

Smokeless Tobacco (Shamma) and Oral Squamous Cell Carcinoma in Women , 3 Years Retrospective Study , Abu Arish General Hospital

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Abstract

Smokeless tobacco, particularly Shamma, also known as Yemeni snuff, is frequently used as a chewing material in Yemen and some parts of South region of Kingdom of Saudi Arabia, is a recognized risk factor for squamous cell carcinoma of the oral cavity. This conclusion based on epidemiologic studies of oral cancer in women, in Yemen cases and some parts of South region of Kingdom of Saudi Arabia. Where the oral cancer death rate in females has been high. The research focus on studies of women led to the identification of the hazards from Shamma use. Preliminary clinical observations indicated that long-term users of Shamma may develop oral cancer. More researches should be stressed on understanding new trends in oral cancer high mortality rates among women.

INTRODUCTION

Previous investigators in the Kingdom of Saudi Arabia (KSA) have reported a relationship between their patients with oral cancer and a history of using shamma. (1)

The purpose of this study is to explore the possible relationship between a smokeless tobacco preparation (shamma) and oral cancer, among women in the provinces of the KSA.

Oral cancer ranks first in terms of mortality, which means that the people dying from oral cancer are more when compared to any other organ cancer in the Jazan provinces of the KSA.(2)

Shamma is a complex mixture of powdered tobacco, slaked lime, ash, oils, spices and other additives,

The user quite often places it in the buccal cavity, labial cavity or sublingual area as a quid till the affect and the flavor of the substance lasts. Studies performed in Saudi Arabia have revealed frequent use of shamma among the people living in the Jazan province .(3)

Examination of the relevant epidemiologic, experimental, and clinical data revealed that oral use of smokeless tobacco is a significant health risk. This behavior can cause cancer in humans, and the evidence is strongest for cancer of the oral cavity, particularly at the site of tobacco placement.(4)

Materials and Methods

An ethical agreement was first obtained from the ethics committee at Abu Arish

General Hospital, Jazan, Saudi Arabia to access the medical records.

The study was based at Abu Arish General Hospital in the Jazan province of Saudi Arabia. This is one of the largest hospital in the whole province and equipped well with proper diagnostic procedures. Cases from primary and secondary centers across the region are referred to oral and maxillofacial departement in this hospital for management, diagnosis,histological confirmation and for further follow up and treatment.

Data and medical records from the oral and maxillofacial departement, Abu Arish General Hospital were reviewed for the period from June 2012 to may 2015. A total of 56 Saudi and Yemeni cancer patients were referred over this period. The frequency of oral cancer was investigated, specifically for those primary sites located near the habitual placement of this smokeless tobacco product. Notably, (73.2) % of these oral cancers were female patients referred from one province (Jizan). The percentage of oral cancer female cases from this province is much higher when compared to the whole of the KSA. These data suggest that there is a relationship between the factors: smokeless tobacco (shamma), frequency of oral cancer, and Jizan province, oral cancer appears to be more common in this province in females where shamma is also common.



Oral Squamous Cell Carcinoma of the lip



Oral Squamous Cell Carcinoma of the cheek



Results

It was observed that the percentage of females suffering from oral cancer 41 (73.2%) are higher than males 15 (26.78%) in the total number of cases examined for the time period in which the study was performed. Most of the people suffering from oral cancer were above 40 years of age. but some cases (12.19%) were also of a younger (< 30 years) age group. The table 1 which shows the use of shamma among women in various age groups reveals that its use is very common among older age groups (41.46%).

Table 1. Habits of Shamma use among women in various age groups

20-30 years	30-40 years	40-50 years	>50 years
5 (12.19)%	7 (17.07)%	12 (29.26)%	17 (41.46)%

The frequency of shamma use in hours per day among study population was also seen to have a significant effect specially in women on the occurrence of oral cancer (Table 2).

Table 2. Frequency of shamma use in numbers per day among Study Population

Numbers / day	Male	Female
> 3 times	40%	19.51%
5-8 times	35%	36.58%
> 8 times	25%	43.9%

Discussion

Jazan region is reported to have the highest number of oral cancer cases diagnosed each year in the Kingdom of Saudi Arabia.(5). we observed that most of the individuals suffering from oral cancer were over 40 years of age, which is in accordance with an earlier study. (6) A previous retrospective study conducted from 1976 till 1995 using the data obtained at the King Faisal specialist hospital and research center in Riyadh revealed that 35.4% of all the oral cancer cases from the nation were just from one province namely, Jazan .(3)

Two researches conducted in Yemen which share the border with Jazan showed higher number of females suffering from oral cancer when compared to males. (1), (6)

Observing the spread of this dangerous disease in these regions, it was necessary to establish a study for various potential risk factors involved within the local population.

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