



Chewing Tobacco and Arecanut Effects on Oral Health and Misconception by Patients

Lalrotlingi Sinate*

Department of Dentistry, Associate Dentist, Chislon Dental Delight, Sielmat, Churachandpur, Manipur, India

*Corresponding Author: Lalrotlingi Sinate, Department of Dentistry, Associate Dentist, Zion Clinic, Tuibuong, India.

DOI: 10.31080/ASDS.2022.06.1487

Received: October 03, 2022

Published: October 10, 2022

© All rights are reserved by

Lalrotlingi Sinate.

Areca palms, which grow in tropical regions of the Pacific, Asia, and eastern Africa, are the source of the betel nut or areca nut. It is reported to have both stimulating and sedative effects and is typically chewed along with other narcotics like cigarettes. Betel nut chewing is a common family custom that is ingrained in the social fabric of many cultures. The betel nut, betel leaf, and the mineral lime are all chewed together, and some people chewed along with tobacco. Tobacco contains nicotine, due to its addictive qualities, the health concerns are increased by this. When tobacco is used, the chance of developing some malignancies is significantly increased [1,2].

Effects on teeth

Both chewing tobacco and arecanut use significantly discolor the teeth of users. A frequent side effect of chewing tobacco is tooth discoloration. The stains penetrate and bind to the enamel, dentin, and root surfaces, discoloring them from brown to black. Prolonged tobacco chewing also stains artificial dentures and prosthetics. When chewed repeatedly, the harsh abrasives in tobacco products can wear down the teeth or create abrasion. Additionally, it makes dental cavities more common, which leads to tooth loss. Tooth decay is caused by the high concentration of sweetening and flavoring ingredients in cigarette products [3]. It can cause internal and external fracture of teeth with internal and external staining. It also increases bone resorption whether generalized or localized which causes loosening of teeth.

Effects on soft tissues

Regular chewers of arecanut with or without tobacco experience the distinctive brownish-red staining of the oral mucosa that results from the incorporation of the quid's constituents, which

frequently has a wrinkled appearance. Additionally, the oral mucosa has a propensity to desquamate, probably as a result of the stressful consequences of chewing [3]. Chewing of arecanut causes friction between the teeth and the nut leading to recession and discoloration of the gingiva, swelling of the gums and formation of thick calculus.

Continuous use of arecanut/tobacco may lead to Leukoplakia, Erythroplakia and Erythroleukoplakia, Squamous cell carcinoma (SCCa), Submucous Fibrosis and Periodontal disease [1].

Apart from side effects on the oral cavity by areca nut, there are many other effects on general health including the effects on the endocrine and reproductive systems, on the respiratory system, on fetus, on the nervous system, acute toxicity, on arachidonic acid and leukotrienes pathways, on blood, on cardiovascular system and gastro cancer.

Oral cancer

Maintenance of poor oral hygiene and prolong use of tobacco and arecanut can lead to oropharyngeal cancer.

There are many products which contains chemicals causing cancer [4].

- The most dangerous substances are tobacco-specific nitrosamines, which are created during the growth, curing, fermenting, and aging of tobacco. Various products include varying amounts of these compounds
- Cancer risk increases with the concentration of certain substances.

- There are also some chemicals found in tobacco causing cancer
- The presence of the radioactive element polonium-210 in tobacco fertilizer
- Chemicals produced when tobacco is heated to cure (also known as polycyclic aromatic hydrocarbons or polynuclear aromatic hydrocarbons)
- Harmful metals (arsenic, beryllium, cadmium, chromium, cobalt, lead, nickel mercury)

Misconceptions by patients

Here are some misconceptions by patients who came for a dental visit

- Chewing arecanut with or without tobacco makes the teeth stronger than non- users
- It makes the teeth free from cavity/caries than non- users
- Using harpic removes the stains
- Using ultrasonic scaler for removing the stains makes the teeth sensitive, weak and thinner

Conclusion

Arecanut and tobacco chewing increased risk of oral cancer and educating the patients is important. More awareness of oral cancer should be exercised because many patients felt that chewing tobacco or arecanut makes the teeth stronger, which they performed during their early teenage years and passed on to their offspring.

Bibliography

1. Hagen BE Klieb DMD MF. "Areca (Betel) Nut and Oral Health Implications" (2020).
2. JE Henningfield RF. "Smokeless tobacco: An addicting drug" (1997).
3. Muthukrishnan A and Warnakulasuriya S. "Oral health consequences of smokeless tobacco use". *Indian Journal of Medical Research* 148.1 (2018): 35-40.
4. "Smokeless Tobacco: Health Effects". Centre for disease control and prevention (2020).