

Perception on Healing Rate of Patients after Dental Extraction Regarding their Adherence to Post Operative Care

Supraja.J¹, Surya Ramanan.K.R¹, Srivatsa Kenga Subbiah², Vishnu Priya.R¹, Veronica.J¹,
Vasu Priyan.R, Varsha.V¹

¹CRRI, Thai Moogambigai Dental College and Hospital, Chennai, Tamilnadu, India, ²Professor, Department of Oral and Maxillofacial Surgery, Thai Moogambigai Dental College And Hospital, Chennai, Tamilnadu, India

Abstract

Objective: The understanding and adherence to postoperative care instructions are factors that influence the healing process of the patients after dental extraction. The aim of this study is to analyse the healing rate of the patients who strictly follow and who do not follow the postoperative instructions after dental extraction. **Study design:** One hundred patients with no medical complications who referred for non-surgical extraction were selected for this study. The patients were evaluated a week after extraction regarding their adherence to postoperative instructions. **Results:** 94 patients completed the study. Smoking, drinking of alcohol/ carbonated beverages are the main influential factors in which patients lack their adherence to post-operative care after dental extraction. **Conclusion:** The result of this study revealed no association of age, gender with the healing of the socket. However habit of smoking, consumption of alcohol associated with male gender highly influence the healing rate of patients after dental extraction.

Keywords: Extraction, Healing, Instruction, Post-operative, Pain

Introduction

A dental extraction (also referred to as tooth extraction or exodontia) is the removal of teeth from the dental alveolus in the alveolar bone.^[1] It is the most common procedure performed in oral surgery and it is performed for variety of reasons in which teeth have become unrestorable through tooth decay, advanced periodontal disease or dental trauma associated with poor prognosis.^[2,3] The other reason for extraction is removal of bicuspid for orthodontic treatment to create space.^[3] Surgical removal of impacted or partially erupted third molar which may also cause recurrent infections on the gingiva (pericoronitis).^[4]

Though each individual has their own capacity to heal, healing after dental extraction mainly depends on the cause of extraction, extraction procedure, and post-operative care.^[5,6] Post operative care is influenced by

the understanding of the patient and their subsequent implementation to the guidelines presented by the professional.^[8]

The main objective of this study was to determine the percentage of healing rate of patients regarding their adherence to post operative care.^[7,9]

Materials and Method

A total of 100 patients underwent dental extraction including surgical removal of impacted tooth were selected for this study. The patients chosen for the study were healthy without any systemic complications. The patients excluded from the study were those who could not attend the scheduled appointments, some psychological disorder and with systemic disorders.

Initially the questionnaire was distributed to the patients after a week of dental extraction. The part of the questionnaire contains the brief detail about the patient and the detail about the tooth which is extracted. The questions in the questionnaire were designed to evaluate patient's adherence to post operative care and their healing process.

Corresponding Author:

J.Supraja

E-mail: suprajsubi@gmail.com

Results

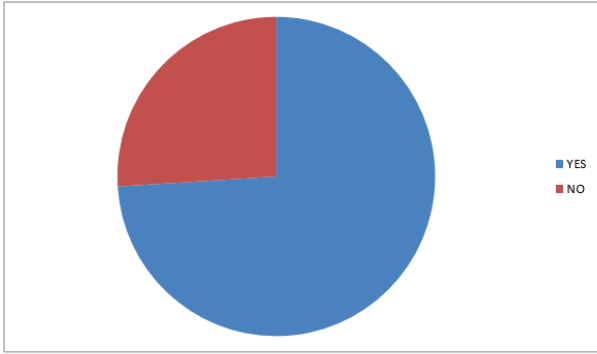


Chart 1: Did you follow the medications prescribed?
74% of patients follow the medications prescribed

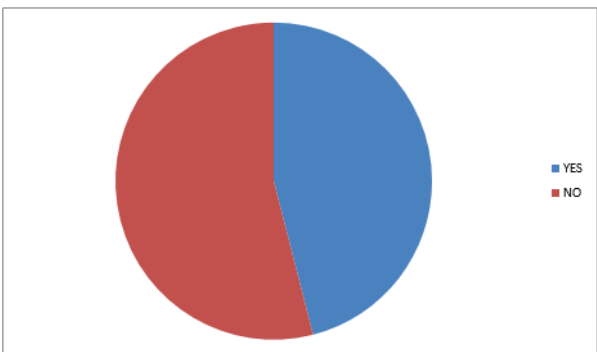


Chart 2: If smoker, did you follow the recommendation of not smoking for a week?
46% of patients follow the recommendation of not smoking for a week

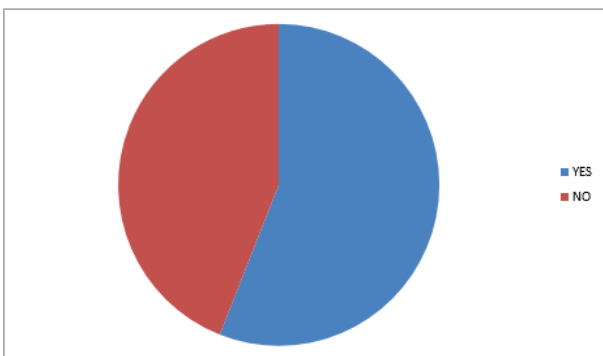


Chart 3: If alcoholic, did you follow the recommendation of not drinking alcohol for a week?
56% of patients follow the recommendation of not drinking alcohol for a week

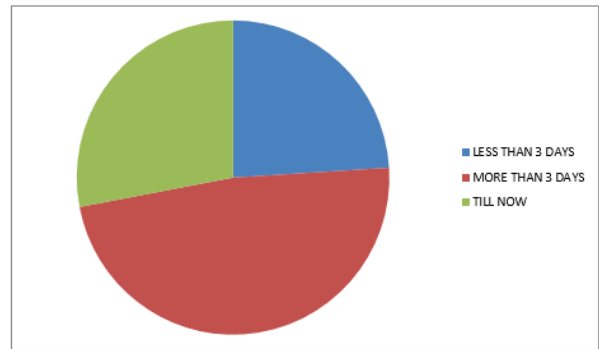


Chart 4: How many days you felt pain in the region of extraction?

24% of patients felt pain for less than 3 days, 48% of patients felt pain for more than 3 days, 28% of patients feel pain till now(after a week)

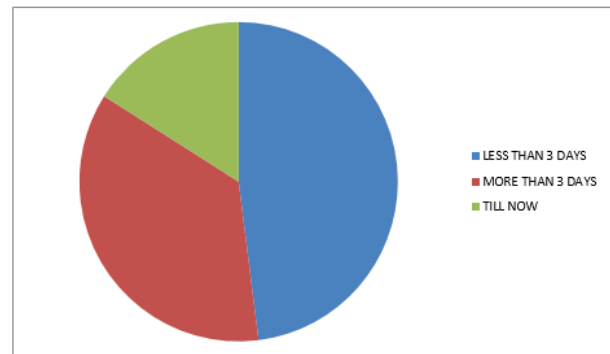


Chart 5: How long does swelling lasts after the extraction?

48% of patients have swelling lasts less than 3 days, 36% of patients have swelling lasts more than 3 days.16% of patients have swelling till now(a week after extraction).

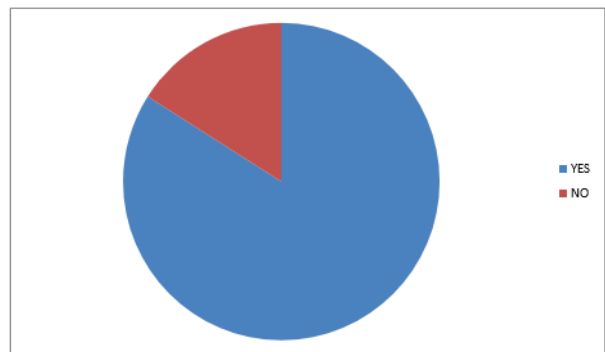


Chart 6: Are you aware that following these instructions influence the healing period?

85% of patients were aware of it

Discussion

The current study was sought to document the perception on healing rate of patients regarding their adherence to post operative care. A detailed survey on patients adherence to their post operative care is

evaluated.^[9] Though most of the patients are aware of their post operative care, some of them lack their knowledge and interest on following the instructions told to them.^[11]

The understanding and subsequent implementation of the post operative instructions are the factors that influence the healing after the dental extraction.^[10] About 74% of patients followed the medicines prescribed, the rest ignored it because of the pain relief.^[12] 82% patients followed the instruction of not spitting for next 24 hours, 72% patients followed the instruction of not rinsing with any liquid as all these can dislodge the clot formation after dental extraction which leads to the formation of dry socket. Maximum number of patients (86%) followed the recommendation of maintaining the soft temperature diet since solid and hot foods affect the healing process. Ice pack should be applied on the region of extraction in 15 minutes intervals for the first 36 hours.^[6] After 36 hours, moist heat should be used instead.^[8] These instructions are followed by 74% of patients.

About 92% patients followed the instruction to brush gently on the region of extraction. Rock salt water gargling is recommended to the patients after extraction, 85% of patients followed the instruction. When the question was asked about the use of carbonated beverages, only 40% of patients followed the recommendation of not drinking the carbonated beverages for a week, the rest were not aware of the instruction. The poor response was obtained when the question was asked to patients about the following of recommendation of not to disturb the region of extraction with tongue, only 36% of patients followed it, the rest were not aware of the instruction and did not follow it.^[13,14]

The next question was asked to smokers, that whether they followed the recommendation of not smoking for a week, as it highly affect the healing process after extraction.^[16] Smoking after extraction results in dry socket, as the clot moved out of place due to the sucking action used to draw the smoke from the cigarette.^[15] Only about 46% of patients followed the recommendation of not smoking for a week. Similarly, the question was asked to alcoholic patients about the recommendation of not drinking alcohol for a week after extraction as it dislodge the blood clot and affects healing.^[17] Only 56% of alcoholic patients followed the instruction, the rest ignored it.^[18] These poor response has taken into consideration and awareness on effects

of smoking and consuming alcohol in healing of tooth socket after extraction should be taught to the patients.^[18,19] About 63% of patients follow the recommendation of using mouth washes for a week after extraction.

When question is asked to patients about the pain they felt after extraction, 24% of patients felt pain for less than 3 days, 48% of patients felt pain for more than 3 days, 28% of patients feel pain till the survey (a week after extraction).^[19] About 70% of patients experienced normal pain, where 30% of patients felt aggravating pain. On questions about swelling at the region of extraction 48% of patients have swelling lasts less than 3 days, 36% of patients have swelling lasts more than 3 days, 16% of patients have swelling till the survey (a week after extraction).^[18] About 12% of patients encountered other complications after the extraction. About 85% of patients are aware about the instruction given and their influence on healing process after extraction. The overall level of awareness among patients to follow the post operative care is fairly good, it is about 85%.^[20,21]

Conclusion

This study is to create the awareness and properly educate the patients about the post-operative instructions and complications and factors affecting, after extraction due to the non-compliance to the post-operative care. The habit of smoking and consumption of alcohol or carbonated beverages for a week after dental extraction influences the healing rate, it is associated with male gender. Hence awareness should be created on effects of smoking and alcohol on healing of socket to patients. It is very important to provide full details of the post-operative instructions to the patients as it promotes healing after tooth extraction. The result of this study revealed no association of age, gender with the healing of the socket. The patients who followed the post-operative instructions healed faster than the people who did not follow the instructions.

Conflict of Interest: There are no conflicts of interest.

Source of Funding: Self –sourcing.

Ethical Clearance: Ethical committee approval is obtained from the university (DR.MGR EDUCATIONAL AND RESEARCH INSTITUTE, MADURAVOYAL, CHENNAI).

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