



SCIENTIFIC LETTER

Suboptimal endoscopic examination due to lack of gastric distension: How best to manage this situation? A case report



Exploración endoscópica subóptima por falta de distensión gástrica. ¿Como podemos manejar esta situación? A propósito de un caso

This is a 54-year-old male patient with a previous history of an 8 mm gastric neuroendocrine tumor treated with EMR. The following year the patient underwent a monitoring upper GI endoscopy. In our Unit, endoscopies are usually performed under deep sedation with propofol. During the procedure, a new 6 mm pseudodepressed lesion (IIa + IIc) was detected in the proximal body of the stomach. However, the lesion could not be properly evaluated because the insufflated air was lost through the mouth, and it prevented the gastric cavity from distending. Biopsies were taken and showed another well-differentiated neuroendocrine tumor (G1).

A new therapeutic upper GI endoscopy was scheduled. As in the previous examination, the lost air through the mouth prevented the gastric cavity from distending and performing the

treatment with a proper view. The nurse in charge of the sedation, who was aware of the endoscopic problem, performed the Sellick maneuver. Then, the stomach could be properly distended, and the lesion could be easily removed with EMR. The histology showed a well differentiated neuroendocrine tumor (G1), with favorable prognostic factors and free margins.

In his original description, Sellick stated that “the maneuver consists of a temporary occlusion in the upper end of the esophagus by giving backward pressure using the index and the thumb fingers on the cricoid cartilage against the cervical spine”¹ (Fig. 1). This maneuver can be easily learned.² Although its effectiveness is controversial,³ it is still used in the sequence of immediate orotracheal intubation in patients with absence of fasting to avoid regurgitation and reduce the risk of bronchoaspiration. In the case we are presenting, the occlusion of the esophageal lumen prevented the loss of air through the mouth and allowed a correct gastric distension.

We believe that this incident is not exceptional, since the Sellick maneuver could help overcome this uncomfortable situation. We have performed this easy maneuver in similar cases with the same positive results. However, this technique requires some learning and should be carried out by anaesthesiologists or nurses trained in sedation, both skilled in this technique and its potential complications and side effects.

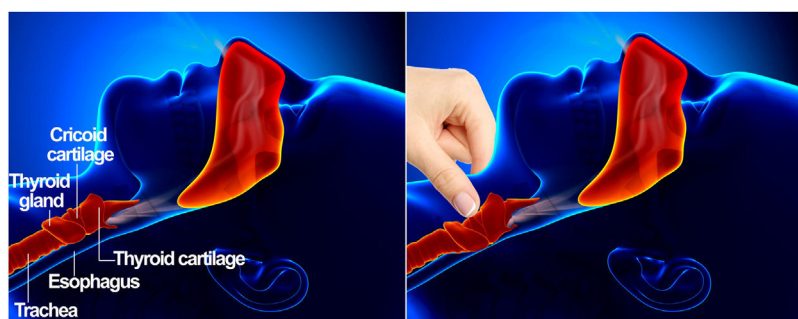


Figure 1 Schematic representation of the Sellick maneuver.

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False positive PET results due to xanthogranulomatous cholecystitis[☆]



Colecistitis xantogranulomatosa como causa de falso positivo en PET

Metastases to the gallbladder (GB) are very rare. Malignant melanoma is their most common origin.¹ We report the case of a patient with a history of melanoma and pathological uptake in the GB seen on positron emission tomography/computed tomography (PET/CT). Surgery was performed with the pre-operative diagnosis of melanoma metastasis to the GB, but the final histology was unexpected.

The patient was a 38-year-old woman diagnosed in August 2015 with malignant melanoma on her back. She was treated with wide resection and sentinel node biopsy (Breslow: 2 mm, Clark: III, without ulceration, mitosis: <1/mm², stage Ib: pT2aN0M0). In September 2018, left axillary lymphadenopathy was detected by self-palpation; fine needle aspiration (FNA) was performed and confirmed melanoma metastasis. A left axillary lymphadenectomy was performed with tumour infiltration in four of the 14 lymph nodes removed. The patient received radiotherapy to the left axilla (50 Gy). In January 2019, she started treatment with nivolumab. In January 2020, a PET/CT scan revealed a 23-mm hypermetabolic lesion in the hepatic hilum (standardised uptake value [SUV]: 9.3), which was causing dilation of the GB. Magnetic resonance imaging (MRI) showed a polypoid mass in the GB, with a diameter of 23 mm, hypointense on T1, and hyperintense and inhomogeneous on T2; these findings were consistent with gallbladder cancer (GBC) or metastasis. The gallbladder content was hyperintense on T1 and hypointense on T2, consistent with haemorrhagic content (Fig. 1A and B). All laboratory tests were normal. The multidisciplinary oncology committee decided on surgery.

The procedure revealed a dilated GB with a thickened wall and inflammation of the hilar plate. A cholecystectomy plus a 1.5-cm resection of the liver parenchyma was performed to ensure a clear margin. Histological sections showed lym-

phoplasmacytic inflammatory infiltrate in the wall of the GB, accompanied by abundant histiocytes, which contained brown pigment in their cytoplasm and formed nodules (Fig. 1C). Erosions and ulcers of the mucosa were observed, with a significant acute inflammatory component forming abscesses. In the histological and immunohistochemical studies, no tumour infiltration was observed. The final histological diagnosis was xanthogranulomatous cholecystitis (XGC).

Malignant melanoma is one of the most aggressive forms of skin cancer. PET/CT has a high precision for the detection of metastases in malignant melanoma, but there is very little experience with using PET/CT in GB metastases.¹

XGC is a relatively uncommon benign inflammatory disease of the GB (1.3%–5.2% of GBs removed) that occurs predominantly in middle-aged and elderly people.^{2,3} Its pathogenesis remains unclear, but it is most widely accepted that after an inflammatory process and a granulomatous reaction, extravasation of bile into the GB wall occurs.^{2,3} This focal or diffuse inflammatory process causes a macroscopic thickening of the GB wall similar to a neoplasm.^{2,3} The clinical signs of XGC are those seen in acute/chronic cholecystitis, but some patients are asymptomatic, as occurred in our patient. It is difficult to distinguish between GBC and XGC by imaging techniques, which may lead to unnecessary liver resections with higher morbidity than cholecystectomy.^{2,3}

PET/CT is not entirely specific for malignant GB lesions.² A 2015 meta-analysis of PET in GBC found a sensitivity of 87% and a specificity of 78%. There were only 22 false positives which occurred in benign inflammatory lesions such as XGC, tuberculosis, adenomyomatosis or acute cholecystitis, and they occur due to absorption of fluorodeoxyglucose (FDG) in inflammatory cells.^{2–4} Nishiyama et al. evaluated the correlation between CRP and 18F-fluorodeoxyglucose (18F-FDG) levels in the GB and verified that the specificity of PET for the diagnosis of GBC is 80% if CRP is normal, but 0% if CRP is elevated.⁵ However, our patient had normal CRP levels when PET was performed.

The eight published cases of false positive PET in XGC, including our case, do not allow many conclusions to be drawn. Six were women and two were men. The mean age was 60 years (range: 38–76). Four presented abdominal pain and three were incidental findings. CRP was always normal; inconsistent with the findings of Nishiyama et al.;⁵ three presented elevated carbohydrate antigen 19-9 (CA19-9) and only 50% (4/8) had cholelithiasis preoperatively. The PET SUV was

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