

Segmental Resection for Recurrent Carcinoma of the Esophagus

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Carcinoma of the esophagus is usually diagnosed at an advanced incurable stage. The overall 5 year survival rate is 7–11%. While surgery is the mainstay for the treatment of carcinoma of the esophagus, the results are disappointing. The overall 5 year survival rate after surgical resection is 25%, with a median survival of 18 months [1].

The incidence of recurrent carcinoma at the anastomosis after curative esophageal resection is 6–8% [1,2]. Recurrent carcinoma of the esophagus raises some difficult therapeutic questions. The majority of patients will present with progressing dysphagia. Some of them will also suffer from bleeding or fistulas to the respiratory system [3]. The main goal of palliation is to relieve dysphagia and to maintain adequate nutrition. Secondary goals are pain relief and treatment of bleeding. Palliative measures include radiotherapy, laser ablation, photodynamic therapy, dilatation, and placement of prostheses. Yet, the results of these measures are discouraging due to the low success and high complication rates [3].

There are scant data regarding the surgical treatment of recurrent carcinoma of the esophagus at the anastomosis after curative resection. We describe here a case of recurrent carcinoma of the esophagus at the anastomosis after an Ivor-Lewis esophagectomy treated by segmental resection.

Patient Description

A 64 year old woman had undergone an Ivor-Lewis esophagectomy at another hospital for T₁N₁M₀ adenocarcinoma

of the distal esophagus. The postoperative course was complicated by prolonged intubation, and she was left with a permanent tracheostomy. No further adjuvant therapy was applied. Eighteen months after the operation she presented with a new-onset dysphagia to solid food. Gastroscopy and biopsies demonstrated a small adenocarcinoma at the site of the anastomosis. Endoscopic ultrasound revealed a 2 cm tumor limited to the submucosa. Computed tomography scan showed no evidence of distant disease in the chest and abdomen.

We operated through the old right posterolateral thoracotomy incision. Exploration of the posterior mediastinum revealed a small tumor at the esophagogastric anastomosis. The stomach was mobilized down to the diaphragm and a segmental resection of the anastomosis was performed. A new esophagogastric anastomosis was created using one layer of interrupted absorbable sutures. The postoperative course was uneventful.

Pathological evaluation demonstrated a recurrent papillary adenocarcinoma infiltrating into the esophageal and gastric walls. The tumor was confined mainly to the mucosa and submucosa, but there was also evidence of invasion into the muscular coats. Both surgical edges were free of tumor. The patient refused oncological treatment. Today, 24 months after the second operation she has no sign of local or distant disease.

Comment

Reports on the management of recurrent carcinoma of the esophagus at the

anastomotic line are sporadic [2–5]. The usual presenting symptom is dysphagia initially for solids and subsequently for liquids. The majority of patients will ultimately require palliative treatment as the tumor is usually non-resectable.

Non-surgical modalities for palliation of malignant dysphagia include radiotherapy, laser ablation, dilatation, insertion of a stent, and photodynamic therapy. Radiation therapy achieves palliation of dysphagia in less than 40% of patients, and it may take up to 2 months until dysphagia is relieved [4]. Laser ablation can palliate up to 89% of patients. Complications include perforation of the esophagus (6%) and massive hemorrhage (2%). The mortality rate is 6%. Repeated treatments are usually required and there is no effect on survival [5].

Endoscopic plastic prostheses or metal self-expanding stents are commonly used for palliation of esophageal malignant stricture. Plastic prostheses carry risks of perforation (14%), aspiration pneumonia (5%) and device migration (24%). Metal stents are associated with ulceration (7%), mediastinal fistula (5%) and stent torsion (5%) [3]. Photodynamic therapy is a relatively new and promising method for palliation of dysphagia. It is associated with skin photosensitivity and usually has no major side effects.

Surgical removal of the tumor is considered to be the treatment of choice whenever possible. Murata et al. [6] reported five cases of second primary cancer in the residual cervical esophagus. The lesions were squamous cell carcinoma that were found during

a routine follow-up without any symptoms of dysphagia. They were all superficial either – Tis or T₁ – with no distant metastases. Two patients were treated by surgical mucosectomy, and one each by endoscopic mucosectomy, laser ablation, and segmental resection. Three patients were alive without disease at 3 years. The patient who underwent a segmental resection died after 6 months due to liver and lung metastases. Law et al. [2] described six patients with anastomotic recurrence; significant dysphagia was treated by dilatation in two patients and radiotherapy in one, with poor results. Ellis and colleagues [1] reported an 8% anastomotic recurrence after standard esophagogastric resections. They concluded that the anastomotic recurrence might have been minimized by a more radical resection, but since the vast majority of patients had distant metastases at the time of local

recurrence it was debatable whether the increased morbidity of such a procedure is justified.

We report here an uncommon case of local recurrence of adenocarcinoma of the esophagus at the anastomotic site with no distant metastases. Given that the tumor was resectable we chose to perform a segmental resection of the anastomosis, as surgery offers the only chance for cure and is the best modality for palliation.

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