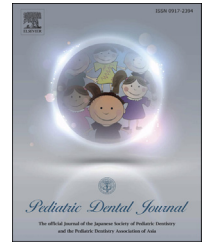




ELSEVIER

Available online at www.sciencedirect.com

Pediatric Dental Journal

journal homepage: www.elsevier.com/locate/pdj

Case Report

Displacement of maxillary right second premolar caused by gutta percha filling in corresponding primary molar

Shuhei Naka, Kazuma Kokomoto, Jumpei Ohata, Rena Okawa,
Ryota Nomura, Kazuhiko Nakano*

Department of Pediatric Dentistry, Osaka University Graduate School of Dentistry, 1-8 Yamada-oka, Suita, Osaka 565-0871, Japan

ARTICLE INFO

Article history:

Received 5 September 2017

Received in revised form

6 October 2017

Accepted 9 October 2017

Available online xxx

Keywords:

Gutta percha filling

Primary molar

Displacement

Permanent premolar

ABSTRACT

Background: For pulp therapy in primary teeth, commonly performed in daily clinical practice, calcium hydroxide paste is widely used as a root canal filling material and typically resorbed by the permanent successor upon its emergence into the oral cavity.

Case report: A 21-year-old female was referred to our clinic for detailed examination of a residual maxillary right primary second molar. After extracting that tooth, a material thought to be gutta percha was unexpectedly extirpated.

Conclusion: We speculated that the material had prevented eruption of the permanent successor because of lack of resorption, leading to its displacement.

© 2017 Japanese Society of Pediatric Dentistry. Published by Elsevier Ltd. All rights reserved.

1. Introduction

Pulpectomy and root canal treatments are commonly performed in daily practice when dental caries extends to the pulp cavity and the root canal has become infected [1]. As the final step of such pulp therapy, gutta percha, a thermoplastic filling material, is generally used in cases with permanent teeth to prevent bacterial reinfection [2]. In contrast, a

resorbable material such as calcium hydroxide paste is generally applied for primary teeth, as the permanent successor will resorb that material upon emergence into the oral cavity [3].

We treated an uncommon case of displacement of a permanent tooth caused by the residual root of the corresponding primary tooth. It is speculated that this was derived from previous use of a non-resorbable material thought to be gutta percha. Here, details of this unusual case are presented.

* Corresponding author.

E-mail address: nakano@dent.osaka-u.ac.jp (K. Nakano).

<https://doi.org/10.1016/j.pdj.2017.10.002>

0917-2394/© 2017 Japanese Society of Pediatric Dentistry. Published by Elsevier Ltd. All rights reserved.

2. Case report

A 21-year-3-month-old female was referred to the Pediatric Dentistry Clinic of Osaka University Dental Hospital for examination of a residual maxillary right second primary molar and tip of a tooth-like mass located on the palatal side (Fig. 1). The patient reported undergoing root canal treatment for the maxillary right second primary molar during childhood that was performed by a general practitioner, though did not recall the details. She did not complain of any signs or symptoms, and her general condition was good. An orthopantomographic examination revealed a radiopaque mass present in the area of the root canal of the maxillary right second primary molar and the corresponding permanent tooth, which was shown to be positioned horizontally with a curved root apex (Fig. 2). We

then performed a cone-beam CT (CBCT) examination to clarify these findings that revealed a radiopaque mass in root canal of the maxillary right second primary molar, which was in contact with the corresponding permanent tooth (Figs. 3–5). In addition, the corresponding permanent tooth appeared to have a curved root apex, which was also demonstrated in 3D construction images (Fig. 6). Based on these findings, we decided to extract the maxillary right second primary molar and apply a space maintainer to move the corresponding permanent tooth into the proper position in the dental arch.

At the age of 21Y4M, the maxillary right second primary molar was extracted under local infiltration anesthesia. During the extraction procedure, a material with the appearance of gutta percha was unexpectedly extirpated (Fig. 7). At this time, the space maintenance apparatus was applied to induce



Fig. 1 – Intraoral photograph taken at age of 21Y3M. Arrow indicates maxillary right second premolar.

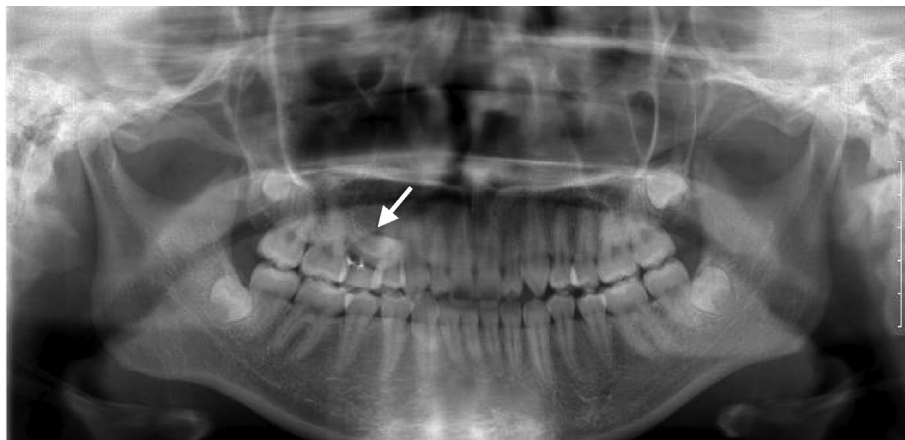


Fig. 2 – Orthopantomograph taken at age of 21Y3M. Arrow indicates maxillary right second premolar.

Download English Version:

<https://daneshyari.com/en/article/8708062>

Download Persian Version:

<https://daneshyari.com/article/8708062>

[Daneshyari.com](https://daneshyari.com)