HPV Related Oral Cancer: A New Epidemic

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HPV or the human papilloma virus is the most common sexually transmitted disease in the world. Every day in the U.S., about 12,000 people ages 15-24 are infected with this pathogen. The vast majority of them will clear this condition naturally and never know that they were exposed or had this infection. However, this virus is playing an increasingly important role in oral cancer. The incidence of HPV positive oral squamous cell cancer (OPSCC) is increasing so rapidly it is not unusual to hear this referred to as an epidemic! From 1984 to 2004 there was a 224% population-level increase in HPV OPSCC. The HPV-positive oropharyngeal cancers have now surpassed those caused by tobacco and alcohol use. HPV oral and oropharyngeal cancers are harder to detect than the tobacco related cancers because the symptoms are not always obvious to the person developing the disease and to the professionals who are looking for it. In addition, the symptoms present many years following the original exposure.

The typical patient with HPV-positive OPSCC is a middle-aged non-smoking white male from a higher socio-economic status with a history of multiple sexual partners. Men are 4 times more likely to get this disease than women. The ongoing trend worldwide has shown a decrease in the age of initial sexual activity and an increase in the number of sexual partners, thus contributing to HPV exposure. Various surveys done in middle schools have illustrated the fact that children in the fourth and fifth grades are experimenting with oral sex.

Patients with HPV-positive OPSCC present with small, asymptomatic primary tumors and more advanced nodal disease. Patients often seek medical attention due to a swelling or mass in the neck. Tobacco use and decreased immune status also play a role in this cancer’s development.

At this juncture, it is important to review the signs and symptoms of oral cancer:

1. An ulcer or sore that does not heal in 2-3 weeks
2. Difficult or painful swallowing
3. A persistent sore throat or hoarse voice
4. A swelling or lump in the mouth
5. A lump in the neck persisting for more than two weeks
6. Constant coughing
7. An ear ache on one side which persists for more than a few days

Treatment modalities include both chemotherapy and head and neck radiation. When an oral/pharyngeal cancer is HPV positive with no additional risk factors such as smoking, it is estimated to be 90% curative with the above combined treatment modality. As always, it is very important for the head and neck cancer patient to have a complete dental evaluation prior to beginning treatment. This will minimize the oral side effects of both chemotherapy and head and neck radiation. In addition, it is essential for these patients to have good follow up dental care on a regular, life-long basis. This would include the daily use of fluoride trays, stretching exercises and having three month dental evaluations as opposed to the usual practice of 6 month dental visits.

In previous years when an oral/pharyngeal cancer was caused by tobacco and/or alcohol use, the survival rate was approximately 5 years. Now these patients with HPV positive cancers can usually expect a normal life span. Without proper dental care the ongoing side effects of cancer treatment can result in significant dental disease. A family dentist should be well equipped to deal with the special needs of cancer patients. The toxicities of radiation treatment to the head and neck last a lifetime. It is not unusual, due to damage by the radiation to the

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salivary glands, to have oral pH levels of a five or below post radiation. Without proper dental management, teeth do not exist long-term in such an acidic environment.

The good news is that there is now a vaccine which protects against the strains of HPV which cause cancer. Vaccines such as Gardasil and Cervarix are most effective if given to children before they become sexually active. In the United States, the National Advisory Committee on Immunization Practices recommends routine HPV vaccinations for females ages 11-26. The Oral Cancer Foundation has advocated to the CDC for vaccination also of boys and men ages 9 through 26, to help protect the next generation from HPV caused cancers. To date, the most prevalent side effect from the vaccination is slight soreness at the site of injection.

Simply put, the HPV vaccine is cancer prevention! Despite the almost non-existent risks and the highly effective nature of this vaccine, less than 38% of girls in this country are being vaccinated and less than 9% of boys. By strongly advocating for the HPV vaccination in our young children, parents and grandparents can reduce likelihood of this disease and help to stop its spread.