Letter to Editor

Myanmar: An Endemic Country for Oral Cancer

Dear Editor,

Betel nut (paan, Areca nut) chewing existed in Myanmar (Burma) since ancient times and it was done by both the kings and princes in the Burmese court and also by the ordinary people. The Burmese kings used golden containers studded with jewels to put the ingredients for betel quid (betel nut, betel leaf, caustic lime, and tobacco), whereas the common people used a lacquerware box. According to historical annals, court ladies offered paan to heroes returning from battles as a sign of respect and affection. It is also a Burmese custom to offer visitors and guests pickled tea leaves, paan, and hot green tea in Myanmar households. These act as stimulants and have effects similar to that of drinking coffee.

The Burmese love the betel nut so much that tens of thousands of acres are dedicated to its cultivation.[1] Consequently, the number of betel nut stalls is also growing in towns and cities across Burma.[1] In Myanmar, the practice of chewing paan is increasing among both sexes and it is more popular among rural people than urban dwellers.[1] It tends to stain the lip and the teeth red but this does not signal bad aesthetics in Burmese culture. It is addictive and the Burmese believe that it can aid in digestion, and prevent halitosis and flatulence. After chewing, the end product, i.e., red betel juice has to be spit out. It creates a stain and this has become a concern for sanitation in modern times. Today, in Myanmar, there is a ban on spitting betel juice in public places. This is a big issue in the United States. Burmese immigrants were banned from a laundromat in Fort Wayne, Indiana for spitting betel juice inside the store.[2] Many of the Burmese immigrants are refugees and political asylees and have come from refugee camps along the Thailand-Burma border. They have low levels of education and have difficulty with the acculturation process in America.

Various compounds present in the nut, most importantly arecoline, are carcinogenic and contribute to histologic changes in the oral mucosa. People who chew betel nut are 10 times more likely to have oral cancer than those who do not.[1] About 90% of males with oral cancer in Myanmar had histories of habitual betel nut chewing.[3] Chewing paan causes oral submucous fibrosis (OSMF), a precancerous lesion that lies on the causal pathway to oral cancer.[4] Areca nut causes fibroblastic proliferation and an increased collagen formation.[5] In Myanmar, the tongue is commonly affected followed by the palate, and diseases like lichen planus, oral leukoplakia, and erythroplakia can be observed, in addition to submucous fibrosis.[3,6]

Even though it has been proved that chewing betel nut causes oral cancer, there are very few education or intervention programs in Myanmar. Monks, men, women, and even kids as young as 10-year-olds chew betel nuts in Myanmar. Myanmar has the highest prevalence of betel nut chewing in the region - about 51.4% of adult males chew paan daily.[7] Compared to this, 32.9% of adult males in India, 31.2% in Nepal, 26.4% in Bangladesh, 24.9% in Sri Lanka, 2.8% in Philippines, 1.3% in Thailand, 0.9% in China, 0.7% in Cambodia, 0.5% in Malaysia, and 0.3% in Vietnam chew betel nut.[8] Of the adult males who chew paan in Myanmar, 31% also smoke tobacco.[7] These two hazardous behaviors are commonly observed together. Betel nut chewing and smoking have a synergistic effect on oral cancer occurrence. In addition, among the 13-15-year-old students in Myanmar, 15.2% of boys and 2.0% of girls chew betel nut.[9] Thus, even in modern times, the trend of chewing betel nut is increasing in Myanmar.[10]

In Myanmar, oral cancer is the fourth most common cancer among males and sixth most common among females.[11] Oral cancer ranks second in cancer mortality among males.[12] In addition to oral squamous cell carcinoma, betel quid with or without tobacco causes cancer of the pharynx and cancer of the esophagus in humans.[13,14] Slaked lime is corrosive and causes chronic inflammation, and peptic and duodenal ulcers.[15] There is a need to educate the Burmese in America and also in their native country. Oral cancer is costly to treat in a Third World country like Myanmar where the preventive services are limited.

Tobacco is one of the main ingredients in the betel quid. There are no laws in Myanmar that prohibit the sale of smokeless tobacco to minors or prohibit the sale of smokeless tobacco within 100 yards of schools.[1] Thus, Myanmar is still far from banning the practice of chewing betel nut.[16] Currently, in the media, there are awareness campaigns in the form of public service announcements. However, in the major cities, there is a ban on spitting red betel juice in the streets, mainly for sanitary reasons. Betel nut chewing eventually becomes very hazardous to health and is a habit that should be strongly discouraged.

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