PICTURES IN DIGESTIVE PATHOLOGY

Transendoscopic miniprobe and cardiac stenosis

R. Abad, M. J. Varas, R. Barniol and J. Saló

Unit of Digestive Diseases. Hospital General de Vic. Unit of Echoendoscopy. Centro Médico Teknon. Barcelona, Spain

Fig. 1. Cardiac stenosis assessed using a 12.5 MHz.
Estenosis cardial evaluada con MS de 12,5 MHz.

Fig. 2. Intestinal-type cardiac adenocarcinoma.
Adenocarcinoma cardial de tipo intestinal.

reflux-related peptic lesion with negative biopsies; an initial dilation using bougies is attempted. A month later a new dilation for restenosis is performed, and further endoscopic biopsies still showed no malignity. He was admitted for severe cardiac stenosis assessment.

Echoendoscopy using a 12.5 MHz (2 mm in diameter, less than 30 mm in penetration) miniprobe within the distal esophagus detected a round though asymmetric, submucosal hypoechoic mass (arrows) involving the submucosal and muscularis propria layers (linitis-type carcinoma), or the muscularis propria layer (leiomyosarcoma) with no adenopathies (Fig. 1).

With this information, both a computerized tomographic (CT) scan and an endoscopy were performed. The CT scan showed a mass suggestive of distal esophageal neoplasm.

Videogastroscopy demonstrated a stenotic area that did not allow the endoscope through. It was dilated using bougies 7 mm and 10.5 mm in diameter. Biopsies performed still were repeatedly negative.

A surgical procedure is decided upon, and an intrathoracic esophago-gastrectomy and left lateral thoracotomy is carried out, with a diagnosis of cardiac neoplasm with esophageal involvement. Pathology offered a diagnosis of intestinal-type cardiac adenocarcinoma (Fig. 2) infiltrating the whole of the gastric wall and involving the submucosal, muscularis, and periesophageal fat layers. Perineural, vascular, and lymphatic involvement was extensive. Adenocarcinoma metastases were seen in 1/21 resected lymph nodes. pT3-N1-M0.

Cases of tumor-related pseudoachalasia have been recently reported in our country (1,2). The authors state that “endoscopy must be the technique of choice for the early diagnosis of tumor-related pseudoachalasia in patients under assessment for suspected primary esophageal motor disorder” (3).

In this stenosis case, echoendoscopy using a miniprobe rather than a conventional endoscope, in view of the presence of an esophageal stenotic area (4), provided additional information for the diagnosis and the selection of a surgical technique; it also allowed tumor staging, even if incomplete, probably due to the miniprobe's inadequate ultrasound penetration (less than 3 cm).

However, a positive 94% yield has been reported with a conventional linear endoscope in the diagnosis of esophageal invasion by a neoplasm of the cardia (5).

Indeed, echoendoscopy plays a significant role in the diagnosis and locoregional staging of esophago-gastric junction tumors, which result in malignant stenosis in a non-negligible number of cases. Two alternatives exist: dilation followed by either radial or linear echoendoscopic examination –with some risk for complications– or the use of transendoscopic miniprobes (4), which provide significant additional information in esophageal conditions, and excellent image quality, as in the present case here reported.

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