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Research Article

THE INTERNSHIP DENTISTS KNOWLEDGE ABOUT DRY SOCKET

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ABSTRACT

A Dry socket is delayed healing but without an infection. This postoperative complication causes moderate to severe pain, but is without the usual signs and symptoms of infection. The term dry socket describes the appearance of the tooth extraction socket when the pain begins.

Objective: The aim of this study was to assess the information of internship dentists in Alfarabi dental college about the dry socket.

Methods: Anonymous survey (15 questions) forms were distributed among the internship dentist in Alfarabi dental college. 115 dentists filled the questionnaire completely.

Results: A high percentage of the internship dentists (94.8%) agreed that the incidence of dry socket is significantly higher in smokers than in non-smokers, while 10.4% agreed that chlorhexidine when used as a preoperative irrigant and mouthwash can increase the dry socket incidence. 58.3% of participants reported that dry socket occurred three times less frequently in females on oral contraceptives than in those who are not taking them. The analysis of data was performed using methods of descriptive statistics.

Conclusion: The non-practiced endodontic procedure was clearly related to levels of self confidence among internship dentists; this means; a lot of studies in dental school should be performed to determine the weakness points or gaps in undergraduate endodontic courses.

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INTRODUCTION

Early loss of the blood clot produces an acutely painful condition in around 5% of normal extractions (Bowe DC *et al*. 2017). This case is called "Dry Socket" which interferes with the healing process that takes place after a tooth extraction. Dry socket was first described by Crawford in 1896 (Crawford JY 1896). "Dry socket" term is used because the socket has a dry appearance after the blood clot is lost and debris washed away. Many other terms are used with the same meaning of dry socket like: alveolar osteitis, alveolitis, localized osteitis, alveolitis sicca dolorosa, localized alveolar osteitis, fibrinolytic alveolitis, septic socket, necrotic socket, alveolgia (Cadoso CL *et al*. 2010). The socket may be filled with food debris and saliva (Bowe DC *et al*. 2017). The pain radiates to the ear and neck (Swanson AE. 1989). Histologically; dry socket consists of remnants of the blood clot and an inflammatory

response characterized by neutrophils and lymphocyte (Birn H. 1973). The supposed causes of dry socket are trauma during extraction, bacterial infection and biochemical agents (Butler DP, Sweet JB. 1977). This complication occurs more commonly in the extraction of the third molars (Muhammad AS. 2010). Trauma from extraction and aggressive curettage cause fibrinolytic activity (Birn H. 1973). Radiotherapy to the head and neck results in a decreased blood supply to the mandible (Soames JV, Southam JC. 1999). Antibiotics influence the incidence of dry socket (Torres-Lagares D *et al*. 2005). Irrigation removes the debris and bacteria from the bare bone in the dry socket (Kaya GS *et al*. 2011). Home instructions for maintenance of oral hygiene and gentle warm saline rinses help in the healing of the socket (Fazakerley *et al*. 1991). Turner stated that curettage and removal of granulation tissue resulted in fewer visits than zinc oxide eugenol or iodoform gauze with eugenol technique (Turner PS. 1982). The aim of this study was

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to assess the information of internship dentists registered in Alfarabi dental college about one important complication of tooth extraction (Dry socket).

Table 1 The answers of the questions of this survey, number of answers for each choice, and the percentage of each answer

	N	%
1. Gender		
Male	65	56.5%
Female	50	43.5%
2. A dry socket also referred to as alveolar osteitis		
Yes	92	80%
No	18	15.7%
I don't know	5	4.3%
3. Pain in dry socket increases in severity at any time between the first and third day after the extraction		
Yes	82	71.3%
No	29	25.2%
I don't know	4	3.5%
4. Dry socket is accompanied by a partial or total disintegrated blood clot within the alveolar socket		
Yes	96	83.5%
No	12	10.4%
I don't know	7	6.1%
5. Dry socket is accompanied by marked halitosis and foul taste		
Yes	94	81.7%
No	13	11.3%
I don't know	8	7%
6. What is / are the cause/s of dry socket?		
trauma during extraction	44	38.3%
bacterial infection and biochemical agents	85	73.9%
7. Dry sockets occur more frequently in the mandible than the maxilla		
Yes	92	80%
No	17	14.8%
I don't know	6	5.2%
8. Dry socket occurs more frequently in females than males due to possible hormonal cause		
Yes	42	36.5%
No	32	27.8%
I don't know	41	35.7%
9. The incidence of dry socket is significantly higher in smokers than in non-smokers		
Yes	109	94.8%
No	4	3.5%
I don't know	2	1.7%
10. Vasoconstrictors increase the risk of developing a dry socket		
Yes	56	48.7%
No	37	32.2%
I don't know	22	19.1%
11. The dry socket occurred three times less frequently in females on oral contraceptives than in those who are not taking them		
Yes	67	58.3%
No	29	25.2%
I don't know	19	16.5%
12. Chlorhexidine when used as a preoperative irrigant and mouthwash, increase the dry socket		
Yes	12	10.4%
No	75	65.3%
I don't know	28	24.3%
13. Erythromycin and Metronidazole are effective in prevention of dry socket		
Yes	45	39.1%
No	24	20.9%
I don't know	46	40%
14. In dry socket management: every 2-3 weeks, the pack of medicated dressing containing zinc oxide and eugenol must be changed and removed after the pain subsides		
Yes	52	45.2%
No	39	33.9%
I don't know	24	20.9%
15. The choice of analgesics in dry socket can range from a short course of non-steroidal anti-inflammatory drug to narcotic based like codeine		
Yes	67	58.3%
No	18	15.7%
I don't know	30	26.1%

MATERIALS AND METHODS

115 internship dentists complete the questionnaire; they were not being obliged for completing or returning the survey. The

questionnaire contains 15 questions, one of them is related to gender, other questions concerning with dry socket term, causes, clinical features, factors affecting dry socket, and treatment of this complication. Descriptive statistical methods were used to evaluate the data.

RESULTS

The table (1) contains the last percentage and number of answers according to the returned questionnaires. These results were obtained by descriptive statistical methods of analyzing the statistical data. Each of these results will be discussed individually in the discussion.

DISCUSSION

80 % of participants agreed that a dry socket also referred to as alveolar osteitis, this term was mentioned by [Cadoso CL et al 2010](#). Pain in dry socket increases in severity at any time between the first and third day after the extraction ([Blum IR.2002](#)); this statement was known by 71.3% of participants. Also Blum mentioned that Dry socket is accompanied by a partial or total disintegrated blood clot within the alveolar socket ([Blum IR.2002](#)); 83.5% of dentists knew this information.81.7% of internship dentists said that dry socket is accompanied by marked halitosis and foul taste ([Awang MN.1989](#)), ([Fazakerley et al.1991](#)).

In the section of dry socket causes 38.3% of participants chose trauma during extraction, while 73.9% support the bacterial infection and biochemical agents as a cause of the dry socket ([Butler DP, Sweet JB.1977](#)). Dry sockets occur more frequently in the mandible than the maxilla ([Muhammad AS.2010](#)), most of our dentists (80%) agree with ([Muhammad AS.2010](#)). Dry socket occurs more frequently in females than males due to possible hormonal cause ([Sweet DB. 1978](#)), the answers about this question was not accurate enough; only 36.5% were sure about the correct answer. Approximately all dentists (94.8%) are sure that, the incidence of dry socket is significantly higher in smokers than in non-smokers ([Mohammed H Abu Younis, Ra'ed O Abu Hantash.2011](#)). 48.7% agree with the statement "Vasoconstrictors increase the risk of developing a dry socket" which was mentioned by [Fridrich in 1990 \(Fridrich et al 1990\)](#). The dry socket occurred three times more frequently in females on oral contraceptives than in those who are not taking them; 58.3% of participants did not agree with this correct information according to ([lily et al. 1974](#)). 65.3% supported the information that Chlorhexidine when used as a preoperative irrigant and mouthwash, decrease the dry socket incidence ([Houston JP et al.2002](#)). In dry socket management section in this questionnaire only 39.1% of participants knew that Erythromycin and Metronidazole are effective in prevention of dry socket. As it is known that every 2-3 weeks, the pack of medicated dressing containing zinc oxide and eugenol must be changed and removed after the pain subsides ([Houston JP et al.2002](#)); 45.2% of participants agreed this point.58.3% of dentists in this study select the choice that, analgesics in dry socket can range from a short course of non-steroidal anti-inflammatory drug to narcotic based like codeine.

CONCLUSION

Within the limits of our study; the knowledge of our dental college' internship dentists about dry socket is accepted, except in some points of specific information like (gender, oral contraceptives, and antibiotics) effects on dry socket development.

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