



## Original Research Article

## Comparative evaluation of smokers palate in beedi vrs smokers in rural area of Vaishali district

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## ABSTRACT

**Introduction:** Somkers palate or Nicotine stomatitis is a whitish papuler lesion seen on the hard and soft palate in the oral cavity that is usually seen in individual who are exposed to any type of smoking habit.

**Aim:** To evaluate and correlate the smoking habit in individual with different pattern of smoker's palate depending on their use.

**Materials and Methods:** A total of 920 subjects were assessed undergoing routine dental checkup in the dental Opd of a polyclinic. The evaluation and correlation between duration and frequency of smoking habit was done.

**Results:** The individual using beedi were high in number than the individual using cigarette. In almost 726 individual smokers palate were present and the grade of smokers palate also increase with the increase or frequency and time of use.

**Conclusions:** In the present study it is found that beedi smoking is more common than cigarette smoking. There is direct relationship of frequency and duration in individual having smokers palate.

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### 1. Introduction

Tobacco habit is widely spread in different parts of our nation. Tobacco product can either be chewed, snuffed, smoked or dipped. Smoking is done by both upper and lower socio-economic group but low socio-economic group is more adapted towards smoking. Somking or tobacco chewing habit just not causes mucosal changes but also lead to various lesions such as leukoplakia, osmf, black hairy tonque, smokers palate, malignant changes and so on.

Somkers palate also known as Nicotine stomatitis is a lesion of the palatal mucosa, which is been described

in literature in early 1926. Thoma KH named the lesion stomatitis nicotine because it was mainly seen in the person who were exposed to smoking habit.<sup>1</sup> Periodontal & mucosal changes are often seen in the oral cavity of smokers but the name nicotine is a misnomer as nicotine is not the product that causes the lesion, but the heat stream of tobacco and smoke.<sup>2</sup> Change in color of hard palate is seen which comprises of red dots located centrally. After continues smoking the opening minor salivary gland becomes inflamed because to heat. Patient is generally unaware of this smokers palate as it is asymptomatic. But with the continues habit of use of smoking it may lead to cancer of the tonsils, posterior mouth, and lungs. However if the habit is stopped then dotted appearance of hard palate

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turns to healthy.

In this study evaluation and correlation of the smoking habit in individual with different pattern of smoker's palate depending on their use is been seen.

## 2. Materials and Methods

A total of 920 individual participated in the study. Individual from last one year who came for routine dental check up or with any other oral and dental problem in dental OPD of polyclinic were included in the study. Individual without any systemic condition and not under any medication were included in the study. Individual who had habit of smoking more than 6-8 cigarette or beedi from last 3-5 years were included for the study. All the individual were informed about the study, and they were ready to comply with the study and consent form were taken for their active participation in the study.

All the individual were examined with the help of diagnostic instrument and guage and case history with relevant information were recorded.

Smokers palate were examined and classified into three grades<sup>3</sup>

1. Mild (grade I): Consisting of red, dot like opening on blanched area
2. Moderate (grade II): Characterized by well defined elevation with central umblication.
3. Severe (grade III): Marked by papules of 5mm or more with umblication of 2-3 mm.

## 3. Results

The study included 920 individuals with smoking habit out of which 726 had developed smoker's palate which shares a high number of the total smokers. Table 1

**Table 1:** Comparison between grades of smoker's palate and type of smoking

Type of Smoking	Grade I	Grade II	Grade III	Total (%)
Beedi	110	270	110	490(67.4)
Cigarette	75	99	62	236(32.5)
Total	185	369	172	726(100)

Out of 920 individuals 726 were smokers with different pattern of habits irt duration and numbers of daily use. In our study we came across the fact that indivisual using beedi are more prone to smoker's palate. Out of 726 individual 490 were in the habit of smoking beedi where as cigarette using individual were 236 which comprises of 32.5% in respect of beedi smokers i.e. 67.4%. Table 2

All this is suggestive of more the number of beedi & cigarette intake and more the duration, much will be the chances of smoker's palate.

**Table 2:** Correlation between different grades of smoker's palate with duration and frequency of smoking habit

Duration and frequency of smoking	Grade I	Grade II	Grade III	Total (%)
6-8 cigarette or beedi from last 3-5 years	91	78	12	181(25.8)
More than 8 cigarette / beedi from more than 8 Years	110	90	60	260(35.8)
More than 10 times and more than 10 cigarette/beedi	125	54	106	285(39.2)
Total (%)	326(44.9)	222(30.6)	178(24.5)	726(100)

#### 4. Discussion

Beedi consumption is more than cigarette consumption. The presence of smokers palate is more in beedi, it may be because of various factors such as

1. Absence of filter in beedi as cigarette do have filter and heat concentration is high in beedi irt to cigarette.
2. Constituents of beedi irt to cigarette.
3. Use of beedi is more because it is cheep irt cigarette.

Our study got the result that beddi smoking is much harmful than cigarette smoking. The severity of smoker's palate lesion also increased as the frequency and duration of smoking increased.

#### 5. Conclusion

The clinically evident mucosal changes were very characteristic and unique. The presence of smokers palate is more in individual with more duration and frequency. Oral & dental Surgeon should take special care in diagnosing the smokers palate for early detection of any further complication.

#### 6. Conflict of Interest

The authors declare no relevant conflicts of interest.

#### 7. Source of Funding

None.

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