

Case Report

Bypass laparoscopic procedure for palliation of esophageal cancer

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Esophageal cancer is a devastating disease with rapidly increasing incidence in Western countries. Dysphagia is the most common complication, causing severe malnutrition and reduced quality of life. A 69-year-old male with persistent esophageal cancer after radiation therapy was subjected to palliative by-pass surgery using a laparoscopic approach. Due to the advanced stage at diagnosis, palliative treatment was a more realistic option. Dysphagia is a most distressing symptom of this disease, causing malnutrition and reducing quality of life. The goal of palliation is to improve swallowing. The most common methods applied are endoscopic stenting, radiation therapy (external or brachytherapy), chemotherapy, yttrium-aluminum-garnet laser rechanneling or endoscopic dilatation. Palliative surgery is rarely proposed due to morbidity and complications. This paper demonstrates an update in the technique proposed by Postlethwait in 1979 for palliation of esophageal cancer.

INTRODUCTION

Esophageal cancer is a devastating disease with rapidly increasing incidence in Western [1]. Despite important advances in therapy, >50% of patients have incurable disease at diagnosis and only 5–10% of these patients have life expectancy >5 years [1].

Dysphagia is the most common symptom that afflicts these patients, causing 70% of complaints, and leading to severe malnutrition and reduced quality of life [1, 2]. Most of these cancers are diagnosed at an advanced stage in patients with comorbidities. This factor prevents curative treatment in the majority of them, thus making palliative care a more realistic option [1, 3].

Although surgical resection remains the treatment of choice for early cancers, palliative esophagectomy is not recommended due to high mortality rates [4]. However, surgical procedures in order to bypass the dietary route with relief of dysphagia have been reported in the literature but have fallen into disuse because of the morbidity and mortality of the procedure itself and advances in endoscopic treatment [5].

This paper demonstrates the use of surgical treatment using the laparoscopic approach in the palliative care of a patient with advanced esophageal cancer.

CASE REPORT

A 69-year-old male presented with progressive dysphagia, retrosternal pain and weight loss of 10 kg in 2 months. An upper endoscopy was scheduled for further evaluation. The finding was a circumferential lesion from 19 to 25 cm of the incisors, with biopsy diagnosing squamous cell carcinoma. Radiological examinations showed lymphadenopathy in the celiac trunk and in the mediastinal area. A bronchoscopy diagnosed tracheal infiltration by neoplasia.

The patient was treated with external radiotherapy (13 × 250 cGy) with symptom relief and regained performance status (from 3 to 1). However, after re-staging exams, the persistence of the disease was diagnosed, with dysphagia worsening. Surgical palliative treatment was proposed, using the laparoscopic approach for symptom relief.

The technique, as described by Lacerda *et al.* in a previous report [6], involves the creation of a gastric tube close to 3 cm in width and with an average length of 30 cm (Fig. 1) and preservation of the right gastroepiploic vessels by laparoscopy.

The tube is then passed along a retrosternal path and end-to-side anastomosis using a circular stapler is performed with the cervical esophagus prepared earlier by left cervicotomy. A laminar drain is applied in the cervical incision (Fig. 2).

The patient was discharged from the hospital on the fifth post-operative day with oral intake. No leakage or other complication was found during the post-operative period. The patient survived for 4 months, gained 10 kg in this period and did not refer any dysphagia after the procedure.

DISCUSSION

The improvement in swallowing becomes a primary goal in the palliative setting [2]. Currently, there are several methods for this purpose, including the esophageal stent, endoscopic

dilation, radiotherapy (both external and endoluminal—brachytherapy), chemotherapy and laser recanalization (YAG) [3]. The choice of procedure and the response to treatment should be properly related to life expectancy, which has also been related to performance status, weight loss, tumor extension, clinical stage, sex and age [3].

Dysphagia from inoperable esophageal cancer is a common and complex management problem, and there is no consensus on the ideal treatment approach [7]. All methods have their own advantages and disadvantages in rapid or late onset effect in symptom relief as in recurrence [7]. No single intervention palliates dysphagia at all time for every patient; therefore, healthcare providers must assess the risks and benefits of each palliative intervention for individual patients [8].

Surgical resection is still cited in the literature as a way to palliate esophageal cancer but is restricted to patients with severe risk of complications (e.g. perforation or uncontrollable tumor bleeding) due to high morbidity and mortality in relation to non-surgical palliative options [9]. Allum *et al.* in their guidelines for treatment of esophageal and gastric cancer state that there are no randomized controlled studies to compare the addition of surgery to palliative chemotherapy with chemotherapy alone [9]. They also state that such studies may become possible and worthwhile if minimal access surgery can be achieved that has reduced complications and better recovery of health-related quality of life than standard open surgery [10].

In 1979, Postlethwait [6] proposed a technique for esophageal bypass surgery with an isoperistaltic gastric tube, and this method is still used despite its morbidity [5].

This report demonstrates that an update in the technique proposed by Postlethwait for palliation of esophageal cancer with the use of minimal access surgery is feasible. According to the current literature, the bypass procedure in order to palliate dysphagia could be reserved for patients in which the stent has failed or contraindicated. However, the patient access to the procedure should also be taken into account. High costs can sometimes make the lesser invasive procedure more prohibitive to the patient than surgery itself.

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Figure 1: Gastric tube.



Figure 2: Patient after surgery.

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