

# Guest editorial

## Current concepts on HPV infection and oral carcinogenesis

An increased interest on oral human papillomavirus (HPV) and head and neck carcinogenesis has been noticed in the last decade. There has been a reduction in the tobacco and alcohol squamous cell carcinomas (SCC) and a high incidence of HPV-DNA positive head and neck carcinomas (HNSCC) over the last 30 years. The role of HPV in the development of HNSCC is still unclear despite its well-established role in the cervix cancers. Up to date, it is consensus that HPV is associated to a subset of HNSCC, the oropharyngeal cancers.

The most important issue in identifying HPV-positive HNSCC is to characterize the demographic patterns, treatment outcome and prognosis of the patients; especially because vaccination programs have been launched very early in many countries, as a preventive approach.

HPV-positive HNSCC patients are usually younger (40 or 50 years old), white adults, never/light smokers. In these patients, these lesions often present at a higher stage and with large metastatic lymph nodes. These patients have higher levels of education and income. A higher number of lifetime oral sex partners and a higher number of lifetime vaginal sex partners have been demonstrated in this group of patients. Recent evidence suggests HPV-related HNSCC present different symptoms than those caused by tobacco. They also have a better prognosis compared to HPV-negative tumors, independent of the treatment chosen. The 2 and 5-year survival rate for HPV positive HNSCC is significantly greater than for HPV negative cancers, as well as they are more responsive to treatment.

Many studies have demonstrated that HPV vaccine can be effective in protecting against cervical, anal, and oral infections, in different frequencies, even if patients were exposed to the virus before.

In 2015, a 9-valent HPV vaccine was approved in United States, but a smaller additional reduction will be achieved by this new vaccine. Still further research is needed, since non-desirable symptoms are being attributed to some HPV commercially available vaccines, such as circulatory abnormalities.

## References

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