CASE REPORT

Observing the Passive Behavior of Dentists towards Oral Cancer Examination and Patient Education: A Case Series

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ABSTRACT

Dentists play an important role in the early detection and diagnosis of oral cancer. In areas with a high prevalence of oral cancer, screening and patient education should receive much more emphasis. The dentist-patient relationship is a cornerstone of dentistry. Patients trust their dentist to be committed to their wellbeing. Thus, dental professionals carry a substantial social and ethical responsibility toward their patients. In this work, the author reports five cases of oral premalignant conditions that were missed due to dental negligence by dental interns practicing in university dental clinics. The observed passive behavior by dental interns in relation to oral cancer screening and patient education is alarming. Five cases were at high risk of delayed diagnosis because of such behavior. The finding suggests the likelihood of overlooking other similar cases, potentially drawing more attention to dentists’ responsibility toward the late diagnosis of oral cancer. This clinical series indicates that more emphasis should be placed on oral cancer examinations, as well as on the ethical and legal consequences of dental malpractice.

Keywords: Behavior, Clinical practice, Dentistry, Malpractice, Oral cancer, Oral cancer screening.

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INTRODUCTION

Oral cancer (OC) is the eighth-most common cancer worldwide.1 The Jazan region has the highest reported number in Saudi Arabia, accounting for 35% of cases.2 A critical issue regarding OC relates to its late detection, as most of the diagnosed cases are detected at a late stage.3,4 OC screening can aid in the early detection of OC and thus provide a better prognosis for the disease.3,5 OC screening includes inspecting and palpating soft and hard tissues, intra-orally and extra-orally, for any asymmetry, lump, ulcerations, swelling or change in color.3 Furthermore, certain circumstances necessitate dentists taking a biopsy of the suspicious lesion and submit it for histopathological testing.5

The dentist plays an important role in promoting public health by contributing to the early detection and prevention of OC.3,4 Thus, dentists are the frontline defense for preventing OC and early detection efforts.3,4 Regular dental visits put dentists in a unique position to screen and educate OC patients. Furthermore, the dental profession expects its practitioners to be prepared at an adequate level of knowledge and skills to face oral health problems and meet the community’s needs.5 In dentistry, junior dental students are usually supervised by faculty members in all the treatments they provide to their patients. A dental internship is the period when senior dental students practice dentistry for the first time independently and usually without supervision. Therefore, dental interns are trusted by patient, society and the profession to deliver dental treatment in respect to high ethical standards and the code of professional conduct.6

Among all health professions, dentistry is the one that most often faces litigation and lawsuits.6 Misdiagnosis and failure to diagnose is the most common cause of litigation of negligence in the United States.7 Negligence can be defined as the failure to meet the expected standard of care of an average qualified oral healthcare provider.8 Year after year, negligence accounts for the death of thousands of patients globally.7 Therefore, correct diagnosis, a well-made treatment plan and good patient communication can decrease the genuine cases of negligence in dentistry.9

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The aim of this study was to report five cases of oral premalignant conditions that were missed due to the passive behavior of dental interns toward oral cancer practices. Furthermore, the ethical and the legal consequences of such behavior were also examined.

CASE PRESENTATION

The author (principal investigator) was observing random dental interns’ clinics in the university as part of a quality evaluation. That was when he came across the following cases:

Case 1: A 26-year-old male and current smokeless tobacco (Shammah) user for 20 years. Clinically presented with a white patch under his tongue in the same area where he puts Shammah. Differential diagnosis: 1 – tobacco pouch keratosis, 2 – epithelial dysplasia, 3 – Squamous cell carcinoma.

Case 2: A 40-year-old male and a heavy smoker. Clinically presented with a white patch surrounded with red margin in the mucosal lining of his left buccal mucosa. Furthermore, there were multiple speckled-white and red palatal lesions. Differential diagnosis: Buccal mucosa; 1 – tobacco pouch keratosis, 2 – candidiasis, 3 – erosive lichen planus. For palatal lesion; 1 – nicotine stomatitis, 2 – candidiasis.

Case 3: A 39-year-old male, and a past smoker. Patient had a history (four years) of treated nasopharyngeal carcinoma, with...
multiple lymphadenopathy on both sides. Clinical examination revealed hard swelling related to the lower-right buccal vestibule with a well-defined margin. Differential diagnosis: 1 – metastatic nasopharyngeal carcinoma, 2 – squamous cell carcinoma.

**Case 4**: A 33-year-old male and a current smokeless-tobacco (areca nut) user. Clinically presented with a white lesion in the right and left buccal mucosa as well as on the ventral surface of the tongue. Differential diagnosis: 1 – proliferative verrucous leukoplakia, 2 – lichen planus, 3 – tobacco pouch keratosis with superimposed candidiasis.

**Case 5**: A 23-year-old male and a current smokeless-tobacco (Toombak) user. Clinically presented with a white lesion in the upper left buccal vestibule. Differential diagnosis: 1 – tobacco pouch keratosis, 2 – hyperplastic candidiasis.

Although these cases were new patients, dental interns who were assigned to these cases did not perform a thorough historical, systematic and diagnostic investigation as should have been the case. A case file was considered in recording each case by dental interns. The case file included medical history, past dental history, and habit history. The average time taken during the examination ranged from 3 to 5 minutes. There was no clinical restriction regarding the time, nor any clinical requirements imposed on dental interns. In all the five cases, patients were asked about the chief complaint and the interns then checked the area of complaint. This was observed by the author and further confirmed by the five cases. Each of the five cases was observed by different dentists and detected by the author over two weeks. As dental interns usually practice independently, their work was not supervised by superior doctors. When the author observed such passive behavior from dental interns, he discussed it with dental interns and model to them a complete oral cancer examination including oral cancer screening, tissue biopsy taking when needed, patient education and a follow-up. Upon the author's diagnosis, patients confirmed that their previous dentists had not asked about their history of cancer, did not ask about tobacco, did not tell them about any tobacco-related changes in their oral tissue, did not educate them about the effects or steps to quit tobacco use and did not inform them about oral cancer screening.

**Discussion**

The aim of this case series was to reflect on five cases of dental negligence by dental interns practicing in university dental clinics. The five cases all showed oral tissue changes related to tobacco use – ranging from a precancerous condition, such as leukoplakia, to a cancerous lesion according to the histopathological test. In these cases, patients did not receive oral cancer examinations nor any patient education. If the author did not perform another diagnosis and screening, these cases would more than likely have remained undetected and perhaps been detected at a more advanced stage.

The dental interns’ passive behavior toward oral cancer practices may denote an existing gap, either in terms of the dental interns’ individual levels or the system's performance level (education and clinical guidelines). A recent study investigated dental students’ perceptions toward oral cancer practices and revealed that awareness, confidence and skills in performing complete oral cancer examinations are a possible determinant for passive oral cancer practices. The descriptive norm was another factor that was associated with dentists’ passive behavior toward oral cancer practices. This refers to the dental intern’s perception toward the performance of oral cancer practices by their colleagues.

Another study showed that factors, such as lack of appropriate supervision (30%) and excessive workload (23%), were associated with serious adverse events due to diagnostic error. Factors such as overconfidence, failure to use second-thought analysis instead of first-look intuitive decisions led to 96% of the diagnostic errors.

The dentist-patient relationship is the basis of dentistry. Patients trust their dentists to be committed to their wellbeing. Thus, dentists carry a big social and ethical responsibility toward their patients. Dental negligence can severely affect the patient's quality of life. In this sense, in dentistry, ethical principles are integral to the education of new practitioners.

Additionally, dentists have the responsibility to refrain from harming the patient (nonmaleficence) and are, in fact, obliged to promote the patient's health (beneficence). However, in all five cases observed, dentists have – intentionally or not– breached those two principles of ethics and codes relating to professional conduct. Furthermore, it constitutes a clear infringement of the patient's right to receive the optimal care. In these situations, patients may resort to filing litigation, which is usually associated with a severe personal and occupational consequences for dental professionals due to negligence.

The fact that five cases were missed by dental interns bring us to question the actual number of missed cases with similar conditions. Also, it may draw attention to the level of education and training provided to dental interns about oral cancer examinations and patient education, so that they are ready to practice independently. Furthermore, it may mean that dentists hold some responsibility for the problem of oral cancer late detection in the region of Jazan. More emphasis should be placed on oral cancer examination as well as on the ethical and legal considerations of neglecting oral cancer practices. Dental interns might need to be indirectly supervised on weekly basis to assess their actual behavior toward performing oral cancer practice. When dental interns show passive behavior toward oral cancer practice, the situation should be raised by the supervising doctor and discuss the ramifications of not performing oral cancer practice on patients’ health. The gap between awareness and actual practice can be bridged by incorporating dental interns in developing intervention that targets their skills toward oral cancer practice. System education, clinical guidelines and any future reforms should utilize the participatory approach to enhance dental interns’ acceptability and adherence to the developed intervention/reform.

**Conclusion**

The passive behavior of dental interns in relation to oral cancer screening and patient education is alarming. Five cases were at high risk of delayed diagnosis because of this kind of behavior. The finding suggests a likelihood of overlooking other similar cases and that more attention should be paid to dentists' responsibility for oral cancer late diagnosis in the Jazan region.

This clinical series indicates that more emphasis should be placed on educating dental students about the importance of oral cancer examinations, as well as on the ethical and legal considerations of dental negligence.

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