitis, Aggressive periodontitis, Control of inflammation, Osteopontin