



## Video Article

# Endoscopic Ampullectomy with Endo-Pancreatic Radio-Frequency Ablation of an Ampullary Adenoma with Pancreatic Ductal Extension

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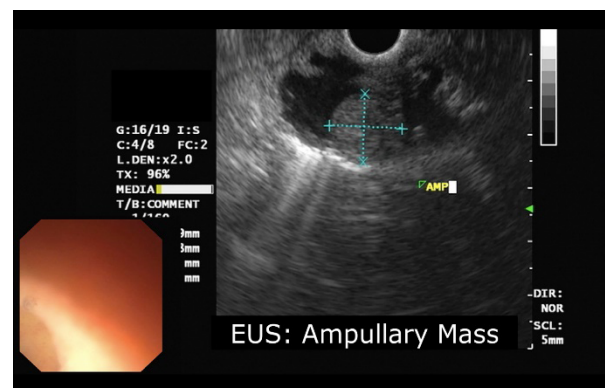
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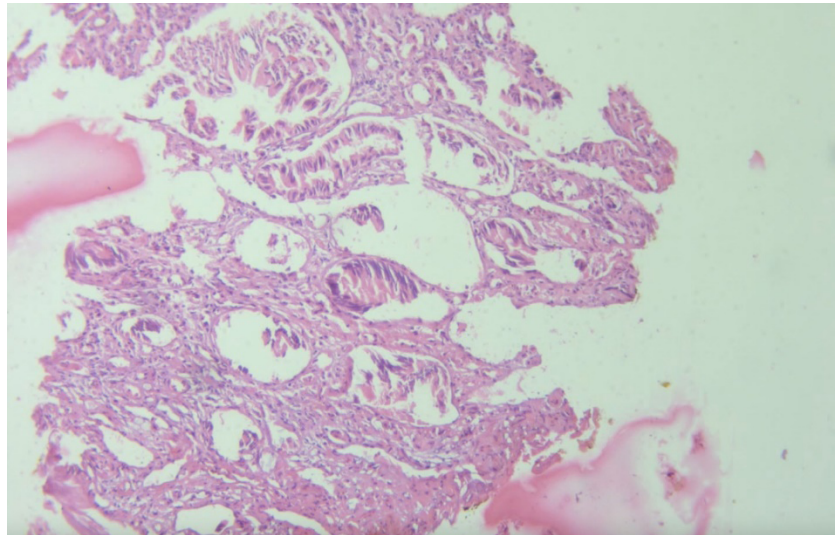
A 59 year-old male with diabetes mellitus, hypertension, decompensated alcoholic cirrhosis with ascites presented with jaundice and right upper quadrant pain. Investigations revealed biliary obstruction (total bilirubin 18 mg/dL, alkaline phosphatase 764 IU/L, ultrasound showing dilated intra- and extra-hepatic bile ducts). Endoscopic Ultrasound (EUS) showed a 3-centimetre ampullary mass (Video). Endoscopic Retrograde Cholangiopancreatography (ERCP) with biliary stenting was done. Ampullary biopsies showed a low-grade adenoma. The relatives declined surgery due to co-morbidities. Endoscopic ampullectomy was planned. After removing biliary stent, a 25-millimetre hot snare (Olympus) was passed over the mass and resection performed (Video). However, part of the tumor kept protruding from the ampullary orifice. Serial snare resections were performed to remove most of the tumor. Small amount of polypoid tissue was seen arising from the pancreatic orifice. Pancreatoscopy confirmed intra-ductal extension. Later, Radiofrequency Ablation (RFA) probe (StarMed) was advanced into the PD, and ablation was performed for one minute (10 watts, 80° celsius). Fresh stents were placed in CBD and PD. The recovery was uneventful, and he was discharged in stable condition. At 3 months and 12 months, there was no visible recurrence, confirmed on pancreatoscopy and ampullary biopsies. Adenomas are rare, precancerous lesions of the duodenal ampulla [1]. Endoscopic resection is considered as safe and effective as surgery, and is preferred in patients with co-morbidities [2]. However, lesions with ductal extension were not

amenable to endoscopic treatment until the invention of endo-RFA. There is limited experience with endo-RFA; with most lesions having CBD extension [3]. Here we present a curative resection of an ampullary adenoma with PD extension. More research is needed to look for long-term results of this intervention (Figures 1-3).

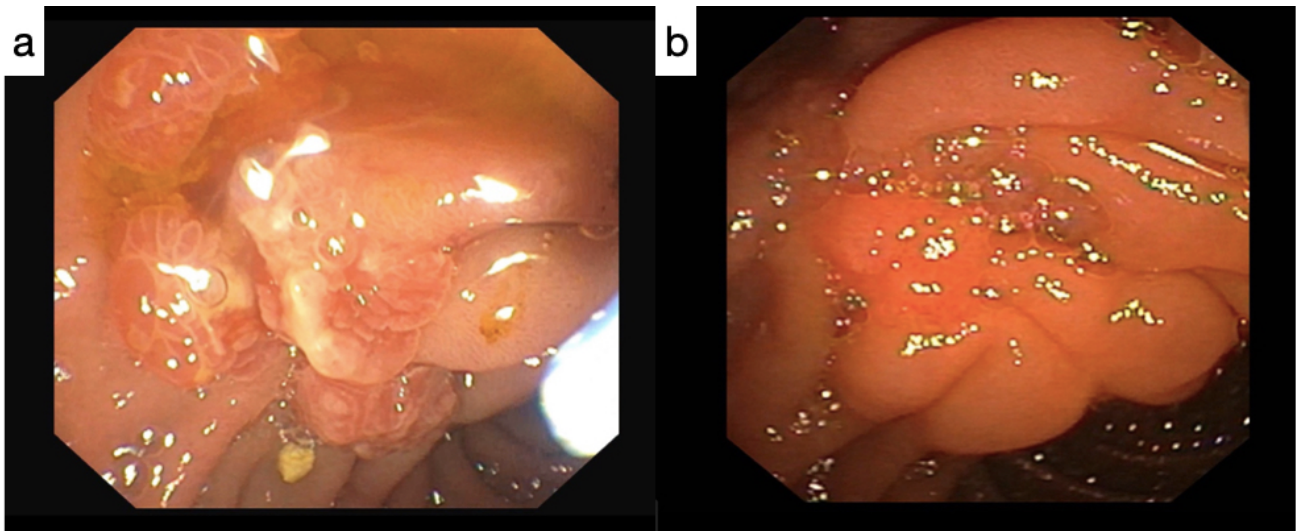
**Video:** Ampullary adenoma with pancreatic ductal extension successfully resected with endoscopic ampullectomy and Endo-pancreatic RFA. Repeat duodenoscopy and pancreatoscopy showed no recurrence. RFA: Radio-frequency ablation.



**Figure 1**



**Figure 2**



**Figure 3**

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## References

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3. Rustagi T, Irani S, Reddy DN (2017) Radiofrequency ablation for intraductal extension of ampullary neoplasms. *Gastrointest Endosc* 86: 170-176.