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REVIEW ARTICLE

DRY SOCKET

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ABSTRACT

Dry socket is a postoperative complication followed by tooth extraction. It is also known as alveolar osteitis. Crawford coined the term "dry socket" in 1896. Following exodontia, dry socket is a painful and typical post-operative consequence. Little progress has been achieved over the years in coming to definitive findings about how dry socket should be handled. A variety of treatment options are recommended for the management of dry sockets, including irrigation with chlorhexidine or saline solution, application of non-absorbable obtundent dressings (zinc oxide eugenol dressings) or absorbable dressings (alvogyl dressings), and instruction for at-home use of chlorhexidine mouthwash. In the field, novel substances including PRF and GECB as well as combinations of PRF and chlorhexidine gel are being tested to see if they might speed up the healing of the socket.

INTRODUCTION

Dry socket is one of the most frequent postoperative consequences following the excision of permanent teeth. Since Crawford's initial description of it in 1896, this phrase has been employed in literary works (Crawford, 1896). For all conventional extractions, the incidence of dry socket varies from 0.5 to 5%, but it can go up to 38% for extractions of impacted mandibular third molars (Kolokythas, 2010 and Fridrich, 1990). Alveolar osteitis is defined by Blum (2002) as "postoperative pain in and around the extraction site that worsens at any time between one and three days after the extraction, accompanied by a partially or completely disintegrated blood clot within the alveolar socket, with or without halitosis." (Blum, 2002). Due to dissolution or loss of the blood clot, which results in the absence of a layer of healthy, persistent, healing epithelium, in this condition, the bone within the socket is revealed in the days after the extraction (Bowe, 2011). A variety of therapeutic approaches have been mentioned in the treatment of dry socket with variable success claims made by dental professionals due to its poorly known aetiology. Patients experience pain and a delay in the healing of the socket wound due to the unsatisfactory nature of dry socket treatment to date. There is no set suggestion for the management of dry sockets, and clinical practice guidelines in many dental practices frequently exclude it (Kamal, 2002).

Etiology: It is not entirely clear what causes dry socket, assumption is that enhanced local fibrinolysis, which causes the clot to disintegrate, is the cause of dry socket. However, it is known that a number of regional and systemic factors have a role in the etiology of etiology (Gowda, 2013).

Risk factors

- 1) Inexperience (Field, 1985).
- 2) Mandibular third molars (Lucas, 1983).
- 3) Systemic disease (Macgregor, 1968).
- 4) Gender (females>males) (Catellani, 1980).
- 5) Surgical trauma and difficulty of surgery (Nusair, 2007).
- 6) Oral contraceptives (Sweet, 1978).
- 7) Excessive irrigation or curettage of alveolus (Awang, 1989).

Clinical Features

- Clinically, exposed bone and an empty socket without a blood clot are visible. The socket might contain a mixture of saliva and food scraps (Bowe, 2011).
- 24 to 72 hours following extraction, pain begins. It radiates to the ear and neck and fluctuates in frequency and intensity (Swanson, 1989).

- There may be symptoms of headache, sleeplessness, and vertigo (Sasaki, 1968).
- While there is no redness, swelling, fever, or pus formation, there is oedema of the surrounding gingiva and localised lymphadenitis. Significant halitosis and bad taste are present. (Awang, 1989 and Fazakerley, 1991).

Management

- **Alvogyl(alv):** It is a combination of eugenol which serves as an obtundent, iodoform as an antimicrobial and butamen as an anesthetic. (20)
- **Zinc oxide eugenol pack of freshly prepared mix (ZOE):** Zinc oxide eugenol is a commonly used treatment agent. It is almost always applied after irrigating extraction socket with a normal saline (Faizel, 2014).
- **Saline irrigation:** Irrigating extraction socket with normal saline as a sole agent was scarcely recorded in the literature as a treatment for the condition (Khalifah, 2017)
- Topical anesthetics (Burgoyne, 2010).
- **Vitamin C:** It is a well-known antioxidant and wound healing promoter which reduces infection and inflammation. It was proposed by Halberstein et al in the tablet form after performing curettage and irrigation of the socket. They reported a more than 50% remission by 2 days of treatment and a 100% remission by the fourth day (Halberstein, 2003).

CONCLUSION

Dental professionals must deal with the unavoidable difficulty of dry socket on a regular basis. The age of the patient, oral contraceptive use, smoking, painful extraction, and poor patient compliance with post-extraction recommendations are some potential causative variables. Reducing the insult to the wound caused by food debris and microorganisms, irrigation of the socket with chlorhexidine, placement of an Alvogyl dressing or, in the absence of that, teaching the patient how to use a syringe at home to irrigate the socket until the socket no longer collects debris, and the prescription of strong oral analgesics are all ways to facilitate and accelerate healing. When necessary, these treatments might be coupled with a prescription for systemic antibiotics.

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