

Mid Diagnosis Leading to Fatality in Oral and Maxillofacial Surgery: Case Series

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Abstract

The accuracy of clinical diagnosis and clinical examinations can have a profound impact on the early detection of potentially malignant lesions. Currently, the standard of care is clinical confirmation of the clinical impression for all medical conditions. Although encouraging early diagnosis through examination and prompt treatment to detect cause is important, it can result in an abundance of correct procedures and patient worry. A little discrepancy between clinical diagnoses can lead to the fatality. An improved understanding of the accuracy of medical conditions of patients is necessary to inform evidence-based treatment recommendations for examination and clinical care. In oral and maxillofacial surgery it is very important to understand and diagnose the underlying medical conditions with the patient chief complaint. An overall general and systemic examination is compulsory needed.

Keywords: Diagnosis, clinical examinations, maxillofacial surgery.

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INTRODUCTION

A health-care expert is accountable for the comfort of the patients under his or her care. Considering the dental practice in general, most of the dental treatments are non-emergency and are done on outpatient basis. Cases of emergency are primarily due to bad dental health or as a complication of dental treatment are rare, however if at all it occurs is mainly due to underlying medical problems. In spite of all the precaution and adequate care, sudden or unexpected death can occur during the dental treatment or in post-operative time because of the underlying causes, such as cardiac arrest or epilepsy, and also due to negligence. Deaths during the course of medical treatment are relatively more common when compared to dental treatments. Though the likelihoods of deaths during dental treatments are infrequent, no one can deny it in absolute terms. There are no statistical data available on the number of deaths in dental clinics across India or in other countries. However, there are anomalous reports of such events in the literature. One of the websites reports that 1 death occurs in every 4,00,000 cases where anesthesia is used in dental offices [1]. In

England, a total of 178 deaths were found to have occurred where general anesthesia was used before dental treatment during the period 1965-1999 [2]. The dentist may or may not be negligent in causing the serious injury or death of the patient, but often the public assumes that the dentist has done something wrong. The present day scenario forces health-care professionals including dentists to protect themselves from public rage. The aim of this case report is to report three of the important incidents which proved out to be fatal during or in postop phase in dental treatment.

Case Series

Case-1:

A 38 year old male was brought to the emergency department of our hospital, the relatives gives the history surgical extraction of impacted maxillary molar of right side. The bystander also confirmed that the patient was having temporal pain for last 15 days, a quick review of the patient was performed, symptoms of hemiplegia was present along with excessive bleeding from the extraction socket. A quick intervention was required and thus performed,

though it could not suffice the need and the patient was lost.

Case-2:

A case was being treated in the medical oncology department where the patient was diagnosed to have acute myeloid leukemia which was confirmed from the biopsy taken from the bone marrow. The patient had a history of surgical extraction which had resulted in persistent unexplained extraoral sinus, fever and trismus.

Case-3:

The dental department faced an awful situation when a 40 year patient was lost during the surgical extraction due to sudden cardiac arrest during the surgical extraction of mandibular third molar. During the procedure the patient suddenly revealed about severe chest pain, which was radiating to the neck and left arm, the emergency protocol was followed for the patient, sublingual GTN was also given however these measures was not proven to be effective and the patient was lost in the dental office.

DISCUSSION

Over the period of time, death has been reported as one of the rare incidences in dentistry. In fact, the literature suggests that fewer than three deaths are reported per year in association with dental care. This suggests that dentistry provides a very safe environment for a variety of oral health care procedures. Nevertheless, the number of deaths reported per decade has not decreased substantially; thus, there seems to be room for improvement in preventing this outcome [3, 4]. Anesthesia/sedation/medication-related effects were the most frequent factors associated with death (47.3%), followed by cardiovascular events (20.9%), infection (12.8%), airway/respiratory issues (12.2%), and bleeding (3.4%). Of note, there were reports of death associated with several patient, provider, and procedural factors. Specifically, the patient's age, drugs administered, providers involved, and setting where care was provided were important risk factors. Many adverse events associated with dentistry (e.g., bleeding, syncope, infection, osteonecrosis, hospitalization, and death) are preventable; however, the factors related to these adverse events must be fully understood to implement the best preventive practices. Although it is clear that not all fatalities associated with dentistry have been reported in the literature, the majority of those reported were associated with medication-related effects, particularly higher levels of anesthesia and sedation. Sedation-related deaths have been studied by several investigators [5-11]. The majority of deaths identified occurred less than 100 hours after initiation of dental care, respiratory deaths occurs rapidly compared with infection-related deaths. Because of the rapidity of de-evolution in respiratory-related deaths, it is essential for the providers to have knowledge about emergencies, be prepared to manage such emergencies, implement

preventive procedures, and be capable of performing emergency procedures. In contrast, the slower course of infection-related deaths strongly suggests that practitioners be able to recognize the features of an evolving and progressing infection and closely monitor the postoperative course of patients with orofacial infections to ensure that an accurate diagnosis has been made, proper care has been provided, and progress in recovery is being made [12]. The role of the history taking and dialogue between the clinician and the patient could prevent, helps in assessing the health status of the patient. The golden rule stands never treat a stranger, if in doubt seek consultation before proceeding. The art of listening is a necessary at tribute of the dentist who will diagnose and treat with wisdom and skill. It must be remembered that the patient is telling something of importance, even when it is misinformation. When all the data have been collected in questionnaire form, the dentist must interpret its quantity, quality and significance. The importance of a given positive answer will vary, depending on the individual giving it and what the question means to him. The dentist who overreacts to every "yes" answer is practicing with no more skill than the one who takes an inadequate history. The dentist must bring his training and experience to bear in making judgments. To turn indiscriminately to the physician for a judgment as to the significance of every "yes" answer is inappropriate and unprofessional. On the other hand, it is essential that the dentist feel no reluctance to consult with his dental or medical colleagues in the best interests of the patient. If one's goal is to treat patients rather than teeth or diseases, the value of taking a complete health history cannot be overemphasized. It is through this procedure that vital information is obtained, that the patient begins to gain confidence in his choice of practitioner and the dentist demonstrates his concern for the patient's total well-being.

CONCLUSIONS

Prevention of fatalities through proper physical assessment and accurate analysis of the factors identified is important for improving risk management and reducing the chances of fatality in day to day clinical practice.

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