The Growing Epidemic of HPV Associated Oropharyngeal Malignancy

Abstract:
Against the prevailing view during the 1970s, Harald zur Hausen postulated a role for human papillomavirus (HPV) in cervical cancer and subsequently won a nobel prize for his work in 2008. The pathway by which the viral oncoproteins cause malignant transformation in the cervical epithelium has been well described in the literature. However, it is far less appreciated is the association between HPV and oropharyngeal malignancy. The extensive prevalence of HPV in head and neck malignancies is increasing rapidly and is preventable. It represents a distinct disease entity and treatment should be tailored accordingly. We recommend the vaccination of both boys and girls against HPV.

Impact on treatment
Several studies have found that HPV positive OSCC responds better to radiation chemotherapy. Faivre et al suggested this is due to the presence of wild type p53 in tumours with a postulated intact apoptotic pathway. The response rates and survival outcomes are clearly superior for HPV positive OSCC.

References
4. Falkry E, RTOG 0129 study found a 26% improvement in 3 year survival when comparing HPV positive OSCC to HPV negative OSCCC. The absolute survival difference between HPV positive and HPV negative cancers at 5 years is consistently 30%
5. At present the treatment protocols for HPV positive and negative OSCCC are similar but we are seeing improved treatment responses to HPV positive OSCCC. HPV oropharyngeal malignancy is a preventable disease. It represents a distinct disease subtype and future treatment strategies for HPV oropharyngeal malignancy will need to be tailored according to whether it is HPV positive. It also presents in a younger and healthier cohort of patients with associated implications for longer term management.

OPSCC through a comprehensive vaccination program for both boys and girls.

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Comments: