Unusual Tooth Sensation due to Maxillary Sinusitis -
A Case Report

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ABSTRACT Maxillary sinusitis can cause pain or discomfort to the maxillary dentition but no report of patients complaining of a "jumping tooth sensation" during sinusitis has been recorded in the literature. This article presents a case of an unusual localised sensation from a maxillary right second premolar experienced while undergoing root canal treatment. This sensation was felt during walking while the patient was suffering an episode of influenza. This sensation first occurred following debridement of the root canal. However, it persisted even after the root canal had been sealed. A hypothetical explanation of this manifestation is proposed.

Keywords: influenza, root canal treatment, maxillary, sinusitis.

Introduction

It is generally accepted that dental infections can cause maxillary sinusitis. Selden⁴ referred to such a manifestation as the endo-antral syndrome (EAS). This is a pathological condition resulting from the spread of infection from the root canal apices near the maxillary sinus into both the antral and periapical tissues. The degree of sinus involvement is related to the proximity of the involved apex to the sinus⁴.

The author treated a case that appeared to be the reverse of the endo-antral syndrome. Maxillary sinusitis due to influenza appeared to result in an unusual sensation on the maxillary right second premolar. The tooth was felt by the patient concerned as though it was "jumping" in its socket. Because this phenomenon was unusual, the author found it of interest to present this case report.

Case Report

The author was requested by a medically fit 22-year-old female dental student to treat her non-vital maxillary right second premolar. The tooth was asymptomatic and immobile, but was discoloured. It tested negative with heat, cold and electrical stimuli. There was a large disto-occlusal amalgam filling on the tooth. A periapical radiograph revealed a periapical radiolucency at the apex of the tooth. This was located close to the maxillary sinus (Fig. 1a). No periodontal pocketing was found around the periodontal structure of the tooth.

Root canal treatment was initiated on 15th of December 1993. The tooth was isolated using a split-dam technique.⁵ A foul odour was noted after gaining access to the pulp chamber. Only a single large root canal was found.

A conventional root canal preparation was done. Cresanol (Medical Products Laboratories, Oral Pharmaceutical Division, Philadelphia, Pa USA) soaked in cotton wool was placed into the pulp chamber for bactericidal effect.

The access cavity was then dressed with zinc-oxide eugenol cement.