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Case Report

Odontogenic Maxillary Sinusitis - Report of A Case

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1. Abstract

A case is reported, which depicts the dichotomy between the care given by a dental clinic, independently from that supplied by a medical clinic, which led to the wrong diagnosis, with consequent inadequate treatment.

2. Key words

Bridge work; Root canal treatment; Odontogenic sinusitis; Mouth wash

3. Introduction

Complex dental care, especially in the presence of a chronic condition like bruxism [1], might lead to unusual sequels. These, in turn, when the patient is exposed to an intercurrent infection and in the absence of collaboration between the dentist and the physician in charge, might prompt the lack of consideration of an unusual diagnosis.

4. Case Report

A 69 year-old male patient had a bridge-work [12-22] replaced, due to the ageing of the contraption (with an overall duration of 40 years), and confirmation of a suspected underlying, secondary caries of tooth 12. Shortly after the completion of the new bridge-work which did not necessitate major modifications of the underlying devitalized teeth, except for the caries, the teeth neighboring on both sides of the bridge [14 and 25] were both found to require in turn, a root canal work up.

The patient was suffering from bruxism with severe dental neck erosion. It is about his release from the army, in which he served as a physician, in 1978, that the original bridge-work [12-22] was installed. Shortly thereafter, this individual was hit by a patient's fist on the mouth. It is of note, that this incident was subclinical, and so was the long term follow-up.

However, a delay occurred between the devitalization of tooth 14 and the completion of the root canal work (43 days). Moreover, the patient used during this period a mouth wash [Listerine (regular) - Johnson & Johnson Limited], in between tooth brushing. During the time lapse till the completion of the root canal work, each mouth wash induced an excruciating pain in the left aspect of the maxilla. This was not the case, when another mouth wash was used instead. Moreover, an attempt to evoke the pain, using the Listerine mouth wash after the termination of the endodontal work failed.

About two months later, the patient developed what he considered an unusual "common cold", with excessive amounts of pus, often blood-tinged, mobilized from anterior and posterior nares, as well as from the bronchi. No fever, headache or face-ache were evident. A severe sore-throat, and very painful swallowing occurred. When, 10 days after the start of the symptoms, the patient raised the query of sinusitis, and evoked antibiotic treatment, his GP rejected the first, and ordered the administration of Rulid ® 150 mg x2, for a persistent dry cough and in spite of normal chest auscultation and chest X-ray.

The large amounts of pus cleared progressively, but the palate was still very sensitive. Ten days after the first symptoms, a left-eye conjunctivitis necessitated antibiotic eye drops. Following ten ad-

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ditional symptomatic days, the complaints slowly resolved.

5. Discussion

The first query to be evoked by this report, is the time lapse acceptable before a bridge renewal is instituted. In the present case, 40 years separated the first bridge and its new version, which is a long time by any criteria. Had an underlying secondary caries in tooth 12, not been actively looked for and detected, the original bridge might still be in place. Controversy is still pending as to the time which should elapse before a bridge renewal, but a reference on this issue is not, for practical purposes, obtainable. Since additional dental pathology may be obscured by the bridge itself, the structure might be severely damaged, before repair was initiated.

The patient suffered from bruxism, and maintained that he could not sleep with a night guard. Moreover, he confirmed indulging in a very hash tooth brushing. Only lately, has he been using a very soft tooth brush.

The poor condition of the teeth neighboring the bridge was overlooked for the period preceding the bridge renewal and after its completion. The teeth were then devitalized and only about 40 days later was the root canal treatment completed, which is probably longer than generally accepted. During this delay, an unusual side effect was observed. It concerned the Listerine mouthwash: its use initiated a very severe pain in the main part of the left maxilla. This complication may suggests the development of an oro-antral communication [2,3]. This secondary defect might probably have resolved at the completion of the root canal work.

The unusual upper respiratory infection episode which evolved, stands out for its duration and severity. Influenza may possibly be excluded, as the patient had been vaccinated and no fever was detected. Moreover, a massive purulent and blood-tinged exudate was raised from both the anterior and posterior nares, as well as from the bronchi. A severe sore throat, showing no tonsillar exudate was evident. The GP excluded a sinusitis, since no headache, face-ache, fever nor dizziness were present. However an odontogenic type of sinusitis was not considered at all, in spite of a hint of a possible oro-antral communication, perhaps underlying this type of sinusitis [4,5]. Headache, facial-ache, as well as fever and dizziness may be absent in this relatively unusual form of sinusitis. It is of note, that odontogenic maxillary sinusitis may develop following dental trauma, dental surgery, but also to some extent following endodontic treatment [2,3]. If the wrong diagnosis was made, it was due also to the limited interaction between the physician and the dentist. This may have lead to a prolonged suffering for the patient.

References

1. Khan F, Young WG, Daley TJ. Dental erosion and bruxism. A tooth wear analysis from South East Queensland. Australian Dent J. 1998; 43: 117-127.

2. Motamedi MH. Root perforations following endodontics: a case for surgical management. Gen Dent. 2007; 55: 19-21.

3. Hauman CH, Chandler NP, Tong DC. Endodontic implications of the maxillary sinus: a review. Int Endod J. 2002; 35: 127-141.

4. Regimentas Simuntis, Ricardas Kubilius, Saulius Vaitkus. Odontogenic maxillary sinusitis: A review. Stomto Baltic Dent Maxilofac J .2014; 16: 39-43.

5. Little RE, Long CM, Loehrl TA, Poetker DM. Odontogenic sinusitis: A review of the current literature. Laryngoscope Invest Otolaryngol. 2018; 3: 110-114.

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