

Heterotopic gastric mucosa in the gallbladder

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Abstract: We report on a case of heterotopic gastric mucosa i in the gallbladder neck. A 45-year-old woman,who had been recurrent vomiting 5 months, visited our hospital because of a occupying lesion in the gallbladder, discovered by the abdominal ultrasonography. Ultrasonography revealed a highly echogenic lesion in the gallbladder neck, with gallstones in the gallbladder. The gallbladder was confirmed by the CEUS (ultrasound contrast). Laparoscopic cholecystectomy was performed because of the possibility of the gallbladder carcinoma. The excised gallbladder measured 5 x 4 cm and was found one thickening part which was in size of 1.0 x 1.0cm. Pathologically, the polypoid lesion consisted of heterotopic gastric mucosa.

Keywords: Heterotopic gastric mucosa, gallbladder

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1. Introduction

Heterotopic gastric mucosa has been described throughout the gastrointestinal tract, from the oral cavity [1] to the rectum [2]. However, heterotopic gastric mucosa, especially that involving the gallbladder, is very rare [3]. But it may be one of the causes of gallbladder cancer [4]. This report presents a case of heterotopic gastric mucosa in the gallbladder which produced clinical symptom. See Figure 1.

2. Case report

A 45-year-old woman visited our hospital, after discovering a occupying lesion in the gallbladder by the abdominal ultrasonography. He had been recurrent vomiting 5 months and did not receive treatment. But the symptoms could relieve itself. Laboratory investigations disclosed were normal. Physical examination showed no abnormal findings. Upper abdominal ultrasonography revealed a highly echogenic lesion whose shape was rules and the boundary was clear, in the size of 1.2 x 1.3cm, located in the gallbladder neck (Figure 2-3), with gallstones in the gallbladder. Then, the ultrasound contrast suggested the contrast medium filled quickly and faded fast in the gallbladder neck lesion.

Laparoscopic cholecystectomy was performed on November 22 2012, because of the possibility of cancer in the gallbladder could not be ruled out despite the above examinations. The lesion in the neck of the gallbladder was diagnosed as a heterotopic gastric mucosa and a hyperplastic polyp on intraoperative frozen specimen examination.

The excised gallbladder measured 5 x 4 cm and the thickness of it was about 1 mm, and had a smooth and glistening serosa. When it was opened, a smooth white mucosa was found, measuring 1.0 cm at its largest diameter. Gallstones were found, too. See Figure 4.

Pathologically, the diagnosis, therefore, was heterotopic gastric mucosa of the gallbladder lesion

and with the change of the hyperplastic polyp. Typical features of chronic cholecystitis were obvious in the surrounding mucosa. The remaining gallbladder was histologically unremarkable. The patient's postoperative course was no special and he was discharged on the November 26 2012.



Figure 1. Gallbladder neck high echo nodule.

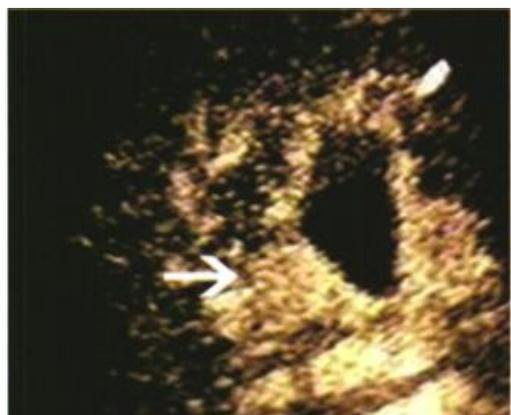


Figure 2. 14 s Nodule development up to the peak.

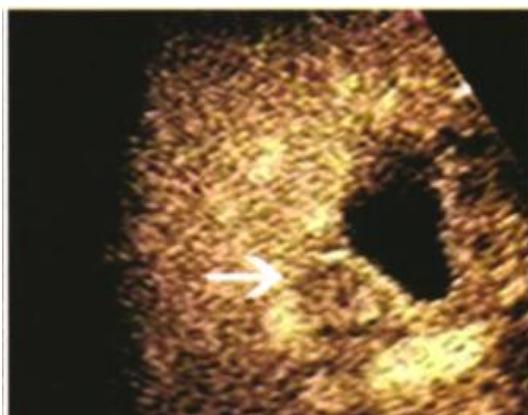


Figure3. 37 s The nodule began to subside.

3. Discussion

Heterotopia is defined as the occurrence of normal tissue in an abnormal location [6]. Heterotopic gastric mucosa has been reported to occur throughout the gastrointestinal tract [7], but its occurrence in the gallbladder is rare [3].

The first case of heterotopic gastric mucosa in the gallbladder was reported by Egyedi [5] in 1934. The most common symptom was upper right abdominal pain, often associated with colic pain, which suggested cholecystitis. It has been reported that this symptom may be produced as a result of intermittent obstruction due to a mass or polyp at the neck of the gallbladder [8]. The heterotopic tissue is mostly located in the neck of the gallbladder or in the adjacent cystic duct. In the present patient, the absence of symptoms may have been due to the location of the polypoid lesion in the fundus of the gallbladder.



Figure 4. Gallbladder gross specimen.

Macroscopically, heterotopic gastric mucosa has been reported to show polypoid or intramural masses,

ranging in size from 0.5 to 2.0cm. Yamamoto reported a similar case of a polypoid lesion of gastric heterotopia and compared it with metaplastic polyp of the gallbladder. In one previous case, a misdiagnosis of adenocarcinoma was made from a frozen section alone. Although an intraoperative frozen section could not be performed in this case, we believe that the examination of matched pairs of frozen sections with preceding touch smear cytology may be useful in helping to avoid unnecessary surgical removal.

As routine health screening becomes more common, asymptomatic cases, such as the present one, may increase in the future.

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