

Human Papillomavirus (HPV) infections in the head and neck

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Commentary

Human papillomaviruses were previously only known to cause diseases of the genital tract, with high-risk kinds causing cervix uteri cancer and low-risk types generating condylomas. More effort has now been made to reveal their effects in the head and neck area. One editorial, eight reviews, one brief report, and two systematic reviews add to the general knowledge of HPV in the head and neck region in this Special Issue on “HPV in the head and neck region.”

It refers to Focal Epithelial Hyperplasia (FEH), also known as Heck's disease, a rare benign condition primarily caused by HPV13 or 32 or both, and manifested as multiple asymptomatic whitish to mucosal-colored, soft, popular or nodular lesions in the oral cavity that require treatment if they grow inconveniently. Recent case reports in the area, including a FEH lesion infected with the low-risk HPV90, are discussed, as well as findings related to HPV genotypes, geographical distribution, comorbidities, and treatment.

One review looks at the issue of HPV vaccination in boys and young men, which was formerly thought to be primarily a female-focused vaccine but is now being recognized as a male-focused issue. The authors describe the barriers to and attitudes about HPV vaccination among boys and men, concluding that boys should be included in national immunization programs and offered catch-up vaccination.

It discusses HPV-associated benign Squamous Cell Papillomas (SCP) in the upper aero-digestive tract, their malignant potential, and the different associations with HPV infection depending on the locale. A review of HPV-related ocular adnexal neoplasia is also provided, revealing that the involvement of HPV in squamous cell cancers of the lacrimal drainage system and the eyelid is still unknown and that more research is needed.

The effects of HPV vaccines on oral and oropharyngeal HPV infections, and found a reduction in HPV vaccine-type infections in HPV vaccines.

Another study issue was HPV and squamous cell carcinoma

of unknown primary in the head and neck area, as well as its clinical consequences, with the conclusion that the presence of HPV in cytological specimens indicated the presence of a primary Oropharyngeal Squamous Cell Carcinoma (OPSCC). Advances in diagnostics, such as transoral robotic surgery and transoral laser microsurgery, have enhanced the likelihood of successfully identifying the primary tumor site, potentially allowing for better treatment alternatives.

It was also discussed how to improve OPSCC treatment options in the era of check point inhibitors, and this review predicts that new treatment options for the future will fuel the next development of OPSCC treatment. In addition, a discussion of the importance of HPV in head and neck cancer is presented, as well as what remains in 2021 from a clinician's perspective. The importance of correctly diagnosing an HPV positive tumor, which includes both p16INK4A and HPV DNA positivity, is underlined here. Furthermore, various flaws in the 8th TNM-classification system for malignant tumours are examined, as well as the relevance of prophylactic HPV vaccination. This find new prognostic and driver genes in HPV positive tonsillar and base of tongue cancer in order to further personalize patient treatment follows in a similar vein.

A short report on HPV-related Multiphenotypic Sinonasal Carcinoma (HMSC), a novel emergent tumor entity according to the World Health Organization (WHO), was also provided, along with a systematic review. The scientists speculate that this disease may manifest itself outside of the sinonasal area, but they also believe that HMSC needs to be properly defined before it can be justified as a distinct tumor entity.

A systematic review of HPV detection accuracy in OPSCC was also included. Regardless of the method, HPV detection

in tumor tissue was found to have a high overall accuracy, and HPV detection in blood was also found to be promising for HPV detection.

Finally, a systematic assessment of HPV positive in OPSCC around the world revealed differences in HPV occurrences, with the highest occurrences tending to be in Northern Europe, the United States, Lebanon, China, and South Korea.

With this, we'd want to express our gratitude to all of the authors for their contributions to our Special Issue. Learning more about this relatively young profession has been both fascinating and enjoyable. We hope that by working together, we can continue to advance the field's understanding in order to better prevent disease and personalize patient care.