DRY SOCKET: An Overview And Its Management

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ABSTRACT
Dry socket is common complication of tooth exodontia. It’s been recognized from many years now. Numerous studies are available discussing methods and techniques to prevent this condition. Its incidence is approximately 3% for all routine extraction and 30% for impacted mandibular third molar. There is wide range of treatment are being used in the treatment of dry socket: rinsing of socket with chlorhexidine (74%) or saline (26%); placement of a non resorbable obtundant dressing and instruction in home rinsing of socket with chlorhexidine. Over the years little progress has been made in establishing firm conclusion as how best dry socket has been managed

KEYWORDS: Dry socket, Alveolar osteitis, low level laser therapy

INTRODUCTION
Dry socket is defined as postoperative pain in and around the extraction site, which increase in severity at any time between 1 and 3 days after the extraction accompanied by a partially or totally disintegrated blood clot within the alveolar socket with or without halitosis1. The name dry socket is used because the socket has dry appearance after the blood clot is lost and washed away. The other terms used are alveolitis sicca dolorosa, localized osteitis

Clinically, an empty socket which lacks blood clots and exposed bone are seen. The socket may fill with food debris and saliva mixture. Severe pain starts after 3 to 5 days of extraction. Marked halitosis and foul taste is present

Histological features are remnants of the blood clot and a massive inflammatory response characterized by neutrophils and lymphocyte which may extend into the surrounding alveolus

Its etiology is not well established: trauma following forced tooth extraction, excessive use of vasoconstriction in local anesthetics, infection, dislodgment of blood clot from socket due to forceful mouth rinsing, use of contraceptives, and heavy smoking have all implicated in the etiology of dry socket. Increase local fibrinolysis at the wound site is another possible mechanism.3

Due to its poorly understood etiology, a range of treatment modalities has been implicated in the treatment of dry socket with varying success The following table shows the difference between dry socket and normal socket:

<table>
<thead>
<tr>
<th>DRY SOCKET</th>
<th>NORMAL SOCKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain that improves, but then get worse</td>
<td>Pain that continues to improve</td>
</tr>
<tr>
<td>No visible blood clot, partly disintegrated blood clot</td>
<td>Visible blood clot</td>
</tr>
<tr>
<td>Visible exposed bone or tissue</td>
<td>No visible exposed bone</td>
</tr>
<tr>
<td>Bad taste in mouth</td>
<td>No change in taste</td>
</tr>
<tr>
<td>Bad smells coming from wound, which may lead to bad breath</td>
<td>No bad smell evident</td>
</tr>
</tbody>
</table>

MANAGEMENT
The treatment of dry socket begins with gently curettage to debride the slough in socket, followed by irrigation and creation of new blood clot The irrigation solution use may comprise of physiological saline solution or other irrigant solution such as chlorhexidine and hydrogen peroxide. This is then followed by insertion of a dressing into a socket that comprise of medicaments such as algovyl, zinc oxide eugenol, oil of clove/eugenol, colloidal silver or antibiotic dressing such as chlortetracycline, rifampicin, clindamycin, and metronidazole gel.5,6 The wound debridement is basic principle of the management in poor wound healing mechanism and creation of a new clot revive the wound healing mechanism Pain control is considered the primary goal of dry socket treatment. Topical anesthetic gel applied directly onto the dry bare bone seems to bring immediate ad effective relief.8 zinc oxide eugenol has a more potent analgesic, sedative and anodyne effect as well as having an antibacterial properties. Neocane is antibiotic-analesigic medicaments containing polymixine B sulfate, which has an effect on gram negative bacteria. Socket irrigation with appropriate solution is necessary allowing a clean socket bed to begin its healing process. Hydrogen peroxide seems to the oldest irrigant used. Hydrogen peroxide is a strong oxidizing agent releases oxygen and kill anaerobes while its foaming action causes oozing and bubbling out of food debris from the dry socket site. However hydrogen peroxide is caustic, and it has been replaced with chlorhexidine gluconate 0.2% or 0.12%.
### Therapeutic intervention | Features
--- | ---
Zinc oxide eugenol | Gauze or ointment formulation, Antiseptic and anesthetic properties
Alvogyl54 | Includes eugenol as an analgesic, iodoform as an antimicrobial and butamen as anesthetic
G.E.C.B Pastille19 | Includes 3% eugenol, 3% guaiacol, 1.6% chlorobutanol as effective ingredients and balsam peru as base
Vitamin C21 | Wound healing promoter and antioxidant action that reduces infection and inflammation
Plasma rich in growth factor18 | Contains platelets and fibrinogen so it promotes wound healing as well as osteogenesis
Low level laser therapy2 | Antimicrobial potential

It is widely accepted that systemic antibiotic should not be prescribed for the treatment of dry socket as they have no additional advantage over local treatment directed to the socket in a non-immune-compromised patient11,12,13. Vitamin C is also found to be use in the management and control of dry socket14. Different methods in the management of dry socket

Other technologies such as low level laser therapy (LLLT) can applied to dry socket to achieve photo-biostimulation of the healing cells during the proliferative stage, producing regenerative effect15,16 and it is also found efficient in pain control

**CONCLUSION**

-Dry socket is most common post extraction complication. Its etiology is not well known but various factor play an important role in its pathogenesis. There is specific treatment for dry socket irrigation of socket followed by placement of suitable dressing is commonly used.

**REFERENCES**

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