

## Primary squamous cell carcinoma of the stomach: a rarity

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(Please cite as: Kumar D, Majid Z, Tasneem AA, Laeeq SM, Luck N, Mubarak M. Primary squamous cell carcinoma of the stomach: a rarity. *Gastroenterol Hepatol Bed Bench* 2022;15(3):290-292. <https://doi.org/10.22037/ghfbb.v15i3.2609>).

### Introduction

A 73-year-old male presented to our outpatient department with complaints of abdominal pain lasting 4 months, generalized weakness, and weight loss in the prior 2 months. On examination, he appeared pale, and his vitals were BP 88/50 mmHg, pulse 77 bpm, RR 12 bpm. Lab reports showed Hb 7.4 g/dl, TLC 10.8 x 10<sup>9</sup>/L, Platelets 192 x 10<sup>9</sup>/L, TBR 0.25mg/dl, SGPT 12. ALP 88 U/L, GGT 15 U/L. His viral markers HbsAg and Anti-HCV were both negative.

Based on the patient's complaints, upper and lower GI endoscopy was planned. The upper GI endoscopy revealed a normal-looking esophagus, liquid to semi-solid food particles in the stomach, and normal-looking duodenum with no visible abnormalities noted. The lower GI endoscopy revealed only evidence of internal hemorrhoids. An abdominal ultrasound was planned and revealed multiple hypodense lesions in the liver. Thereafter, a CT CAP was scheduled (Figure 1 and 2), which showed a lobulated heterogeneous soft tissue mass lesion involving the gastroesophageal junction, the lesser curvature and cardia, measuring 70 x 73 mm in size, with multiple enlarged lymph nodes, the largest one measuring 35 x 21 mm. Multiple hypodense lesions were also noted in the liver. The patient was then scheduled for EUS-guided biopsy of the gastric lesion.

Meanwhile his tumor markers showed alpha fetoprotein: 3.60 ng/ml (normal: less than 8.5), Ca 19-9: 5.46 U/ml (normal: less than 37 U/ml), Ca 125: 8 U/ml (normal: less than 35U/ml).

Later on, a linear EUS examination was carried out and revealed a hypoechoic lesion in the perigastric area and gastric wall area measuring 60 x 56 mm along with a hypoechoic celiac LN. Biopsies of both regions were taken with a 22-gauge needle (Figure 3).

### Qs What is your diagnosis?

### Qs. What will you do next?

### Discussion

Gastric adenocarcinoma is the most common cancer (1). Squamous cell carcinoma of the stomach is scarcely reported in the medical literature, with less than 100 cases noted to date (2). Its incidence is reported as being around 0.040% to 0.07% (3). It is seen predominantly in males with a ratio of 5:1 and occurs most often in the 6th decade of life (4).

Risk factors include the presence of squamous metaplasia and a prior history of smoking (5). The most common site of involvement is the upper third of the stomach (5).

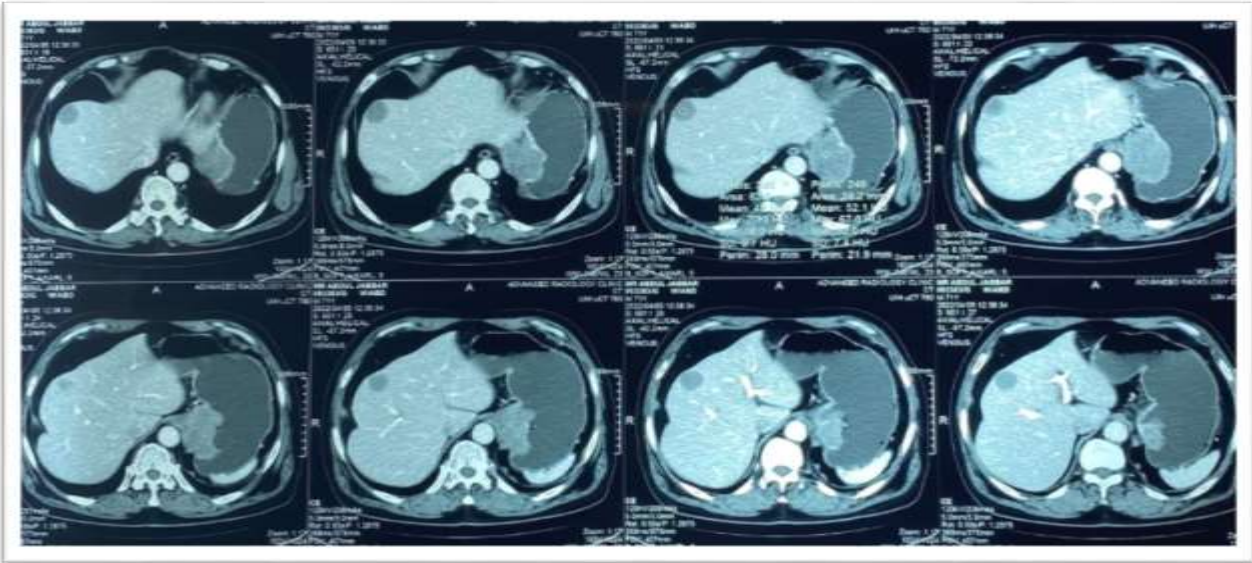
According to the Japanese Gastric Cancer Association, to diagnose a primary gastric squamous cell carcinoma, normal gastric tissue needs to be present between the gastric lesion and the GEJ.1 Presentation varies with symptoms being similar to other types of gastric cancers and including abdominal

Received: 03 May 2022 Accepted: 14 July 2022

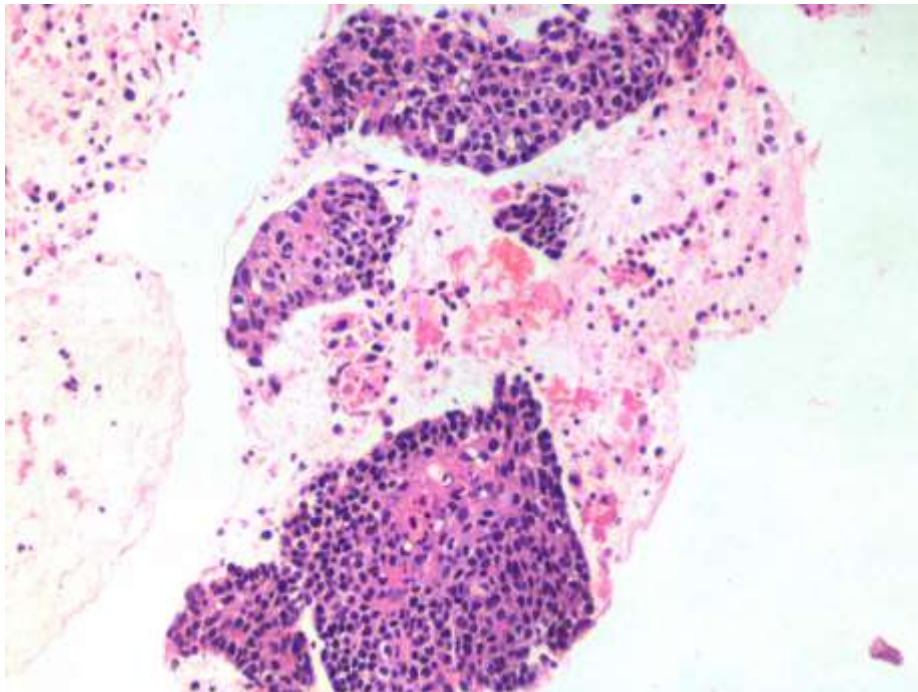
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**Figure 1.** Lobulated heterogeneous soft tissue mass lesion involving gastroesophageal junction, the lesser curvature and cardia of the stomach (blue arrow), measuring 70 x 73mm in size, with multiple enlarged lymph nodes and multiple hypodense lesions in the liver (orange arrow).

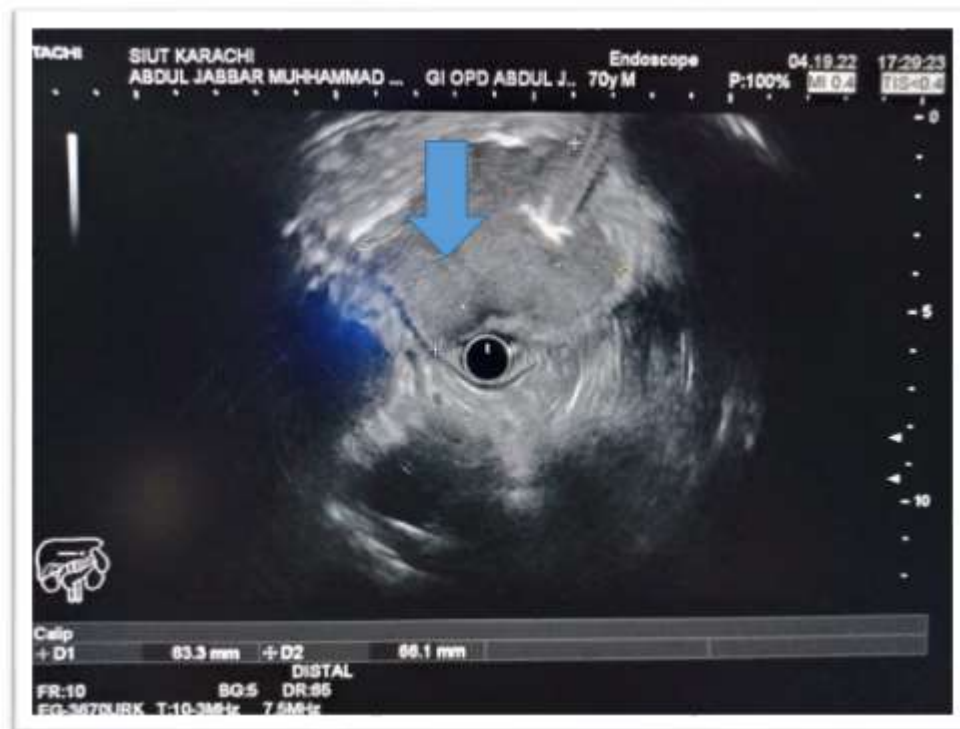


**Figure 2.** EUS-guided gastric wall mass biopsy revealed features suggestive of moderate to poorly differentiated squamous cell carcinoma.

pain, weight loss, dysphagia, nausea and vomiting, melena and hematemesis (6). Diagnosis is supplemented with the use of IHC markers, with p63 and CK5/6 having high sensitivity and specificity (7).

Treatment depends upon the extent of the disease, with surgery being considered in localized cases (8). The

use of chemotherapeutic agents as either neo-adjuvant or adjuvant therapy or radiotherapy is not well defined in the medical literature (1), as this is an aggressive tumor with poor short-term survival because it is diagnosed late with lympho-vascular involvement (2).



**Figure 3.** Radial EUS shows the mass to be arising (shown in arrow) from the mucosa extending up to the muscularis propria with areas of calcification and with few lymph nodes, stage T2/3, N1.

### Conflict of interests

The authors declare that they have no conflict of interest.

### References

1. Akce M, Jiang R, Alese OB, Shaib WL, Wu C, Behera M, El-Rayes BF. Gastric squamous cell carcinoma and gastric adenosquamous carcinoma, clinical features and outcomes of rare clinical entities: A National Cancer Database (NCDB) analysis. *J Gastrointest Oncol* 2019;10:85-94.
2. González-Sánchez JA, Vitón R, Collantes E, Rodríguez-Montes JA. Primary Squamous Cell Carcinoma of the Stomach. *Clin Med Insights Oncol* 2017;11:1179554916686076.
3. Mardi K, Mahajan V, Sharma S, Singh S. Primary squamous cell carcinoma of stomach: A rare case report. *South Asian J Cancer* 2013;2:199.
4. Schmid CH, Schmid A, Lüttges JE, Kremer B, Henne-Bruns D. Primary squamous cell carcinoma of the stomach. Report of a case and review of the literature. *Hepatogastroenterology* 2002;48:1033-1036.
5. Wakabayashi H, Matsutani T, Fujita I, et al. A rare case of primary squamous cell carcinoma of the stomach and review of the 56 cases reported in Japan. *J Gastric Cancer* 2014;14:58-62.
6. Chen Y, Zhu HZ, Xu F, et al. Clinicopathological characteristics, treatment, and prognosis of 21 patients with primary gastric squamous cell carcinoma. *Gastroenterol Res Practice* 2016:2016.
7. Von Waagner W, Wang Z, Picon AI. A rare case of a primary squamous cell carcinoma of the stomach presenting as a submucosal mass. *Case Rep Surg* 2015;2015.
8. Pereira AM, Magalhães J, Almeida RF, Lima AT, Oliveira A, Nora M. Primary pure squamous cell carcinoma of the stomach: Unique case in one institution. *Int J Case Rep Imag* 2018;9:100885Z01AP2018.