

CASE IMAGE

Squamous cell papilloma of the hypopharynx with elongated villous projections

Masami Suzuki¹  | Naohiro Yoshida¹  | Takaya Miura² | Naota Okabe³ | Masahiro Hiruta³

¹Department of Otolaryngology-Head and Neck Surgery, Jichi Medical University Saitama Medical Center, Saitama, Japan

²Department of Gastroenterology, Jichi Medical University Saitama Medical Center, Saitama, Japan

³Department of Diagnostic Pathology, Jichi Medical University Saitama Medical Center, Saitama, Japan

Correspondence

Naohiro Yoshida, Department of Otolaryngology-Head and Neck Surgery, Jichi Medical University Saitama Medical Center, Saitama, Japan.

Email: naoyoshida@jichi.ac.jp

Key Clinical Message

Squamous cell papilloma with elongated villous projections may occur in the hypopharynx and present with symptoms observable on physical examination.

KEYWORDS

hypopharynx, narrow-band imaging, pyriform fossa, squamous cell papilloma, villous projections

1 | CASE PRESENTATION

A 79-year-old woman presented with a six-month history of feeling something stuck in her left throat. She was referred to our department for further evaluation.

Laryngoscopy (ENT-VH; Olympus Medical Systems, Tokyo, Japan) revealed a flat, white mass lesion with elongated villous projections in the left pyriform fossa of the hypopharynx. The villous projections resembled a Venus flytrap leaf. Narrow-band imaging laryngoscopy revealed vasculature running toward the villous projections, suggestive of a neoplastic lesion (Figure 1).

We performed endoscopic pharyngeal surgery under general anesthesia. The Sato's type curved laryngoscope (Nagashima Medical Instruments Company, Ltd., Tokyo, Japan) was used to provide a larger operative field. Transoral esophagogastroduodenoscopy (EGD)

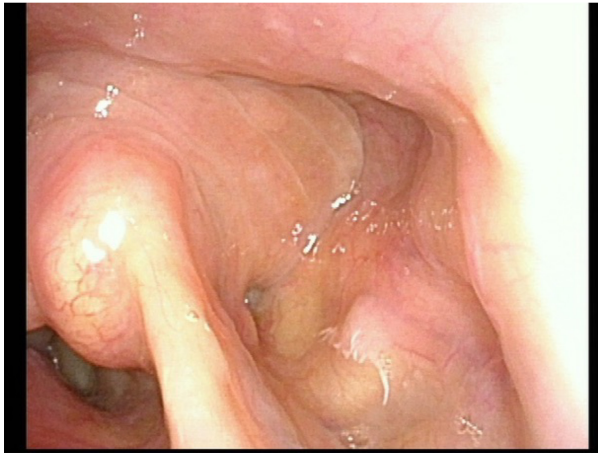
(GIF-H290T; Olympus Medical Systems, Tokyo, Japan) was performed to observe the tumor. The EGD images differed from the laryngoscopy images, showing a tumor that resembled a sea anemone (Figure 2).

The tumor was resected with ProKnife (ORISE ProKnife; Boston Scientific, Tokyo, Japan) by endoscopic submucosal resection. Pathological diagnosis confirmed squamous cell papilloma (Figure 3). The tumor measured 5×3 mm. Five months post-surgery, the patient's symptoms have resolved, and no recurrence is observed.

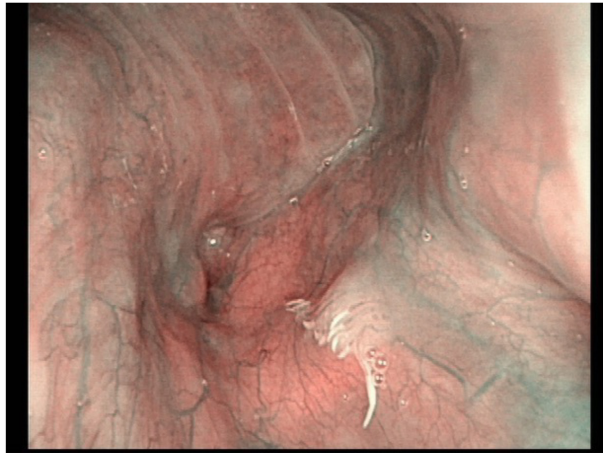
2 | DISCUSSION

Few reports detail the physical findings of hypopharyngeal papillomas.^{1,2} We report a case of squamous cell papilloma of the hypopharynx with elongated villous

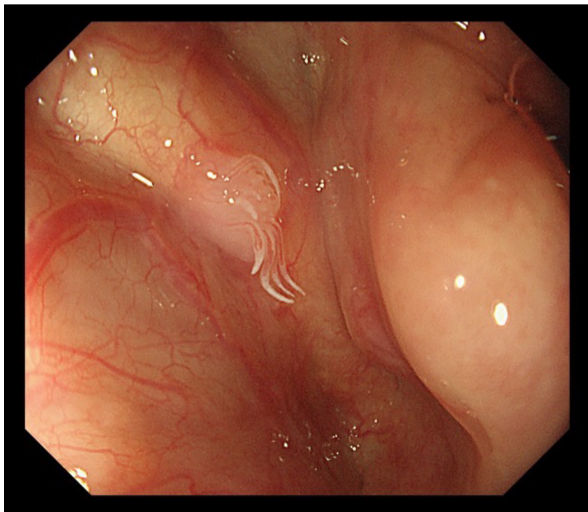
(A) White light



(B) NBI

**FIGURE 1** Laryngoscopy images. (A) White light; (B) narrow-band imaging (NBI).

(A) White light



(B) NBI

**FIGURE 2** Esophagogastroduodenoscopy (EGD) images. (A) White light; (B) narrow-band imaging (NBI).

projections, a presentation not previously described. Papillomas on mucosal surfaces typically appear as soft, pedunculated masses with finger-like projections. Less keratinized lesions are pink or red, resembling raspberries, while heavily keratinized lesions are white, and cauliflower-like. Projections can become long and pointy if keratin accumulates around the lesion.³ This description aligns with our case of a white papilloma with long, pointy projections.

Asymptomatic pharyngeal papillomas are often diagnosed incidentally.² However, this patient presented with a feeling of something stuck in her left throat, a symptom that disappeared after surgery, suggesting the papilloma as the likely cause. The pharyngeal mucosa, rich

in sensory receptors, might have been irritated by prolonged contact with the elongated villous projections of the papilloma.

The difference observed between the laryngoscopy and EGD images is likely due to the laryngoscope's ventral elevation of the larynx. This elevation would have also shifted the ventrally-arising papilloma on the mucosal surfaces of the hypopharynx, contributing to the discrepancy in appearance (Figure 4).

Although some methods to view vascular lesions in detail have been available, there are still some limitations of imaging diagnosis. As the advancement of imaging technology, it may be possible to diagnose papilloma lesions to some extent before biopsy is performed.

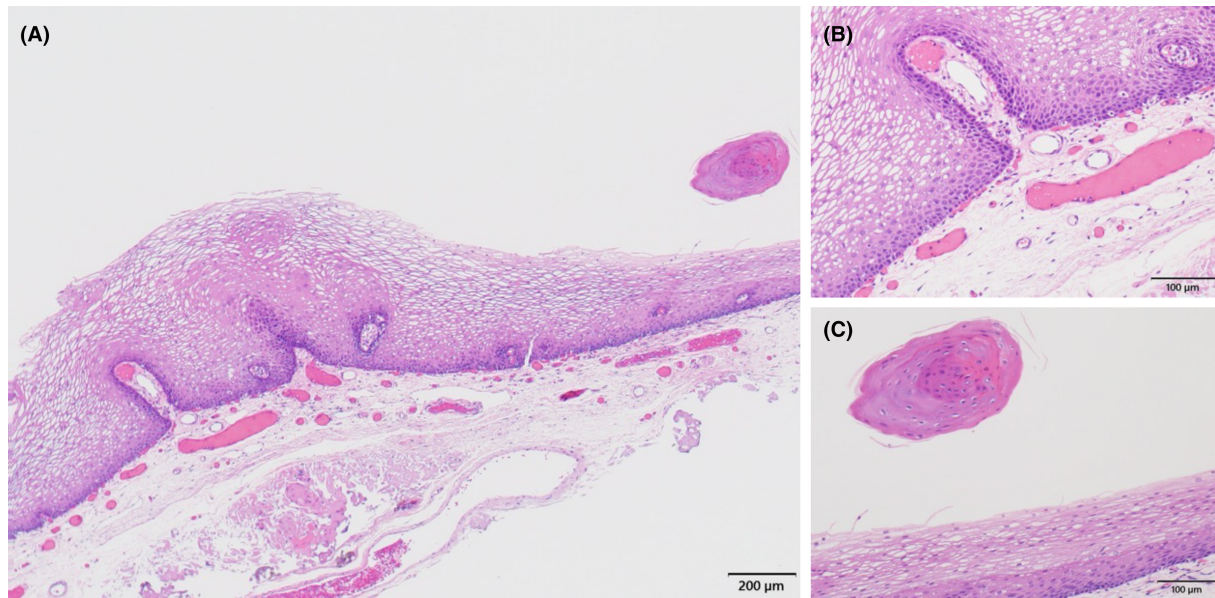
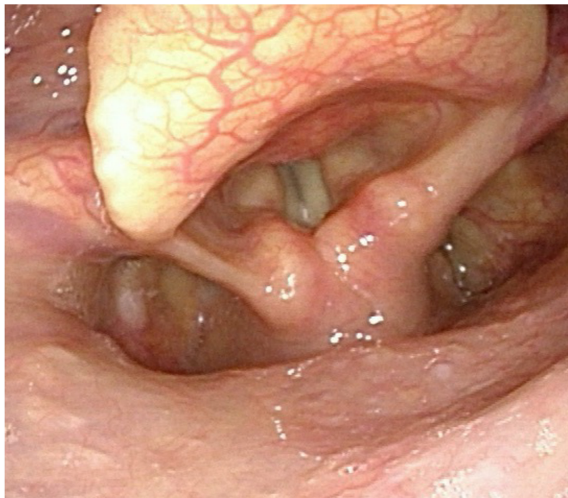


FIGURE 3 Pathological findings. (A) Papillary proliferation of squamous epithelium with no atypia (hematoxylin and eosin stain [HE], 40×). (B), Vascular core is seen in the base of the papilloma (HE, 100×). (C), The tip of the papilloma shows villous projections of parakeratotic squamous epithelium (HE, 100×).

(A) Laryngoscopy image in sitting position rotated 180 degrees



(B) EGD image in the operative position

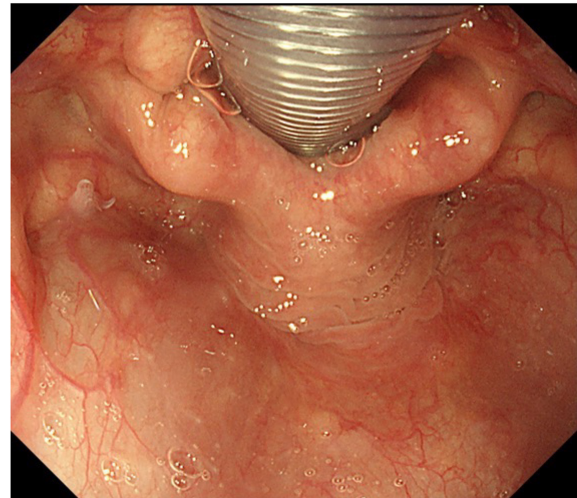


FIGURE 4 Difference in the hypopharyngeal image between laryngoscopy in the sitting position and esophagogastroduodenoscopy (EGD) in the operative position. (A) Laryngoscopy image. (B) EGD image. The EGD image in the operative position shows a wider hypopharyngeal space compared to the laryngoscopy image in the sitting position.

AUTHOR CONTRIBUTIONS

Masami Suzuki: Project administration; writing – original draft. **Naohiro Yoshida:** Project administration; writing – review and editing. **Takaya Miura:** Writing – review and editing. **Naota Okabe:** Writing – review and editing. **Masahiro Hiruta:** Writing – review and editing.

ACKNOWLEDGMENTS

None.

FUNDING INFORMATION

None.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ETHICS STATEMENT

This study was approved by the regional ethical standards committee in Jichi Medical University Saitama Medical Center (RINS24-011).

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

ORCID

Masami Suzuki  <https://orcid.org/0000-0002-2179-938X>

Naohiro Yoshida  <https://orcid.org/0000-0003-0933-7470>

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How to cite this article: Suzuki M, Yoshida N, Miura T, Okabe N, Hiruta M. Squamous cell papilloma of the hypopharynx with elongated villous projections. *Clin Case Rep*. 2024;12:e8913. doi:[10.1002/ccr3.8913](https://doi.org/10.1002/ccr3.8913)