# Wire-guided endoscopic snare resection of a choledochocele-associated villous adenoma



**Fig. 1** Endoscopic view of the choledochocele.

Adenomas arising in a choledochocele are usually resected surgically because they are difficult to completely remove endoscopically and they are associated with a high malignancy potential [1-2]. We successfully performed an endoscopic snare resection for choledochocele-associated villous adenoma with high-grade dysplasia. A 76-year-old woman was admitted complaining of epigastric pain lasting for several days. Duodenoscopy revealed a soft cystic-mass-like lesion covered with normal mucosa above the ampulla of Vater (**•** Fig. 1).

Intraductal ultrasound showed an anechogenic cystic mass with diffuse wall thickening and preserved wall layer (**•** Fig. 2).

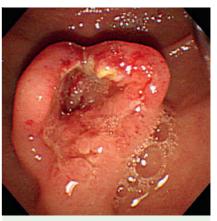
Magnetic resonance cholangiopancreatography showed an oval-shaped cystic mass above the ampulla of Vater. A major endoscopic sphincterotomy was conducted. Following sphincterotomy, duodenoscopy revealed mucosal nodules on the inner surface of the choledochocele (**•** Fig. 3).

Histopathologic findings of the biopsy specimen showed an adenoma with high-grade dysplasia (**> Fig. 4**).

Because the patient wanted to undergo an endoscopic treatment, we performed a wire-guided endoscopic snare resection for the choledochocele with the adenoma (**•** Fig. 5, **•** Video 1).



Fig. 2 Intraductal ultrasound showing an anechogenic cystic mass with diffuse wall thickening.



**Fig. 3** Endoscopic view after a major endoscopic sphincterotomy.

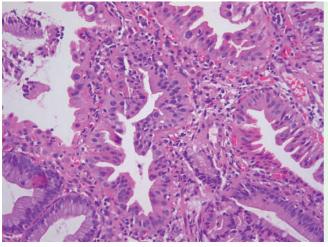
During the 1-year follow-up duodenoscopy, no remnant or recurrence of the adenoma was found.

The surgical approach may be too invasive for a choledochocele with adenoma. Itoi et al. [3] performed a balloon-catheter-assisted endoscopic snare resection using a double-channel duodenoscope for choledochocele. We attempted to perform a wire-guided endoscopic snare resection using the previously reported method for adenomas of the major papilla [4]. En bloc resection was successfully achieved without any procedure-related complications or residual tumor. In conclusion, endoscopic snare resection may be a feasible and effective solution for selected patients with choledochocele associated with a villous adenoma.

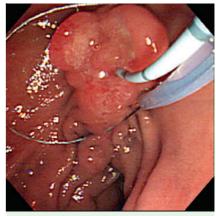
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# Video 1

Wire-guided endoscopic snare resection. The guide wire was inserted into the main pancreatic duct. An electrosurgical snare was then inserted along the guide wire. The snare was manipulated to grasp the base of the choledochocele before en bloc resection was conducted. After the excision had been completed, a pancreatic stent was immediately placed along the indwelling guide wire. Histopathologic examination of the resected specimen showed a villous adenoma with a clear resection margin (**> Fig. 6**).



**Fig. 4** Histopathologic findings of the biopsy specimen (hematoxylin and eosin stain, × 200).



**Fig. 5** Endoscopic view for the wire-guided endoscopic snare resection.

**Fig. 6** Histopathologic picture of the endoscopic resected specimen showing villous adenoma (hematoxylin and eosin stain, × 10).

#### Bibliography

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