

## *An Unusual Metastatic Site of Head and Neck Cancer; Case Report and Literature Review*

Abdulrauf A. Salamah, MD<sup>1</sup>, Moftah M. Sharad, MD<sup>1</sup>,  
Mohamed Sultan, MD<sup>2</sup>

### ABSTRACT

Globally, the annual occurrence of head and neck cancer (HNC) is documented to be more than 650,000 cases with 330,000 deaths.<sup>1</sup> In the United States, it represents 3% of all malignancies and affects 53,000 Americans.<sup>2</sup> Metastasis to the lung, liver, and bones are considered the most common locations.<sup>3-4</sup> Herein, we are reporting a case of HNC and an unusual synchronous gastric metastasis found on upper gastrointestinal endoscopy (EGD). CECT scanning of the abdomen showed only the mass related to stomach fundus. On pelvic MRI, no mass could be seen. Both cancers were poorly differentiated (PD) on histopathology indicating possible disease aggressiveness and poor treatment response. The patient's disease progressed despite combined chemo-radiation therapy. He subsequently passed away from disease burden and sepsis due to aspiration pneumonia. Therefore, further evaluation could not be completed.

### KEYWORDS

Head and Neck Cancer, Gastric Cancer

*Author affiliations are listed at the end of this article.*

### *Correspondence to:*

Abdulrauf A. Salamah, MD  
National Cancer Institute  
of Sabratah  
[abd.elr.salamah@gmail.com](mailto:abd.elr.salamah@gmail.com)

### INTRODUCTION

Head and neck cancer (HNC) is one of the most common cancers worldwide. Its morbidity, mortality, and poor outcome mandate a multi-disciplinary approach in order to increase disease-free survival and improve outcomes. The major risk factors are tobacco use, alcohol consumption and infection with human papillomavirus (HPV).<sup>5</sup> Distant metastases are relatively small and the most frequently involved sites are the lungs (approximately 70% of cases) followed by liver and bone.<sup>6,7</sup> Gastric and esophageal synchronous lesions have been reported with tonsillar squamous cell cancer.<sup>8</sup> We performed PubMed, Google Scholar, and ResearchGate searches yet we were unable to find any similar cases of poorly differentiated HNC metastases to the stomach.

### CASE REPORT

A 76-year-old black Libyan male presented with a chronic non-traumatic mouth floor ulcer for several weeks. In regard to his past medical history, the patient reported no previous illness or the

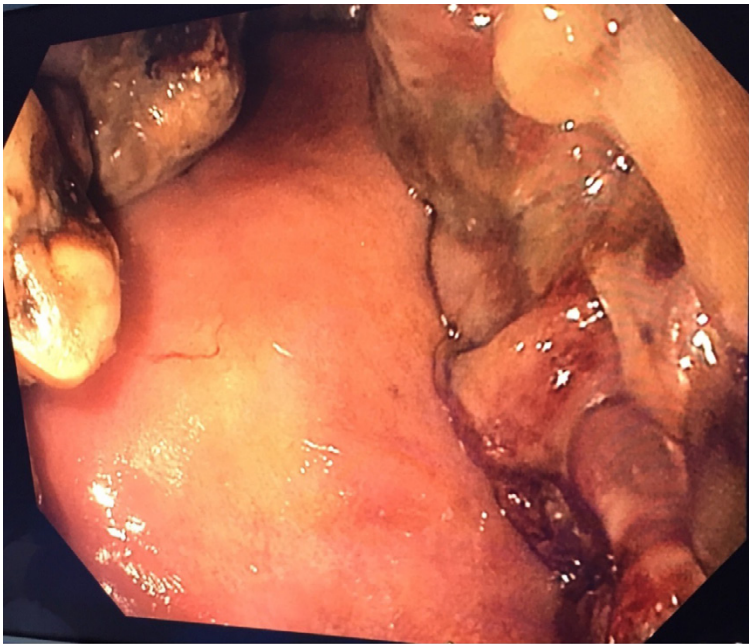
use of any medications. He reported no cigarette smoking, alcohol intake, personal or family history of malignancy.

On physical examination, he was noted to have poor oral hygiene and a 10 mm x 5 mm ulcerated lesion on the floor of his mouth (Figure 1). No cervical lymphadenopathy or organomegaly could be detected on the abdominal exam. Histopathology of this lesion revealed poorly differentiated carcinoma. An EGD showed a 20 mm mass with ulcerated heaped-up edges and a necrotic base in the gastric fundus (Figure 2). Histopathology of the gastric mass showed poorly differentiated carcinoma (Figure 3).

### DISCUSSION

Lung, liver, and bone are considered the most common sites for metastasis from HNC; these are poor prognostic indicators and can be asymptomatic early on the disease course.<sup>3,4</sup> In this report, we are documenting an unusual metastatic location of poorly differentiated HNC to the stomach. To our knowledge, this is the first described case of





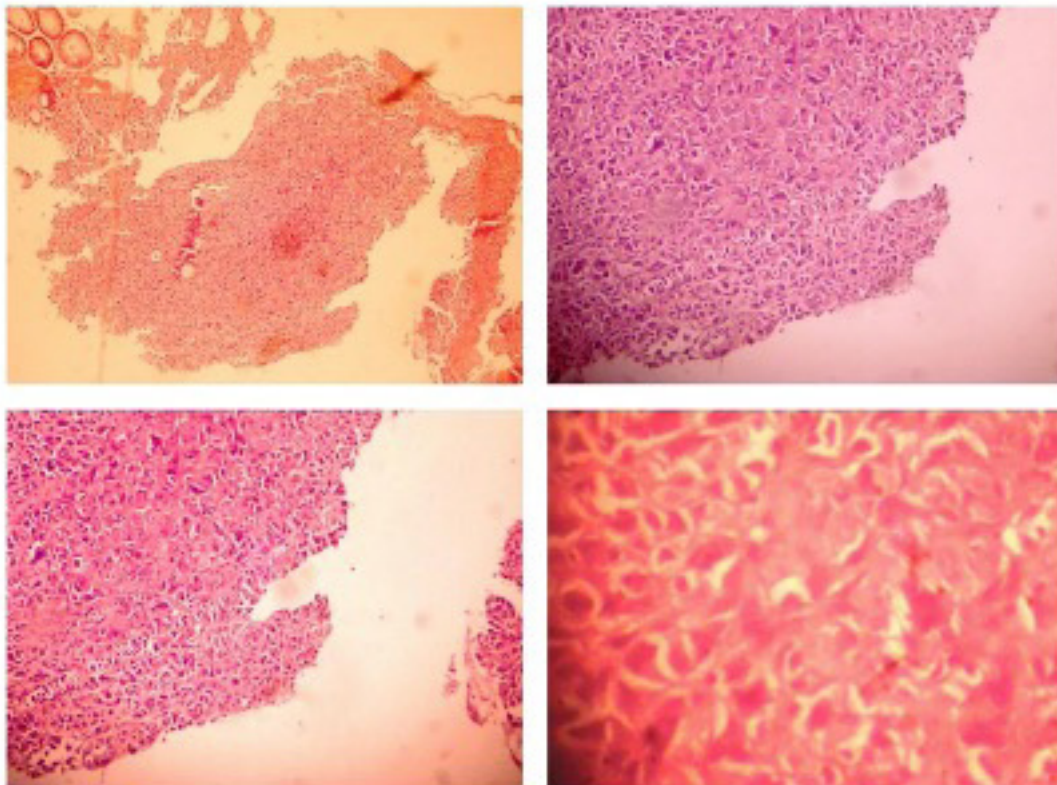
**FIGURE 1:** Ulcer in the floor of the mouth.

poorly differentiated HNC with metastasis to the stomach found during an upper endoscopic evaluation of the stomach. The most common sites of metastasis, lung, liver, and bone are free of cancer on CECT and MRI with contrast. This may indicate an unusual spreading pathway of tumors other than lymphovascular routes and possibly an emerging new disease phenotype. We think HNC is the primary source as the patient had poor oral dentures and low-socioeconomic status (SES) and has no risk factors for gastric cancer. Although a routine panendoscopy of the upper aerodigestive tract to evaluate for synchronous lesions has been debatable, it could be useful in selected, high-risk patients and those with poorly differentiated histology or aggressive disease phenotype.<sup>9</sup> Therefore, adding an upper gastrointestinal evaluation even in asymptomatic patients might be of additive value to accurately stage the disease especially those with advanced-stage disease and identify appropriate therapy.



**FIGURE 2:** Ulcerated mass in the gastric fundus.





**FIGURE 3:** Hematoxylin & Eosin stain of gastric mass biopsy.

#### AUTHOR AFFILIATIONS

1. National Cancer Institute of Sabratah, Sabratah, Libya
2. Peak Gastroenterology Associates, Colorado Springs, Colorado, USA

#### REFERENCES

1. Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jemal A. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries," CA. Cancer J. Clin. 2018;68(6):394-424.
2. Siegel RL, Miller KD, Jemal A. Cancer statistics, 2020. CA. Cancer J. Clin. 2020;70(1):7-30.
3. Troell RJ, Terris DJ. Detection of metastases from head and neck cancers. Laryngoscope. 1995;105(3):247-250.
4. Houghton DJ et al. Role of chest ct scanning in the management of patients presenting with head and neck cancer. Head Neck. 1998;20(7):614-618.
5. Argiris A, Karamouzis MV, Raben D, Ferris RL. Head and neck cancer. Lancet. 2008;371(9625):1695-1709.
6. Garavello W, Ciardo A, Spreafico AR, Gaini RM. Risk factors for distant metastases in head and neck squamous cell carcinoma. Arch. Otolaryngol. Neck Surg. 2006;132(7):762.
7. Takes RP et al. Distant metastases from head and neck squamous cell carcinoma. Part I. Basic aspects. Oral Oncol. 2012;48(9):775-779.
8. Albugeaey M, Sultan M, Smith JP. Synchronous, yet unusual GI metastases of tonsillar cancer: case report and literature review," Gastrointest Endosc. 2015;81(5):AB522-AB523,.
9. Rodriguez-Bruno K, Ali MJ, Wang SJ. Role of panendoscopy to identify synchronous second primary malignancies in patients with oral cavity and oropharyngeal squamous cell carcinoma. Head Neck. 2011;33(7):949-953.

