

Abstract

Background and Aim

Endodontic postoperative pain is a common complication and its incidence varies widely. The present study assessed the incidence of post-operative endodontic pain and its related factors in patients referring to Ardabil dental school during 2017-2018.

Materials and Methods

In a descriptive cross-sectional trial, 150 patients (94 females, 54 males) received root canal therapies in this center by standardized techniques. The data of the patients were obtained from their records while the severity of the posttreatment endodontic pains measured by visual analogue scale (VAS) after 1, 3, 5 and 7 days. The incidence of posttreatment pains were statistically analyzed in terms of patients' age and gender, the tooth position, the jaw type, pulp status before treatment, the pain intensity before the treatment and tooth filling status using chi-square test.

Results

Mean (\pm standard deviation) of pain scores were 2.3(\pm 2.41); 2.8(\pm 2.24); 1.92(\pm 2.33); 1.25(\pm 2.07) and 0.95(\pm 1.94) at a day before the treatment and days of 1, 3, 5 and 7 posttreatment respectively. At a day before treatment, 88 (58.7%) had pain while 120 (80%), 81 (54%), 58 (38.7%) and 45 (30%) patients showed pains at 1, 3, 5 and 7 days posttreatment respectively.

No significant differences were found in the incidence of endodontic pains regarding the patient's age and gender. However, the pain incidence were significantly higher in the posterior teeth than anterior teeth at 3rd ($p=0.002$), 5th ($p=0.002$) and 7th ($p=0.001$) days posttreatments. Furthermore, at 7th ($p=0.05$) day after treatment, higher pain incidence were found in the patients experienced pain before the treatment than those who not. Necrotized pulps showed higher pain incidence than normal ones at 3rd ($p=0.04$), 5th ($p=0.02$) and 7th ($p=0.07$) days postoperatively. Again, higher pain incidence was found in the mandibular than maxillary teeth at 5th ($p=0.02$) and 7th ($p=0.02$) days posttreatment and also higher pain incidence was reported for the teeth with over- and underfilling restorations than the teeth with acceptable fillings at 3rd ($p=0.04$), 5th ($p=0.001$) and 7th ($p=0.001$) days posttreatment respectively.

Conclusion

Then, the prevalence of the endodontic posttreatment pains found in this study was similar to the previous reports in this area. Furthermore, higher pain incidence

were found in the posterior teeth, in the mandible, in patients with previous pains, in the necrotized pulps and in the teeth with over- and underfilling restorations.

Keywords

Endodontic posttreatment pains, Visual analogue scale, Risk factor

