A Rare Case of Esophageal Verrucous Carcinoma

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Introduction

Verrucous carcinoma (VC) is a rare variant of squamous cell carcinoma, which is slow-growing, well-differentiated, and locally invading into the esophagus[1]. Fewer than 50 cases have been reported worldwide and is usually detected by endoscopy[1]. Here we present a rare case of VC that took a multi-disciplinary approach for both diagnosis and treatment.

Objectives

- Recognize verrucous carcinoma as a cause of dysphagia
- Recognize when to consider alternate etiologies outside of an anchor diagnosis such as candida esophagitis
- Recognize the importance of deep endoscopic biopsies in the setting of ongoing mucosal abnormalities

Case Report

An 81-year-old male presented with dysphagia to solids and liquids for over a decade. In 2005, he had an upper endoscopy (EGD) with two strictures present in the lower esophagus that were dilated. In 2020, he had a repeat EGD with one stricture at 22 cm from the incisors, dilated to 10 mm (Image 1). Distal to the stenosis, the mucosa had white plaques which were biopsied and revealed hyperplastic mucosa and candida (Image 2). He was treated with fluconazole and improved.

Two years later, he presented with severe dysphagia and a 30-lb weight loss. EGD revealed warty-white plaques throughout the entire esophagus, again with candida. He was treated with fluconazole and then IV caspofungin. He was discharged after he began to tolerate solids.

He again returned after discharge with worsened dysphagia, and had an EGD that revealed abnormal mucosa. Deep biopsies were taken and he underwent Savary dilation. The biopsies returned as verrucous carcinoma, and he was referred to surgical oncology, pulmonology and advanced GI. A PET-CT scan was ordered that returned positive for an esophageal lesion and paratracheal lymphadenopathy. Biopsies returned as squamous cell carcinoma. He was treated with carboplatin and paclitaxel and radiation (4500 Gy, 25 fractions), as well as esophageal stent (image 3) placement due to radiation esophagitis with stenosis post-therapy.

Currently, he had the stent removed and tolerates an oral diet without using his PEG tube. His most recent PET-CT did not show evidence of active disease. His most recent EGD showed minimal abnormal mucosa near the UES that returned as hyperkeratotic mucosa with resolution of the warty-appearance of the esophagus (image 4). He has surveillance imaging in the next few months.

Endoscopy

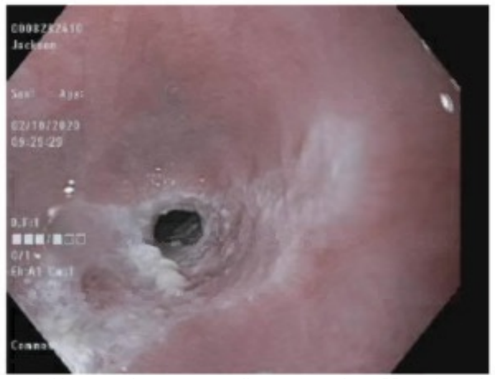

Image 1. Upper endoscopy revealing a stenosis at 22 cm from the incisors in the esophagus.

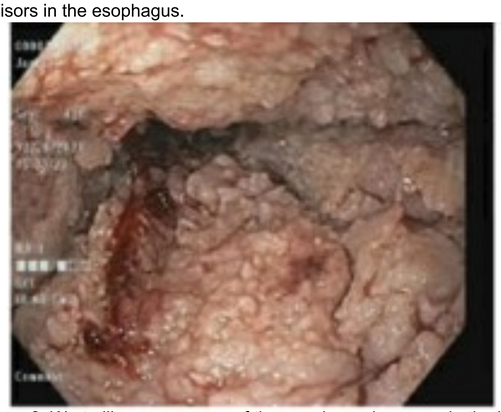

Image 2. Warty-like appearance of the esophageal mucosa in the lower third of the esophagus.

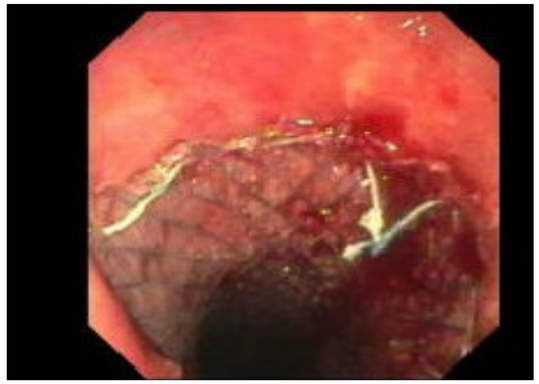

Image 3. Esophagus with esophageal stent in the distal third esophagus

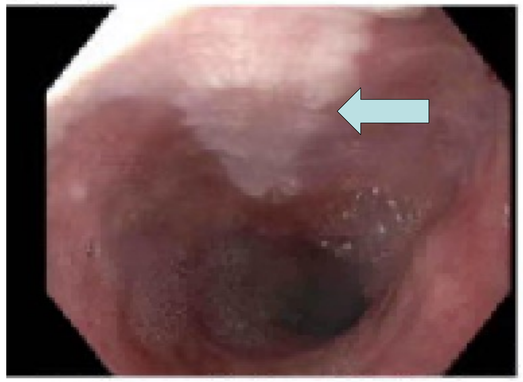

Image 4. Esophageal mucosa post radiation and chemotherapy with small area of abnormal mucosa (arrow)with resolution of prior warty appearance

Pathology

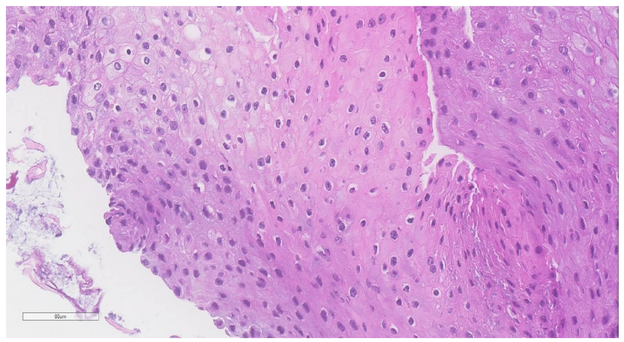

Image 5. H&E stain (40x) showing squamous epithelium with minimal/mild cytologic atypia.

Imaging

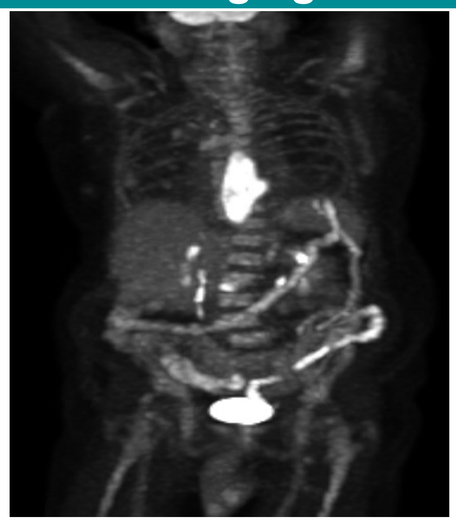

Image 6. PET-CT scan revealing a large hypermetabolic lesion in the mid to distal esophagus consistent with primary esophageal malignancy.

Discussion

- Verrucous carcinoma is slow-growing and can be difficult to diagnose due to superficial tissue covering the malignant tissue
- Majority of cases are associated with smoking tobacco, reflux esophagitis, alcohol use, HPV, and achalasia[2]
- A typical clinical scenario includes dysphagia, weight loss, endoscopy revealing warty appearing luminal mass, and biopsies with hyperkeratosis and squamous cell carcinoma
- It is typical for the histology to evolve from hyperkeratosis or parakeratosis and papillary hyperplasia to VC[3].
- There is a question if esophageal content retention and chronic inflammation lead to the development of VC
- This case is a good example demonstrating that due to stasis form the VC, candida esophagitis was seen as the anchor diagnosis for many months due to the missed diagnosis of VC as biopsies returned without obvious squamous cell carcinoma
- It is important for gastroenterologists to have a clinical suspicion for verrucous carcinoma in the setting of mucosal abnormalities that do not improve with typical therapies, such as treatment of candida
- Therapy for verrucous carcinoma is not well-established, and the options include surgery, chemotherapy, and radiation[4]
- This case also displays the importance of a multidisciplinary approach to treatment, as the involvement of gastroenterologists, dieticians, oncology, and surgery are necessary in diagnosing and treating the condition.
- Prognosis is variable as there is a delay from onset of symptoms to the diagnosis, although it is a slow-growing tumor[1]
- Mortality is mainly due to local invasion or surgical complications
- It can spread locally to the lungs, bronchi, or pleura[1]
- Overall, prognosis tends to be poor due to local invasion, significant symptoms, and delayed diagnosis[5]

References

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