The term “oral cancer” encompasses cancers that originate in the oral tissues. Squamous cell carcinoma of the oral mucosa and lips, however, comprise 90–95 percent of all oral malignancies.

Oral cancers are one of the most common cancers, constituting almost 50 percent of all cancers diagnosed in males with an overall incidence of 3.8-11 per 100,000 population. The disease usually presents in advanced stages.

It is surprising that a site, which is most accessible for daily self-examination, can become a lethal disease. Oral cancer is a preventable disease that can be greatly controlled through the early detection and health education.

Incidence
In developed countries oral cancer is less common, but it is the eighth most common form of cancer overall. However, the ranking varies greatly among countries.

“Oral cancers are one of the most common cancers.”

Estimates show that in 1980, more than 32,000 new cases of oral cancer were diagnosed throughout the European community. The prevalence of lip cancer appears to be decreasing, but the prevalence of intraoral cancer appears to be rising in many countries, especially in younger people. This is especially true in Central and Eastern Europe. In the South America, the highest rate varies from 4.4 (Cali, Colombia) to 22 (Calcutta). In India and New Zealand, it varies from 2.6 (New Zealand—Maori) to 7.5 in South Australia.

The prevalence of tongue cancer is consistently found to be higher (by approximately 50%) in blacks compared with whites within the same regions of the US. The prevalence of oral cancer is also generally higher in ethnic minorities in underdeveloped countries. Males are affected more frequently than females, although the ratio is equalizing and is predominantly found in middle-aged and older persons. The sex differences in some population groups could be a direct consequence of the sex differences in tobacco usage.

For instance, in an epidemiological study in India, it was found that the M:F ratio of oral cancers in the Indian population is a direct consequence of the tobacco use among men and women in the general population, and in a study of 198 oral cancers among South African blacks, a high M:F ratio (7:1) related to the differences in tobacco usage between the sexes was observed.

Etiology
The literature on the etiology of oral cancer is voluminous, but few firm conclusions can be drawn except for the use of some forms of tobacco usage.

The evidence for this and other possible etiological agents—namely, alcohol, xylitol, oral, dental factors, dietary deficiences, and viral infections—viruses and sunlight—is reviewed below, in brief.

Tobacco and alcohol use are independent risk factors for mouth and tongue cancer. Heavy tobacco smokers have a 20-fold greater risk; heavy alcohol drinkers a 5-fold greater risk, and those who do both have a 50-fold greater risk. Betel-quid chewing and oral snuff are important risk factors in people from specific geographic areas (Southeast Asia).

Oral Health
The prevalence of intra-oral cancer appears to be rising in many countries, especially in younger people. Tobacco chewing in Asia, habits, usually combined with or without to-bacco use can cause cytogenic changes in oral epithelium. From this point, chewing habits, usually combinations that contain tobacco, are used as experimental models (eg, Oat, Shamshah, Toom-badak). Tobacco chewing in people from parts of Asia appears to predispose to OSCC, particularly when it is started early in life and is used frequently and for prolonged periods. Studies from India indicate that an association between pan tobacco chewing and OSCC, particularly cancer of the buccal and labial mucosa.

a) Diet: A significant protective effect of diet against oral cancer has generally been shown in persons who consume beta-carotene rich vegetables and citrus fruits.

5. Viruses: Viruses are believed to increase the index of suspicion for oropharyngeal malignancies, and in a study of 198 oral cancers among South African blacks, a high M:F ratio (7:1) related to the differences in tobacco usage between the sexes was observed.

b) Tobacco chewing habits: In 1986, the International Agency for Research on Cancer deemed betel-quid chewing an important risk factor, and the areca (betel) nut habit or without tobacco use can cause cytogenic changes in oral epithelium. Variations in chewing habits, usually combinations that contain tobacco, are used as experimental models (eg, Oat, Shamshah, Toombadak). Tobacco chewing in people from parts of Asia appears to predispose to OSCC, particularly when it is started early in life and is used frequently and for prolonged periods.

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"Without therapy, 60–90% of carythroplasias may turn into cancer in 5–10 years."

The head and neck cancer team is comprised of surgeon, radiation oncologist, medical oncologist, nurse, professional counsel, speech and language pathologists, dietitian, pharmacist, medical social worker, professional counsellor, speech and language pathologist, occupational therapist, physiotherapist, nurses and a pharmacist. The dismal scenario can be improved by combined basic training in knowledge of speech and swallowing to the treating surgeon, ostomy therapist and medical oncologist.

Most of the tumors present in advanced stages, necessitating both surgical and adjuvant RT. Both these therapies lead to massive deterioration in speech and swallowing. Lack of knowledge of various interventions—e.g., jaw/long exercises, thermal stimulation, augmentation prosthesis, speech exercises—compels the surgeon to accept these disorders as unavoidable sequel to treatment.

Not only surgery but radiation also affects the physiology of swallowing. Loss of sensation, xerostomia, post RT fibrosis, mucusitis, edema are some of the causative factors. All these can be effectively handled by proper pre-treatment counseling and post-treatment rehabilitation.

There is a need to identify speech and swallowing dysfunctions as a rehabilitation as an essential part of head and neck cancer treatment. An effective rehabilitation does not mean disappearance of a tumor following surgery and RT chemotherapy, but restoration of altered functions as well.

Follow-up & Prevention

The oral cavity is easily accessible to the examinations and hence, unlike other cancers, can be diagnosed in its early stages. The detection of this disease in its early stages is possible due to the constant surveillance and the significant improvement in patient compliance and access to medical care.

In primary prevention, avoiding exposure to tobacco reduces the risk for cancer development. This can be implemented in the form of a community approach where the risk is added to the individual's direct risk. The policies can be addressed through an individual approach designed to motivate those with tobacco habits to quit their habits, or discourage people, especially young people, from acquiring such habits. The implementation of primary prevention requires a change in cultural attitudes such as films, television, radio, newspapers, posters and also involves personal communication by doctors and social workers.
Halloween Candy: It’s Not How Much Kids Eat, It's When

Prolonged exposure to acid in the mouth is the culprit.

Halloween and itsavalanche of mouth-coating, mauling sweets at the worst time of year for children’s teeth, right? Well, necessarily, says a dentist who contends that parents can make a big difference by monitoring the frequency with which kids eat their sweets.

Parents need to know that frequent eating of sweets at bedtime is more harmful than amount when it comes to taking in” sugars, said Dr. Mark Helpin, acting chairman of Temple University’s Department of Pediatric Dentistry. “It’s not how much we eat but how often we eat these kinds of things that will place us at increased risk of dental decay and cavities.”

Candy remains a huge part of Halloween for tens of millions of kids and their candy-hungry -- or candy-fearing -- parents. The National Confectioners Association says 95 percent of children in the United States go trick-or-treating, and the group estimates that Halloween candy sales this year will top $2.26 billion.

But children -- and adults -- are less at risk of developing tooth decay if they eat sweets -- even carbohydrate-heavy foods like potato chips and crackers -- at mealtimes, Helpin said.

Cavities are most likely to develop when your mouth is exposed to the acid created by bacteria during eating, Helpin said.

“When we eat at meals, the flow of saliva increases. We’re also taking in other liquids that will help wash the mouth out, he said.

But if you snack during the day, the teeth are continuously bathed in acid. If “half, or even four pieces of candy, and I eat all four at one time, my mouth will have acid in it for 50 to 60 minutes. If I eat one each hour, my mouth can be exposed to acid for four hours,” he added.

The worst time to give kids sweets is right before bedtime, Helpin said. As for mealtimes -- like lunchtime at school -- it’s fine if they eat sweets in their mouths to wash away acid.

When it comes to Halloween, Helpin recommends that parents not get overly concerned about candy and their kids. “I don’t think Halloween week is going to be the make-or-break factor in whether someone will get a number of new cavities,” he said.

Helpin recommends that parents have their kids brush their teeth after eating candy. If that’s not possible, have them rinse their mouth with water three or four times after eating. This will help cut down on acidity in the mouth, he said.

There can be special concerns about Halloween treats if your child is among the boys and girls with food allergies.

“Candy products frequently include ingredients like peanuts, tree nuts, milk and egg, some of the most common food allergens in children,” Dr. Jacqueline A. Pongratz, an official with the Milwaukee-based American Academy of Allergy, Asthma & Immunology, said in a news release issued by the organization.

“Peanuts and tree nuts are common causes of severe, life-threatening reactions, and children and their parents need to be aware of this and check ingredients for all treats. This can be especially tricky with Halloween candies, which often do not have ingredients listed on their labels.”

Progressive Orthodontics extends live programme to Asia

ALISO VIEJO, USA: Owing to popular demand, global orthodontics education provider Progressive Orthodontics has announced the re-opening of its Singapore location in 2009. Singapore’s two-year Orthodontics class, run by Dr. Oliver Hennedige and his wife Irene Hennedige, will begin on 13 January 2009 with the closing date for discounts for early registration

26 December 2008, company officials told Dental Tribune. The programme series will be presented by leading instructors, such as Dr. Swaroop from the USA, Dr Hymer from Australia, Dr Hagens from Holland, and Dr Tossolini from Argentina. Students will also receive Progressive Orthodontics’ leading orthodontic software, IPSsoft, which will assist them in creating optimal treatment plans for patients anywhere in the world. According to the company, the software analyses patients’ details prior to diagnosis and treatment, to ensure the highest chance of successful diagnosis. Features include 150 treatment plan templates, which can be adapted to each patient, cephalometric tracing, model measuring, visual treatment objectives, and easy export for case diagnosis to instructors worldwide.

In addition to Singapore, Progressive Orthodontics offers the programme in Australia and New Zealand. Dentists who cannot attend Progressive Orthodontics’ live series in the 21 worldwide locations can still benefit from the comprehensive Orthodontics programme through online training. With this programme, dentists need only attend seminars three times, making a total of ten days’ absence from their practices, while attaining the same level of orthodontic skill from the 5,000 web pages of principles, cases, and videos, as well as hands-on instruction, according to the company.