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## Gallbladder Paraganglioma With Hemorrhage: A Case Report And Literature Review

Sanghwa SONG<sup>1</sup>, Cholkyoon CHO\*<sup>1</sup>, Heejoon KIM<sup>1</sup>, Yangseok KOH<sup>1</sup>, Eunkyu PARK<sup>1</sup>, Younghoe HUR<sup>1</sup>

<sup>1</sup>Division Of Hepato-Pancreato-Biliary Surgery, Department Of Surgery, Chonnam National University Medical School, REPUBLIC OF KOREA

**Background** : Gallbladder paraganglioma (GP) is a rare tumor, with only 12 cases reported in the literature to date. Due to its rarity, clinical information of GP is insufficient. We present a case of GP in a 48-year-old woman along with a literature review of all CP cases described to date.

**Methods** : A 48-year-old woman presented with intermittent right upper abdominal pain. There were no abnormalities in her vital signs or physical examinations. All laboratory findings were within normal limits except that hemoglobin level was low at 9.0 g/dL (range: 12–18 g/dL). Tumor markers were within their normal ranges, CA19-9 level < 2.00 U/mL (range: 0–37 U/mL) and CEA level = 0.82 ng/mL (range: 0–5 ng/mL). Abdominal ultrasonography (US) revealed a single uniformly shaped mass measuring 8.0 × 5.0 cm in the gallbladder lumen. Abdominal computed tomography (CT) showed a uniformly contrasted mass measuring 8.7 × 5.3 cm and a small area of calcification in the gallbladder. Abdominal magnetic resonance imaging (MRI) showed an 8-cm-sized mass in the gallbladder body and fundus with uneven high signal intensity on T1-weighted imaging. These MRI findings suggested that the intraluminal mass was s gallbladder hematoma rather than a malignancy. Laparoscopic cholecystectomy was tried under the impression of gallbladder stone and hematoma due to unknown cause.

**Results** : Gallbladder wall was thickened and a 1.6-cm-sized polypoid lesion was detected at the gallbladder fundus. Microscopy of the polypoid mass showed a zellballen appearance, wherein chief cells showed copious eosinophilic granules gathered to form cell groups separated by blood vessels and fibrous tissues. Immunohistochemical analysis showed that the mass was positive for synaptophysin, CD56, and chromogranin. The polypoid mass of the gallbladder was confirmed as GP based on histopathological findings.

**Conclusions** : GP is difficult to diagnose because of non-specific clinical findings. Almost all GP cases are diagnosed based on histologic findings after cholecystectomy. Simple cholecystectomy was performed as a treatment in all reported cases of GP, including our case. There was no postoperative tumor recurrence or metastasis after surgery.

Corresponding Author : Cholkyoon CHO (ckcho@chonnam.ac.kr)