Nutrición Hospitalaria

Nutr Hosp. 2015;31(4):1879-1881
ISSN 0212-1611 • CODEN NUHOEQ
S.V.R. 318

Caso clínico

Ostomy metastasis after pull endoscopic gastrostomy: a unique favorable outcome

Jorge Fonseca[1,2], Carla Adriana[1], Miguel Fróis-Borges[3], Tânia Meira[1,2], Gabriel Oliveira[3] and José Carlos Santos[3]

[1]GENE, Enteral Feeding Group, Hospital Garcia de Orta, Almada. [2]Serviço de Gastrenterologia, Hospital Garcia de Orta, Almada. [3]Serviço de Cirurgia, Hospital Garcia de Orta, Almada. Portugal.

Abstract

Head and neck cancer (HNC) patients tend to develop dysphagia. In order to preserve the nutritional support, many undergo endoscopic gastrostomy (PEG). In HNC patients, ostomy metastasis is considered a rare complication of PEG, but there are no reports of successful treatment of these metastatic cancers. We report the case of a 65 years old pharyngeal/laryngeal cancer patient who underwent a PEG before the neck surgery. He was considered to be cured, resumed oral intake and the PEG tube was removed. Ten months after, he returned with a metastasis at the ostomy site. A block resection of the stomach and abdominal wall was performed. Two years after the abdominal surgery, he is free of disease. Although usually considered a rare complication of the endoscopic gastrostomy, ostomy metastasis may be more frequent than usually considered and the present case report demonstrates that these patients may have a favourable outcome.

(*Nutr Hosp*. 2015;31:1879-1881)

DOI: 10.3305/nh.2015.31.4.8262

Key words: *Metastasis. Gastrostomy. PEG.*

METÁSTASIS EN LA ESTOMA DE UN PACIENTE SOMETIDO A GASTROSTOMÍA ENDOSCÓPICA: UNA EVOLUCIÓN CLÍNICA FAVORABLE

Resumen

Los pacientes con cáncer cérvico-facial tienden a desarrollar disfagia. Para preservar la nutricion, son sometidos a gastrostomía endoscópica (GEP). Las metástasis en la estoma se consideran complicaciones raras y no hay informes de éxito del tratamiento de estos cánceres metastásicos. Presentamos el caso de un paciente de 65 años con cáncer faríngeo/laríngeo que se sometió a una GEP antes de la cirugía en el cuello. Se consideró curado, reanudó la ingesta oral y se retiró el tubo. Diez meses después regresó con una metástasis en el lugar de la estoma. Se realizó una resección en bloque del estómago y la pared abdominal. Dos años después de la cirugía abdominal es libre de la enfermedad. Aunque generalmente se considera una complicación rara, las metástasis en la estoma de GEP pueden ser más frecuentes que lo corrientemente considerado. El presente caso demuestra que estos pacientes pueden tener un resultado clínico favorable.

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Introduction

Head and neck cancer (HNC) is a group of cancers, arising from lips, mouth, nasal cavity, paranasal sinus, pharynx, larynx and proximal esophagus. Most of them (90%) are squamous cell carcinomas. HNC patients tend to develop dysphagia, caused by tumor growth, or induced by surgical procedures or chemotherapy/radiotherapy. Suffering from long standing dysphagia, these patients present a very high risk of developing malnutrition. In order to preserve the nutritional support, many of these HNC patients undergo endoscopic gastrostomy, frequently before surgery or radiotherapy.

Worldwide, most HNC patients undergo endoscopic gastrostomy using the "pull" method. In HNC patients, PEG ostomy metastasis is still considered a rare complication of endoscopic gastrostomy procedure, even using a "pull" gastrostomy[1,2]. Several clinical reports describe advanced cancers with PEG site metastasis but, to the best of our knowledge, no one reports successful treatment of these metastatic cancers. We

Correspondencia: Jorge Fonseca
Bloco de Exame Especiais - GENE - Grupo de Estudo de Nutrição Entérica - Av. Professor Torrado da Silva, 2800 Almada, Portugal.
E-mail: jorgedafonseca@hotmail.com

Recibido: 17-XI-2014.
Aceptado: 19-XII-2014.

report the case of a successfully surgical treatment of a PEG ostomy metastasis on a patient whose primary cancer was previously cured.

Case report

A 65 years old man with a progressive dysphagia was evaluated in the ear, nose and throat outpatient clinic of our hospital. He presented a pharyngeal/laryngeal mass which a biopsy proved to be a squamous cell carcinoma. The patient was referred to our artificial nutrition team. A PEG was proposed and finally accepted after some hesitation. He underwent the endoscopic gastrostomy procedure in June 2011. A partial laryngectomy was performed at June, 29th. Surgery was considered to be curative.

The patient resumed oral feeding, and the PEG tube was withdrawn in December. In January 2012 ostomy cicatrisation was complete and the patient was discharged from the artificial nutrition outpatient clinic.

In October 2012 he was sent to the artificial nutrition outpatient clinic because of a large mass on the previous gastrostomy site (Fig. 1a). An upper GI endoscopy showed a large cancer at the anterior part of the stomach including the gastrostomy site (Fig. 1b). The biopsies confirm that the cancer was a squamous cell carcinoma. No other cancer site was found after careful evaluation. On October, 23th he underwent a bloc resection including a total gastrectomy with part of the abdominal wall removed with the stomach. A Roux-en-Y anastomosis was created and he was kept in laparostomy. Laparostomy was closed on October, 30th. Patient resumed oral intake and was discharged in December, 5th.

Two years after the abdominal surgery, the patient is still being followed by the artificial nutrition outpatient clinic. He is allowed oral nutrition *ad libitum* and hypercaloric oral nutritional supplements are used to balance protein-calorie intake. He is underweight (IMC: 18,6) but independent in every day activities. The only evidence of the abdominal surgery are the low weight and a large scar marking the place were the large "slice" of abdominal wall was removed in block with the stomach (Fig. 2). There are no clinical signs of cancer recurrence and an abdominal and thoracic CT scan that the patient underwent during a respiratory infection showed no suspicious mass. As far as we can evaluate, the patient is free from the squamous cell carcinoma.

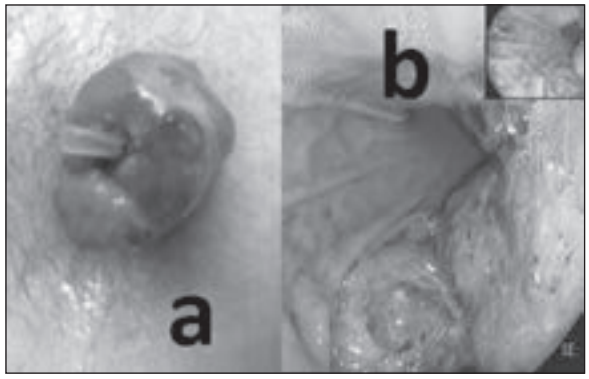

Fig. 1.—Ostomy metastasis: skin view with a tube in the previous PEG tract (a) and endoscopic view (b).

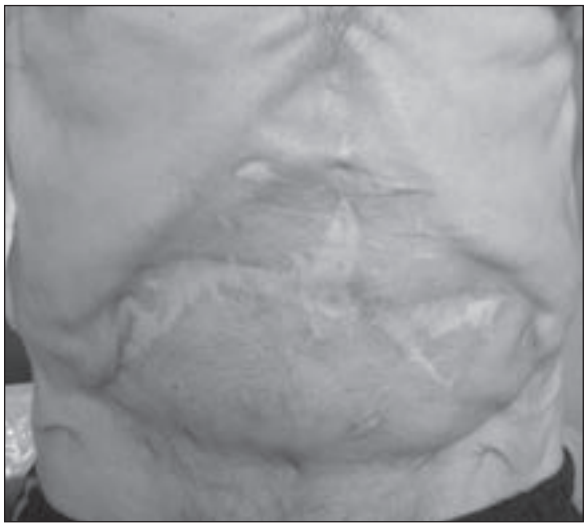

Fig. 2.—Large scar, two years after the abdominal surgery.

Discussion

Since the first PEG reports, the "pull" method has been the most reported technical option, clearly preferred over the "push" method. Using the "pull" method the gastrostomy tube passes through the mouth, pharynges and oesophagus. In head or neck cancer patients, as the PEG tube passes through the mouth, pharynges and oesophagus, cancer cells may sometimes be dragged by the tube and seeded into the gastrostomy ostomy.

Since the first report of an upper aerodigestive tract cancer metastasis in the PEG exit site[3], an average of 2 cases is reported every year. In fact, various revisions point out only some dozens of cases. A 2012 report of three cases find only 43 preceding cases[4]. Another 2013 case and revision found 45 previous metastasis[5]. From hundreds of thousands of endoscopic gastrostomies performed worldwide every year on HNC patients, these cases seem to represent a negligible number of patients and ostomy metastasis are considered a very rare complication of the PEG procedure[1,2]. Nevertheless, they may be much more frequent than usually considered. In a large study, 250 HNC patients were evaluated using positron emission tomography (PET). Six of them had an endoscopic gastrostomy, and 2 out of these 6 had asymptomatic ostomy metastasis[6] (Purandare NC, 2008). A recent prospective study evaluated 40 HNC or oesophageal cancer pa-

tients that underwent PEG "pull" method. Immediately after the procedure, in 9 (22,5%) cancer cells were demonstrable on the tube[7]. These studies suggest that asymptomatic ostomy metastasis may be much more frequent than symptomatic ones. As a large number of these patients has poor prognosis, many of these metastasis may remain undiagnosed until the patient dies. In fact, to the best of our knowledge, there are no reported cases of a two-year survival after the ostomy metastasis diagnosis. In our patient the primary cervical cancer underwent successful curative surgical recession. Except for the gastrostomy site, there were no secondary lesions, and stomach and abdominal wall were successfully resected. Two years after, he appears to be free from the cancer, and will hopefully remain healthy.

As PEG procedure is spreading worldwide, artificial feeding teams may be confronted with a growing number of ostomy metastasis. In order to prevent further cases, our team switched from the "pull" method to a "push" kit with gastropexy (Pexact®), that allows a safe "push" procedure while preventing the tube from passing through the mouth, pharynges and oesophagus. The present case report also shows the possibility of curative resection of ostomy metastasis with a bloc resection including a total gastrectomy with part of the abdominal wall. An isolated ostomy metastasis should not be considered a death sentence and there is a chance of a curative surgical recession.

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