**ID: 3913**

**Congress: 12th International Congress of Iranian Academy of Restorative Dentistry 24-26 October 2012 Tabriz-Iran**

**Title: Bio-Glass (New approach for treating Dentin hypersensitivity)**

**Authors:** Azadeh zakerzadeh, DDS, MS, Assistant Professor of Restorative Department,

**Abstract:**

**Aim**

Introducing new treatment protocol for dentin hypersensitivity with Bioactive glass

**Abstract**

Dentin hypersensitivity (DH) is a common oral condition, but an ideal product or protocol for its treatment does not exist, and active management is a challenge.

DH is caused when the fluids within the dentinal tubules are subjected to changes (thermal, mechanical, osmotic). The movement in the fluids stimulates a nerve receptor sensitive to pressure, which leads to the transmission of the stimuli. Consequently, dental products proposed to treat DH seek to interrupt the pulp neural response of pain and/or to block the sensitive mechanisms through occlusion of the open dentinal tubule.

A fully crystallized bioactive glass-ceramic (P2O5-Na2O-CaO-SiO2) named Biosilicate, has been proposed to treat DH by hydroxyl carbonate apatite (HCA) deposition in open dentinal tubules. Bioactive glasses and glass-ceramics are widely recognized as one of the best clinical choices to improve bone regeneration, and the similarity of composition between bone, dentin and enamel led to the assumption that bioactive glasses and glass-ceramics could also be efficient for the regeneration of enamel and dentin. It has supposed that glass-ceramics could treat DH by providing permanent occlusion of the open dentinal tubules through in situ deposition of a HCA-bonded layer.

**Conclusion**

We are going to have comprehensive view about recent articles in this field.

Dentin hypersensitivity. Bioactive glass,

**Presentation:** Poster