

EDUCATION AND IMAGING - GASTROENTEROLOGY OPEN ACCESS

Slow-Growing Whitish Flat Elevated Lesion of the Esophagus

Makiko Sasaki  | Takaya Shimura  | Yuki Kojima | Ruriko Nishigaki | Takuya Kanno | Shigeki Fukusada  | Naomi Sugimura  | Mamoru Tanaka  | Keiji Ozeki | Eiji Kubota  | Hiromi Kataoka 

Department of Gastroenterology and Metabolism, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

Correspondence: Takaya Shimura (tshimura@med.nagoya-cu.ac.jp)

Received: 7 July 2025 | **Revised:** 29 September 2025 | **Accepted:** 17 October 2025

Keywords: endoscopic submucosal dissection | esophagus | natural history | verrucous esophageal carcinoma

1 | Case Presentation

A 53-year-old woman with a medical history of rheumatoid arthritis and methotrexate-associated MALT lymphoma was referred for evaluation of the gastrointestinal tract. She had occasional alcohol consumption and no smoking history. An upper gastrointestinal endoscopy at our institution was performed. A whitish and flat elevated lesion involving half the circumference of the mid-esophagus was observed. Due to the presence of a white coating, no intraepithelial papillary capillary loops were observed by magnifying endoscopy with narrowband imaging, and the lesion exhibited no iodine staining reduction (Figure 1a–d). Neither unstained nor faintly stained areas were observed in other regions of the esophagus during iodine staining. Serum tumor markers, including carcinoembryonic antigen (CEA), carbohydrate antigen (CA) 19–9, and squamous cell carcinoma antigen (SCCA) were not elevated (CEA 1.6 ng/mL, CA19–9 33.2 U/mL, and SCCA 1.3 U/L). Upon thorough history taking, it was found that the patient had undergone routine screening upper gastrointestinal endoscopies as annual medical check-ups at another health screening center for the past 8 years (Figure 1e). Compared to the previous records of the health screening center, a slightly elevated whitish lesion of less than 1 cm had gradually expanded to a 4 cm tumor that involved approximately half of the esophageal circumference over 8 years.

2 | Question

What is a slow-growing whitish flat elevated lesion of the esophagus, and how should it be managed?

3 | Answer

Verrucous esophageal carcinoma (VEC) and en bloc resection with endoscopic submucosal dissection (ESD).

Endoscopic biopsy performed at our institution revealed superficial epithelial differentiation with evident cellular atypia in the parabasal layer. Based on the clinical course and endoscopic findings, the possibility of highly keratinized esophageal squamous cell carcinoma or VEC was considered, and we performed ESD with bloc resection. Hematoxylin and eosin staining revealed papillary thickening of atypical squamous epithelium with partial dyskeratosis. Histopathological diagnosis was VEC, pT1a-MM (muscularis mucosae invasion), INFa, Ly0, V0, pHM0, pVM0, and R0 resection (Figure 2). Based on the standard criteria for ESCC [1], the risk of lymph node metastasis in this case was considered relatively low. Close surveillance was chosen as the follow-up strategy, following shared decision-making with the patient.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial](https://creativecommons.org/licenses/by-nc/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2025 The Author(s). *Journal of Gastroenterology and Hepatology* published by Journal of Gastroenterology and Hepatology Foundation and John Wiley & Sons Australia, Ltd.

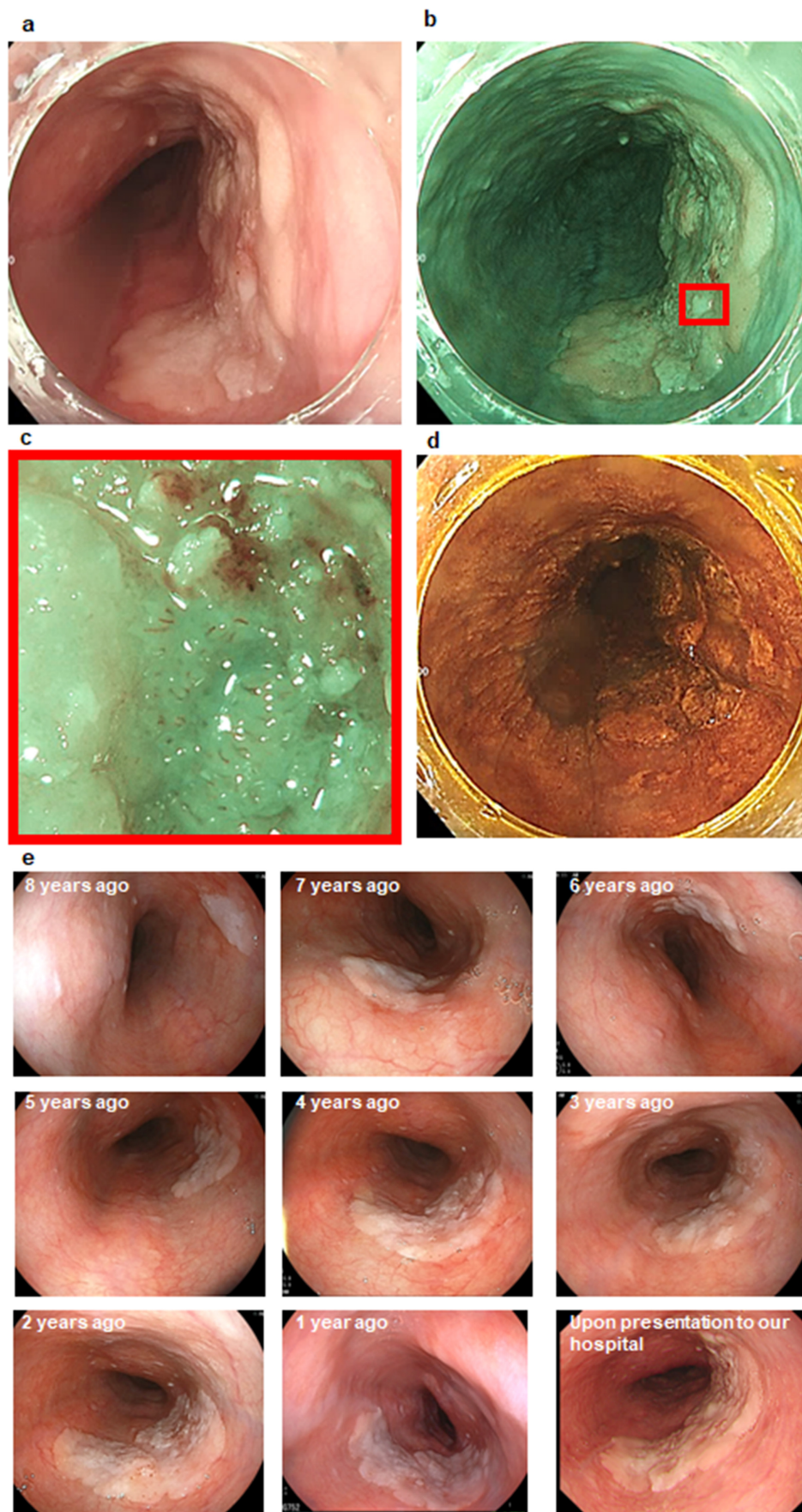


FIGURE 1 | Findings of upper gastrointestinal endoscopy. (a) White light imaging and (b) narrowband imaging showed whitish and flat elevated lesion. (c) No intraepithelial papillary capillary loops were observed by magnifying endoscopy with narrowband imaging. (d) No reduction of iodine staining was observed. (e) Endoscopic images over the past 8 years.

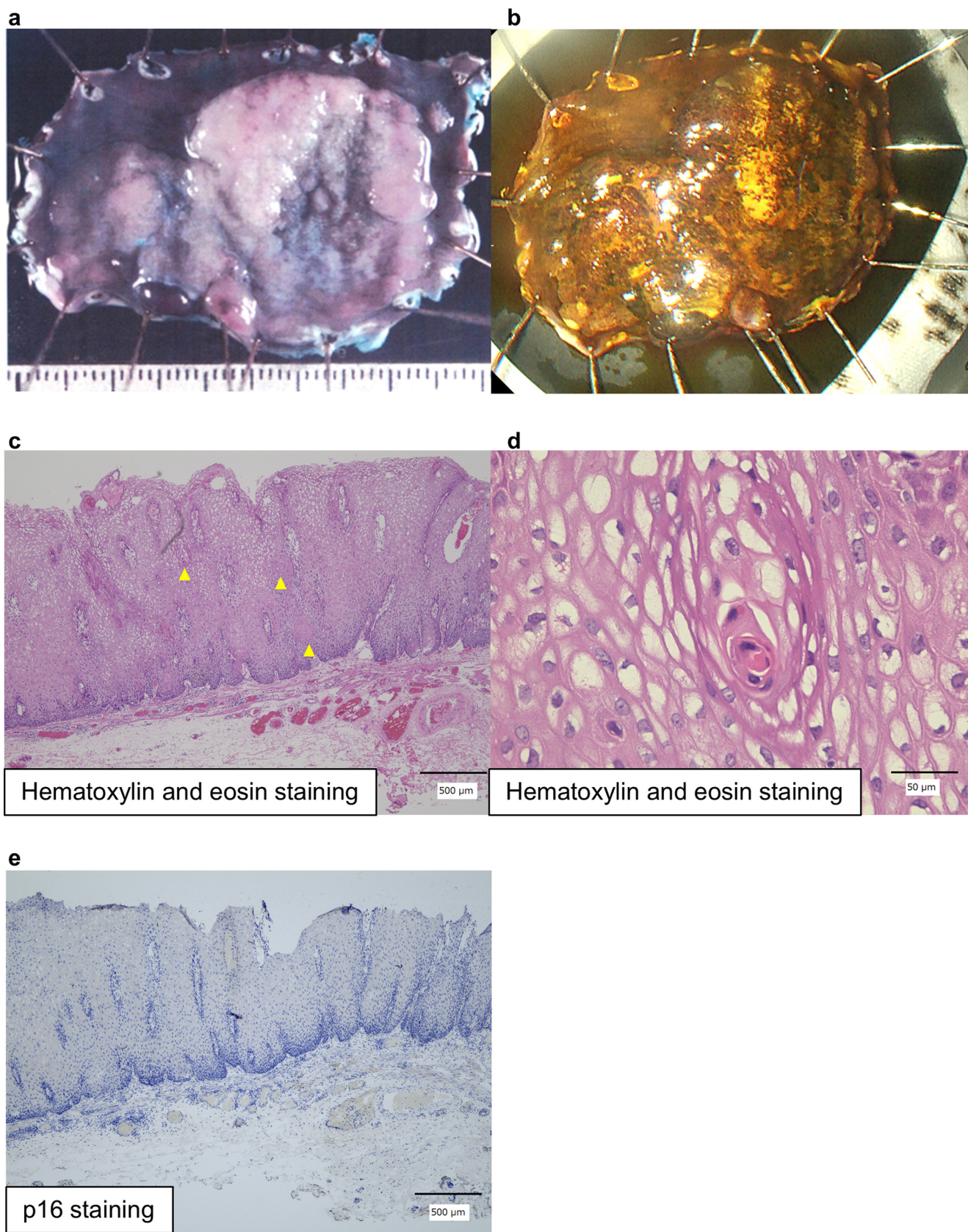


FIGURE 2 | En bloc resection with endoscopic submucosal dissection. (a) Macroscopic view of the whole specimen and (b) iodine staining ex vivo. (c,d) Hematoxylin and eosin staining showed papillary thickening of atypical squamous epithelium with partial dyskeratosis. Yellow arrows in (c) indicate the partial dyskeratosis, and (d) showed a typical round and layered keratin structure (cancer pearl). (e) Immunohistochemical staining for p16 was negative.

Verrucous carcinoma (VC) is first described in the context of oral lesions characterized by slow progression [2]; however, the primary esophageal origin of VC is rare. The pathological feature of VC is characterized by mild cytological atypia and prominent surface keratinization, often leading to difficulty in making a definitive diagnosis via biopsy [3]. Consequently, VEC is frequently misdiagnosed as a benign lesion. The relationship between VEC and human papillomavirus remains controversial; however, p16 immunostaining was negative in this case.

We report a rare case of VEC, with a long-term clinical course documented through serial annual endoscopic images, which was successfully treated with ESD. Accurate recognition of the lesion is essential to avoid missing the optimal timing for endoscopic treatment.

Ethics Statement

The authors have nothing to report.

Consent

Consent was obtained directly from the patient.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

References

1. Y. Kitagawa, R. Ishihara, H. Ishikawa, et al., "Esophageal Cancer Practice Guidelines 2022 Edited by the Japan Esophageal Society: Part 1," *Esophagus* 20 (2023): 343–372.
2. L. V. Ackerman, "Verrucous Carcinoma of the Oral Cavity," *Surgery* 23 (1948): 670–678.
3. C. Parra-Herran, M. R. Nucci, N. Singh, et al., "HPV-Independent, p53-Wild-Type Vulvar Intraepithelial Neoplasia: A Review of Nomenclature and the Journey to Characterize Verruciform and Acanthotic Precursor Lesions of the Vulva," *Modern Pathology* 35 (2022): 1317–1326.