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Case Report

Migrated Fish Bone Caused Liver Abscess Presented as a Gastric Subepithelial Lesion (Mass) in Clinical Practice Diagnosed by Echoendoscopy

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Abstract

A 63-year-old man presented with a one-month history of abdominal pain. An upper gastrointestinal endoscopy (esophagogastroduodenoscopy) revealed a 40 mm subepithelial lesion located at gastric antrum. A gastrointestinal stromal tumor (GIST) was suspected at the first. Subsequent endosonographic (EUS) evaluation was performed and show that a 23 x 27 mm hypoechoic mass arising from gastric wall and produce pus by the pressure of the tip of the EUS. Additionally, there was a linear hyperechoic tract that was located between the gastric antrum and left liver lobe (on video imaging). A foreign body, a fish bone, was found within the fistula during the surgically. In conclusion, EUS is fundamental on the diagnosis of suspect foreign bodies and their complications.

Keywords: *Migrated; Fish Bone; Liver Abscess; Subepithelial Lesion; Echoendoscopy; Foreign Bodies*

Introduction

A 63-year-old man presented with a one-month history of abdominal pain. The final diagnosis was a fish bone caused liver and gastric wall abscesses presented as a gastrointestinal stromal tumor diagnosed by echoendoscopy (EUS).

Methods for image capture/processing

A curvilinear echoendoscope (EG-530UT; Fujinon, Japan) was used during this procedure.

Case Report

A 63-year-old man presented with a one-month history of abdominal pain. Esophagogastroduodenoscopy revealed a 40 mm subepithelial lesion located at gastric antrum. Gastrointestinal stromal tumor (GIST) was suspected. Then, an endosonographic (EUS) evaluation was performed.

A curvilinear echoendoscope (EG- 530UT; Fujinon, Japan) was used. Endosonographic (EUS) evaluation was performed and show that a 23 x 27 mm hypoechoic mass arising from gastric wall and produce pus by the pressure of the tip of the EUS (Figure 1). Additionally, there was a linear hyperechoic tract that was located between the gastric antrum and 3th segment of the left liver lobe (Figure 2).

Apex of the subepithelial lesion producing pus by the pressure of EUS device. Inferior part of the gastric lesion did spread to the left lobe of the liver. On this liver segment, there was a hypo- izo-echoic mass lesion with a 24 mm in diameter. There were also several perigastric lymph node enlargements, size less than 10 mm.

Figure 1: *Esophagogastroduodenoscopy revealed a 40 mm subepithelial lesion with drainage located at gastric antrum.*

Figure 2: *Echoendoscope revealed a 23 x 27 mm hypoechoic mass arising from gastric wall with a linear hyperechoic tract that was located between the gastric antrum and 3th segment of the left liver lobe. Apex of the subepithelial lesion producing pus by the pressure on the lesion. Inferior part of the gastric lesion did spread to the left lobe of the liver. On this segment, there was a hypo-izo-echoic mass lesion with a 24 mm in diameter.*

The findings suggested abscesses in the antrum and in the left liver lobe with a foreign body in the fistula tract.

Computerized tomography performed and confirmed what we found with EUS.

He went to the operation room. During the exploration, a fibrinous fistula tract with a 35 mm length was found (Figure 3). It did spread from the incisura angularis to the 3th segment of left liver lobe and excised. A fish bone was found within the fistula. Histopathological analysis of the resected tissue revealed foreign body reaction with granulomatous tissue reaction.

Figure 3: *During the exploration, a fibroneous fistula tract with a 35 mm length was found.*

Video

Discussion

Suppurative gastritis is a rare entity mainly because of antimicrobial environment provided by gastric acidity. Suppurative gastritis may develop secondary to pancreatitis, cholecystitis, appendicitis, and diverticulitis [1-5]. It may also arise from foreign body ingestion.

Patient-related risk factors for the development of suppurative gastritis include alcoholism, older age, diabetes mellitus, hypochlorhydria or achlorhydria, and immunosuppression. Abdominal pain and nausea usually dominate the clinical picture in these cases.

The most common appearance of a gastric wall abscess is a submucosal tumor. Both radial and curved linear array endoscopic ultrasound provides a unique imaging modality for evaluating the gastric wall with an excellent visualization of the layers of the gastric wall. EUS features include a heterogeneous mass often with solid and cystic components. Suppurative gastritis may progress to peritonitis and death from sepsis with delayed diagnosis and treatment. Surgery is definitive therapy.

Cases of hepatic abscess due to fish bone penetration are rare and may be fatal with delayed diagnosis and treatment [6,7].

Conclusion

EUS may provide an additional diagnostic tool in the evaluation of patients with suspected gastric wall abscess. EUS is fundamental on the diagnosis of suspect foreign bodies and their complication.

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