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# Laparoscopic Nissen fundoplication post-oesophageal stenting: an unusual case.

Zubin J. Daruwalla

*Royal College of Surgeons in Ireland*

S Powles

*Beaumont Hospital, Dublin*

Mayilone Arumugasamy

*Royal College of Surgeons in Ireland*

Stephen Patchett

*Royal College of Surgeons in Ireland*

Patrick Broe

*Royal College of Surgeons in Ireland*

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# Laparoscopic Nissen Fundoplication Post-Oesophageal Stenting: An Unusual Case

## Abstract:

ZJ Daruwalla, S Powles, M Arumugasamy, S Patchett, P Broe  
Beaumont Hospital, Beaumont, Dublin 9

## Abstract

Laparoscopic Nissen fundoplication post-oesophageal stenting is uncommon and yet to be reported. We report the case of a 57-year-old palliative lady who underwent surgery for symptomatic relief of severe gastrooesophageal reflux post-oesophageal stenting. Surgery was carried out successfully with no complications. On the evening post-surgery she was able to lie supine for the first time in months without symptoms of reflux. In conclusion, surgery is still valuable and may play an important role, even in a palliative setting.

## Introduction

Laparoscopic fundoplication is the gold standard surgical treatment for gastrooesophageal reflux disease reported cases in the literature of oesophageal stenting post-Nissen fundoplication exist reported. We would therefore like to discuss a case of laparoscopic Nissen fundoplication post-oesophageal stenting.

<sup>1</sup>. While few  
<sup>2</sup>, the reverse has not been

## Case Report

A 57-year-old lady with a background of severe chronic obstructive pulmonary disease and ischaemic heart disease presented to her GP complaining of general malaise. Following discovery of a space occupying lesion on chest x-ray, she was referred for bronchoscopy. This revealed an obstructing lesion in the left lower lobe with a histopathological diagnosis of squamous cell carcinoma. Computerized tomography (CT) showed no evidence of mediastinal or distant metastases with the tumour being amenable to resection. A pneumonectomy and mediastinal lymphadenectomy were performed. Subsequent CT showed no mediastinal lesions. In view of her co-morbidities, it was decided that adjuvant radiotherapy be deferred unless she became symptomatic.

Ten months post-pneumonectomy, she presented with a five-week history of progressive dysphagia initially for solids but progressing to liquids, and associated with regurgitation, vomiting and weight loss. Barium swallow and oesophagogastroduodenoscopy (OGD) showed extrinsic mid-oesophagus compression with no mucosal irregularity. Biopsy revealed a solitary solid submucosal nodule which histopathology confirmed as recurrent extrinsic squamous cell carcinoma. The patient was reviewed by the oncology service and referred for radiotherapy. The patient obtained good symptomatic relief with radiotherapy but was admitted eight months later because of recurrent dysphagia. OGD again revealed significant extrinsic compression in the upper third of the oesophagus. A 7cm Choo stent was inserted under direct vision. The patient was informed of the possibility of reflux symptoms post-stent insertion. These symptoms resulted in the first of many subsequent admissions just four days later. The stent was confirmed to be perfectly positioned and patent. Although a subsequent CT confirmed no progression of carcinoma, a right paraoesophageal collection was noted.

This was later drained when she re-presented a month later with a cough, fever, night sweats and worsening reflux symptoms. Severe reflux symptoms continued with the patient being unable to lie down, sleep or eat any food. The patient was re-admitted a few weeks later when a repeat OGD was performed which demonstrated perfect positioning and patency of the stent. It was not bridging the oesophagogastric junction. Barium swallow noted gastrooesophageal reflux with no tertiary contractions or dysmotility. PPIs were maximized. Management options given to the patient on discharge were medical, endoscopic or laparoscopic Nissen fundoplication in view of her symptom severity and relatively fit status. A month later she was re-admitted with symptoms associated with ongoing severe reflux. A laparoscopic Nissen fundoplication was performed without complications. On the night of surgery, she was able to lie supine for the first time in months without any problems or reflux symptoms. She remained well and was discharged just two days later with a much improved quality of life, reflux-free until her death six weeks later of disease progression.

## Discussion

Laparoscopic Nissen fundoplication post-oesophageal stenting even in patients with extensive co-morbidities may be indicated in certain clinical circumstances. Our case demonstrates this in the context of advanced metastatic disease, where a palliative stent was inserted to relieve tumour-associated dysphagia in a patient who then subsequently developed severe reflux, not allowing them to lie down, eat or sleep. In the hands of experienced laparoscopic surgeons, fundoplication is a safe and effective treatment with excellent subjective and objective long-term results with at least 90% patient satisfaction<sup>4</sup>. Gastrooesophageal reflux which occurred in our case is much less common in proximal stents compared to stents lying over the gastro-oesophageal junction. Overall, ten to fifty percent of patients will need some form of re-intervention due to complications. However, these complications are primarily stent occlusion or migration, as opposed to severe reflux. In conclusion, surgery is still valuable and may play an important role in a palliative setting.

Correspondence: ZJ Daruwalla  
Beaumont Hospital, Beaumont, Dublin 9  
Email: [zubinjimmydaruwalla@rcsi.ie](mailto:zubinjimmydaruwalla@rcsi.ie)

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