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CORRESPONDENCE

Condyloma acuminatum manifests as intranasal papillomatosis



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Dear Editor,

A 37-year-old man had experienced right nasal obstruction and nasal discharge for 3 years, and visited our department in November 2013. We observed a large cauliflower-like lesion in the right nasal cavity, which was attached to the septum (Fig. 1A) and distributed to the middle turbinate, inferior turbinate, and vestibule. Nasopharyngoscopy revealed similar lesions on the nasopharyngeal surface of the soft palate (Fig. 1B). The oropharynx, hypopharynx, larynx, and anogenital region were free of lesions. The pathological diagnosis was squamous cell papilloma. The specimen was sent for hc2 high-risk human papillomavirus (HPV) DNA testing (Hybrid Capture II), with negative results for high-risk HPV infection. Eradication surgery was performed to excise the lesions. Carbon dioxide laser cauterization was applied to the wound beds for local control.

Microscopic examination revealed the overlying squamous mucosa with hyperkeratosis and acanthosis (Fig. 1C). Under a high-power field, the koilocytes were characteristic of HPV infection (Fig. 1D). Condyloma acuminatum was diagnosed based on the pathological features observed. The specimen was extracted with DNeasy Tissue Kit

(Quiagen, Venlo, Limburg, Netherlands) and HPV DNA was detected with MY09/11 anti-HPV primers. Eventually, HPV Type 6 was identified.

The patient had no recurrence 3 months post-operatively. However, he was subsequently lost to follow-up.

HPV Subtypes 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, and 68 are associated with malignant transformation.¹ Several techniques are available for detecting high-risk subtypes, as indicated by this study.

A previous study has reported the association between HPV infection and intranasal papillomatous lesions, including Schneiderian sinonasal polyp, inverting papilloma, squamous papilloma, and condyloma acuminatum.² Squamous papilloma and condyloma acuminatum typically arise in sites of ciliated respiratory epithelium and squamous epithelium juxtaposition.³ They share similar histological appearance, with finger-like projections containing stroma with papillary fibrovascular cores covered by hyperplastic squamous epithelium. Macroscopically, they present as cauliflower-like projections.

The classical histopathological features of condyloma acuminatum include broad reticulated acanthosis, hyperkeratosis, and koilocytosis, which is the histological gold standard for the diagnosis.⁴ As in our case, typical koilocytes with nuclear enlargement, hyperchromasia, and perinuclear halo presented in the specimens, which differed from the atypical koilocyte-like cells in the initial biopsy when squamous cell papilloma was diagnosed at

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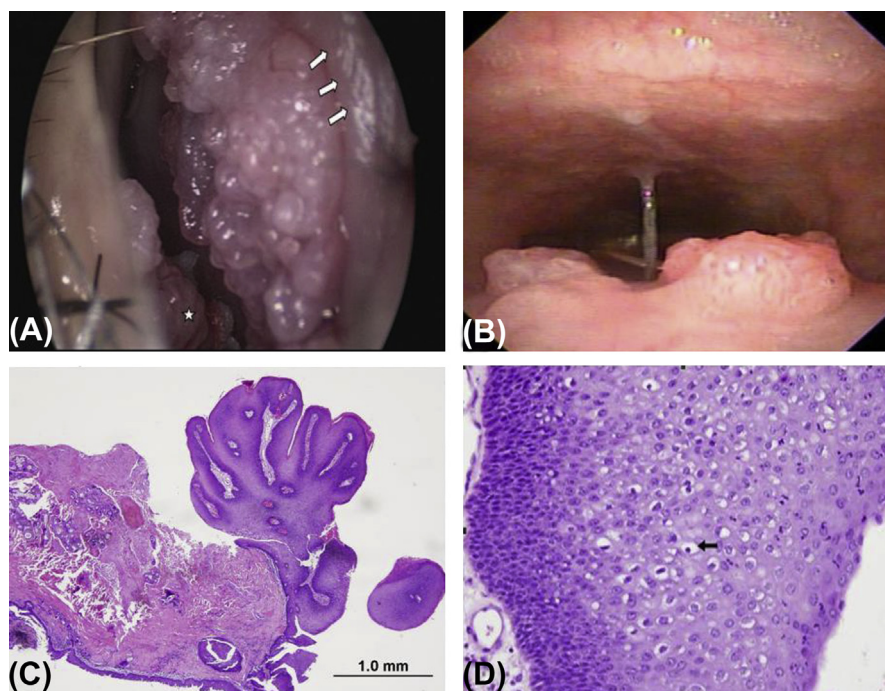


Figure 1 (A) Cauliflower-like lesions can be noticed in the right nasal cavity (arrows = nasal septum; asterisk = inferior turbinate). (B) Papillomatous lesions also appear on the nasopharyngeal surface of the soft palate. (C) Papillomatosis of overlying squamous mucosa with hyperkeratosis and acanthosis. (D) Koilocytes is a characteristic of active viral replication (arrow). These vacuolated epithelial cells are relatively large and possess a hyperchromatic, round nucleus with perinuclear halo (arrow).

the beginning. If the diagnosis is uncertain, immunohistochemical stains will be helpful.⁴ The most common pathogens of condyloma acuminatum are HPV Types 6 and 11 and, rarely, Types 16 and 18.

Excision is the mainstay of treatment. Considering that HPV is epitheliotropic and predominantly infects basal cells layer,⁴ we believed that surgical eradication beyond this layer could achieve good local control. Hence, we excised the diseased mucosa deeply to the perichondrium, bone, or fat layer.

Several adjuvant chemotherapies are available for treating condyloma acuminatum, if surgery alone is unable to control it.⁵ Literature has reported favorable results for intralesional cidofovir injections.⁵ However, the usage has not been approved by the Food and Drug Administration.

In conclusion, condyloma acuminatum is rarely found in the nasal cavity. A patient with nasal condyloma acuminatum should undergo a thorough examination of the upper aerodigestive tract. Surgical excision is the mainstay of treatment, and we recommend removing lesions beyond the epithelial layer.

Conflict of interest

The authors have no conflicts of interest relevant to this article.

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