Oesophageal dysphagia as a presentation of a gastric duplication cyst of the cardia

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Dear Editor,

Duplication cysts are uncommon congenital abnormalities of the gastrointestinal tract occurring anywhere from the mouth to the anus. The most common location is the ileum followed by the oesophagus, jejunum, stomach and colon (1). Gastric duplication cysts are rare, accounting for 4 to 8% of all gastrointestinal duplication cysts (2). In more than 50% of cases, they are associated with congenital malformations and it is important to perform a differential diagnosis against other conditions, especially tumours with a cystic component.

A 38-year-old tonsillectomised woman with no known drug allergies or toxic habits under no regular treatment was referred to the Gastrointestinal Unit by her general practitioner for a 3-month history and worsening of epigastric pain, nausea without fever and oesophageal dysphagia. She had recently taken ibuprofen and been treated with pantoprazole with no improvement.

The patient had no personal or family history of colorectal cancer, but a tendency towards constipation. Gastroscopy revealed a mass that was potentially submucosal or from extrinsic compression of the stomach, and a biopsy was taken. The histopathological analysis indicated mild chronic gastritis with microfoci of haemorrhages but no evidence of Helicobacter pylori. An abdominal and pelvic CT scan showed a homogenous nodular lesion, suggesting a duplication cyst in the cardia or gastrointestinal stromal tumour (GIST). Subsequently, an endoscopic ultrasound scan (Fig. 1) found a 5-cm diameter solid mass with smooth margins suggesting a GIST at the junction between the oesophagus and the stomach, and surgery was indicated, given its size and characteristics. Pre-surgical blood tests were requested, but there were no significant abnormal findings; specifically, tumour markers (alpha-fetoprotein, carcinoembryonic antigen and carbohydrate antigen 19-9) were negative.

We referred the patient to the Oesophageal and Gastric Surgery Unit (Hospital Universitario de Donostia, Gipuzkoa, Spain), for laparoscopic surgery to remove the tumour (6x4x4 cm). Anatomopathological analysis revealed a benign cystic lesion (Fig. 2) covered in part by squamous and ciliated epithelia with an intact muscle layer and no cartilaginous remnants. There were foci of mixed inflammation and congestion in the wall, suggesting duplication cysts. Subsequently, the patient attended regular check-ups at the unit and recovered well, no further follow-up being considered necessary.

Fig. 1. Endoscopic ultrasound image. Solid lesion, 5 cm in diameter, with smooth margins, arising from the muscularis propria.
Duplication cysts form in the gastrointestinal tract with which they share a wall. There is no specific theory concerning their etiopathogenesis, but they are known to mostly affect women, the prevalence in women being twice that in men, and there does not seem to be a family tendency (3-5). Most cases are diagnosed during the first year of life, patients having abdominal pain, vomiting, weight loss and an abdominal mass palpable on physical examination (6). Adults tend to be asymptomatic, the cysts being an incidental finding. In our case, the patient was symptomatic, attributable to the mass effect of the lesion and its location. Differential diagnosis should be performed against the presence and cystic degeneration of tumours, including intraductal papillary mucinous neoplasm, mucinous cystadenoma, lymphangioma, and GIST, as well as other benign cystic lesions (7,8). The diagnostic technique of choice is endoscopic ultrasound particularly with fine needle aspiration (FNA). In our case, as the lesion was classified as suspected GIST with endoscopic ultrasound alone, FNA was not performed; rather, she was referred directly for surgery.

For asymptomatic cases, there is a no consensus: Some authors recommend surgical excision given the risk of malignant transformation, while others advocate conservative management, considering the risk of malignant transformation to be negligible. However, in cases of symptomatic duplication cysts such as ours, surgical excision is recommended.

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References


Fig. 2. A. Cystic cavity, lined with ciliated columnar epithelium (magnification x 4). B. Epithelium at a higher magnification (x10), without cytological atypia.