

Fish-Eye Ampulla: A Rare Pathognomonic Sign

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Keywords

Endoscopy · Endoscopic ultrasonography · Pancreas · Fish-eye ampulla · IPMN

Ampola Fish-Eye: um sinal patognomónico raro

Palavras Chave

Endoscopia · Ecoendoscopia · Pâncreas · Ampola fish-eye · IPMN

A 74-year-old female patient with no relevant personal or family medical history was referred to our department for reevaluation of a pancreatic cystic lesion detected on a computed tomography scan performed for weight loss and fatigue. Physical examination and laboratory results were unremarkable. Magnetic resonance cholangiopancreatography evidenced an atrophic pancreas with a multiloculated cystic lesion (7.2 × 6.5 cm) with internal septa in the head, accompanied by diffuse main pancreatic duct (MPD) dilatation. Endoscopic ultrasonography was subsequently performed. Endoscopic visualization revealed a patulous major papilla, actively extruding thick mucus, the fish-eye sign (Fig. 1a, b). Ultrasonographic evaluation confirmed the previous findings, specifically

an atrophic pancreas with diffuse ectasia of the whole ductal system and a multiloculated cystic lesion (Fig. 2) with internal septa and mural nodules (≥5 mm). The lesion was in direct communication with a dilated MPD (12 mm), which had stratified and thick walls and was filled with dense material and mucus plugs (Fig. 3, arrow). The overall findings were diagnostic of a mixed-type intraductal papillary mucinous neoplasm (IPMN) with high-risk features. Surgical treatment was proposed, but the patient refused and chose to be maintained on regular surveillance.

In the past few years, the improved and expanded use of several diagnostic tests, mainly computed tomography and magnetic resonance imaging, led to a surge of interest on pancreatic cystic lesions, including IPMN [1, 2]. Currently, most patients diagnosed with IPMN are asymptomatic and are detected by examinations performed for unrelated problems [2]. The final diagnosis of IPMN is normally achieved by a combination of endoscopic, radiologic, pathological and/or molecular findings [2]. Endoscopically, a diagnosis of IPMN can be established if a patulous papilla with mucin extrusion, referred as the fish-eye ampulla, is visualized. This sign, although rarely present, is pathognomonic for IPMN of the pancreas [3–5]. Taking into the account the high frequency of high-grade dysplasia and invasive carcinoma in main duct IPMN, surgical resection is strongly recommended for all

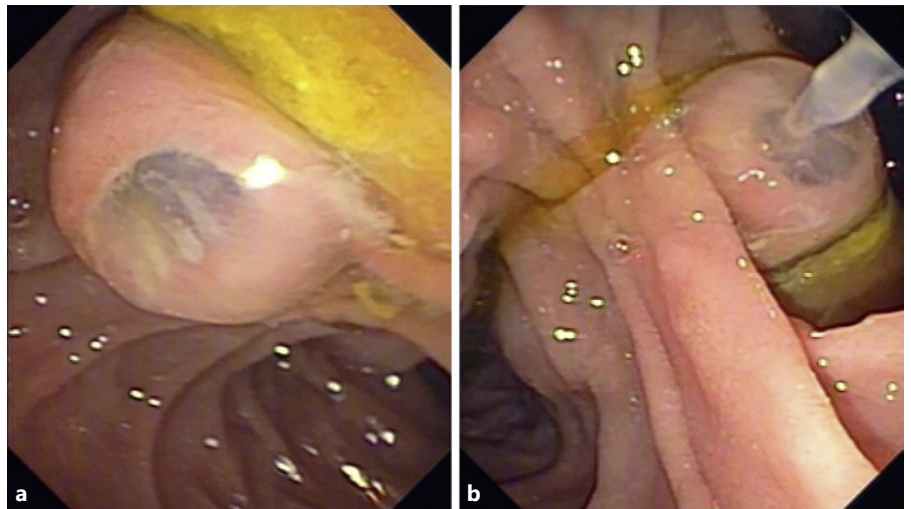


Fig. 1. Endoscopic view of the major papilla presenting a patulous aspect (a) actively extruding thick mucus (b), the fish-eye sign.



Fig. 2. Ultrasonographic view from the stomach of the pancreatic area, revealing an atrophic gland with diffuse ectasia of the whole ductal system and a multiloculated cystic lesion with internal septa and mural nodules (≥ 5 mm).

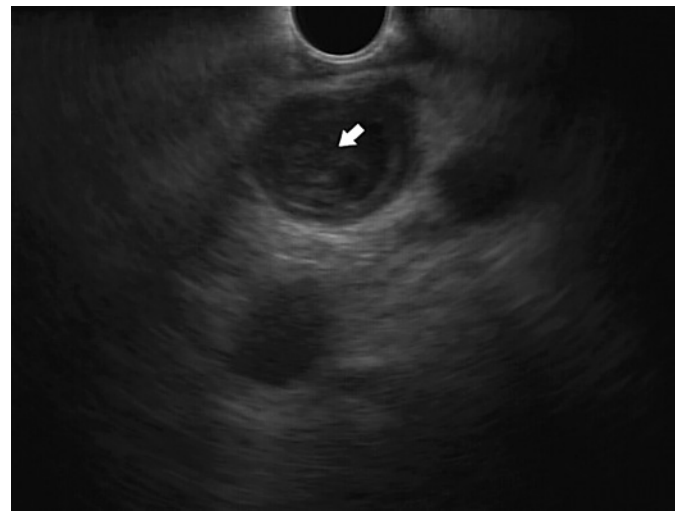


Fig. 3. Ultrasonographic investigation from the stomach revealing direct communication between the cystic lesion and a dilated MPD (12 mm) with stratified and thick walls that is filled with dense material and mucus plugs (arrow).

surgically fit patients with MPD >10 mm, jaundice, or mural nodules [1]. Regarding mixed-type IPMN, clinical and biological characteristics are identical to those of main duct IPMN, so their management is classically based on a similar algorithm [1, 5]. In this context, and according to its high specificity, whenever the fish-eye sign is identified, surgical referral should not be delayed in patients fit for surgery.

Statement of Ethics

This study did not require informed consent nor review/approval by the appropriate ethics committee.

Disclosure Statement

The authors do not have any interest that might be interpreted as influential in this report. This report did not receive any support from corporations, neither industrial nor private.

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