Objectives:

The aim of this study was to compare the demographic and clinical features of tooth sensitivity (TS) in subjects with and without fluorosis.

Methods:

A total of 2249 subjects (378 subjects with fluorosis and 1871 subjects without fluorosis) were examined for TS during a study period of one year and TS was determined in 122 subjects. The level of TS was evaluated on a visual analogue scale (VAS). The sensitivity evaluation was made by applying tactile and cold air stimuli. In teeth sensitive to any stimuli, the plaque index (PI), gingival index (GI), gingival recession (GR) and periodontal pocket depth (PPD) were recorded. Fluorosis was assessed using the Dean Index.

Results:

One hundred and twenty-two participants were found to have TS (5.42%). The frequency of TS in subjects with fluorosis was 9.26%, while the frequency of TS in subjects without fluorosis was 4.65%. There was a statistically significant difference between the groups in terms of TS frequency (P=0.0003). In contrast, there were no significant differences between the groups for periodontal parameters except PI.

Conclusions:

The results of the study showed that the subjects with fluorosis may have been suffering from TS more than the subjects with normal dentition. Further studies are necessary to determine the factors that contribute to sensitivity of teeth with fluorosis.

Keywords: Fluorosis, Tooth sensitivity, Visual analogue scale, Epidemiology