

# Review of oesophageal stent use and outcomes in the management of patients with palliative oesophageal carcinoma

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## Introduction

This survey was undertaken to review stent use and outcomes in patients with a diagnosis of oesophageal carcinoma under the care of St Barnabas House. This followed a concern raised by an individual clinician questioning the timeliness and appropriateness of stents being inserted. In addition, it was recognised that post stent pain was sometimes very difficult to manage and that the incidence of this was unknown.

## Method

All referrals with a diagnosis of carcinoma of the oesophagus referred to St Barnabas House during the year 2014 were reviewed. Notes were examined to ascertain whether they had undergone stent insertion, type of stent deployed, the timing of this in relation to death and the presence of oesophageal pain pre and post stenting. Severity of pain was graded mild, moderate or severe according to the following criteria:

- Severe – poorly controlled despite using >150mg oral morphine equivalent/day
- Moderate – pain controlled using regular opioids up to 150mg oral morphine equivalent/day
- Mild – pain controlled using prn opioids

## Results

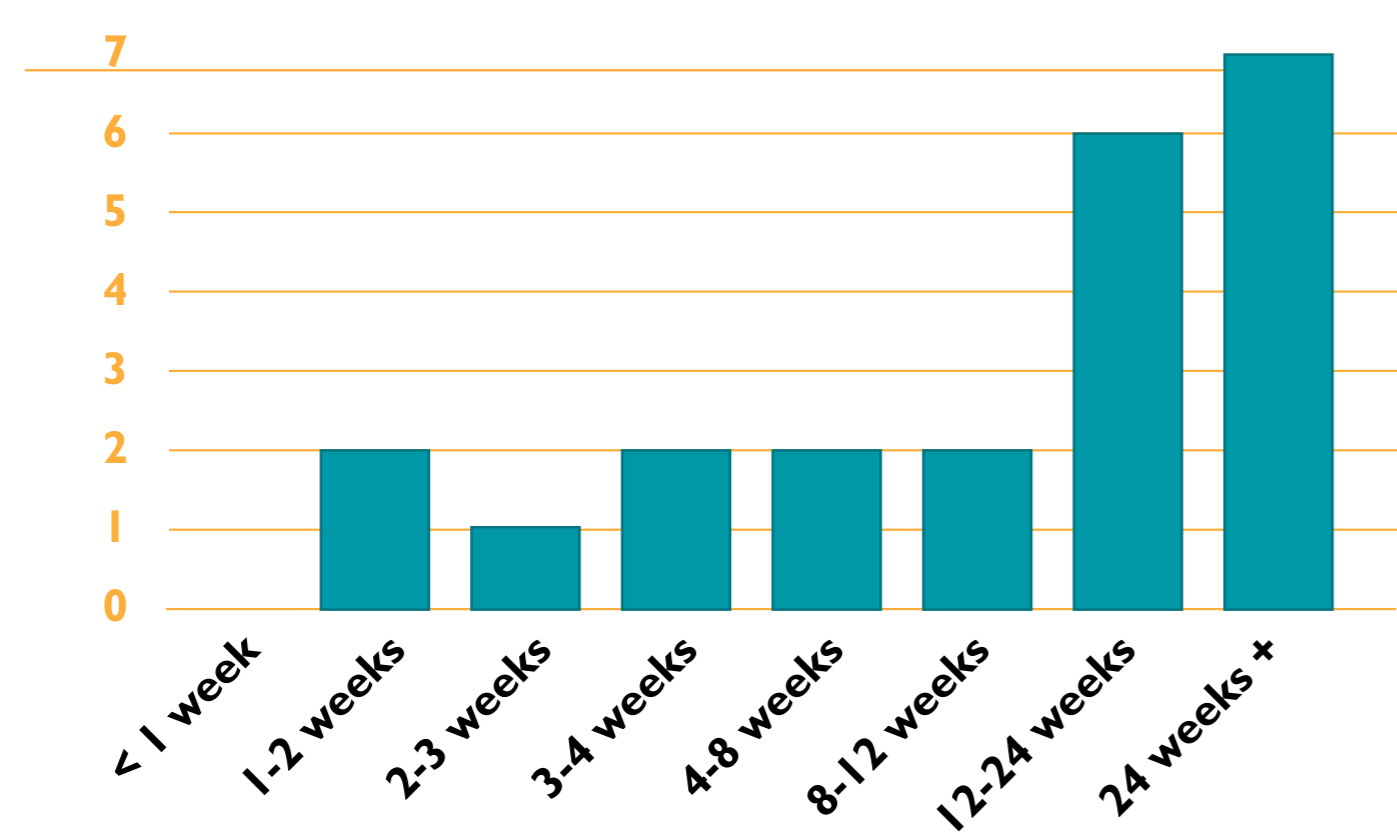
Thirty eight patients were included in the review: 27 male, mean age 73 years.

Twenty six out of the 38 patients had stents inserted – the indication for stent insertion being dysphagia in all cases

### 1) Survival

Mean survival following stent insertion was 120 days, median 105 (range 9-38 days). Six out of 26 patients died within 4 weeks of stenting (23%) (see Graph 1)

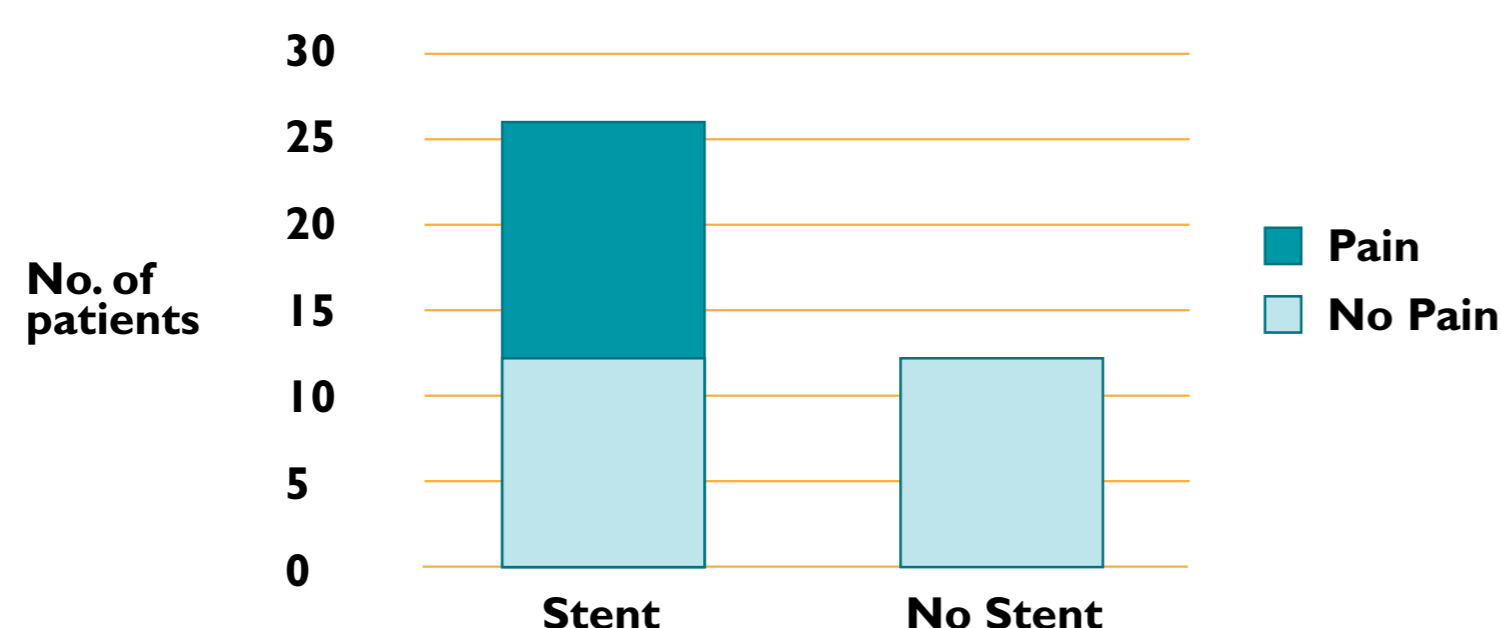
Graph 1: Length of time from stent insertion until death



### 2) Pain

One third of all patients (14/38) complained of retrosternal pain when being assessed by the palliative care team. All of these were patients with oesophageal stents in situ. None of the patients without a stent complained of retrosternal pain but half of the patients with stents complained of pain (14/26) (see Graph 2).

Graph 2: Proportion of patients complaining of retrosternal pain



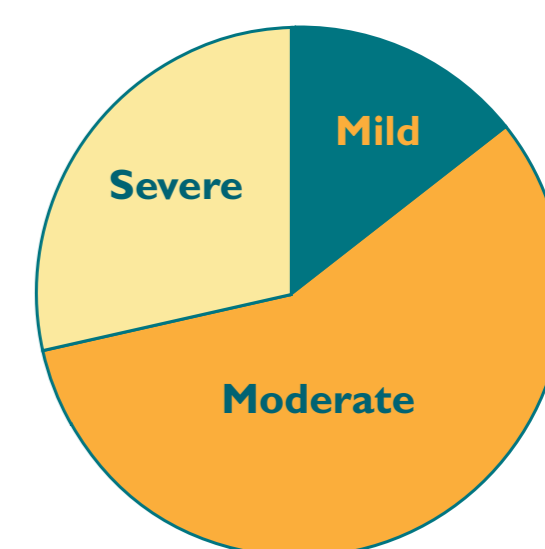
A poster presentation for the PCC Glasgow 2016

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### 3) Severity of pain

Four patients had pain categorised as severe. Eight patients had moderate pain and 2 patients had mild pain as defined by rating scale above (see Graph 3). All patients had persistent pain requiring regular or frequent analgesia until death except one patient in whom pain improved several weeks after his course of radiotherapy was completed. In two patients, both with severe pain, it was documented that the nature of the pain was consistent with oesophageal spasm pain.

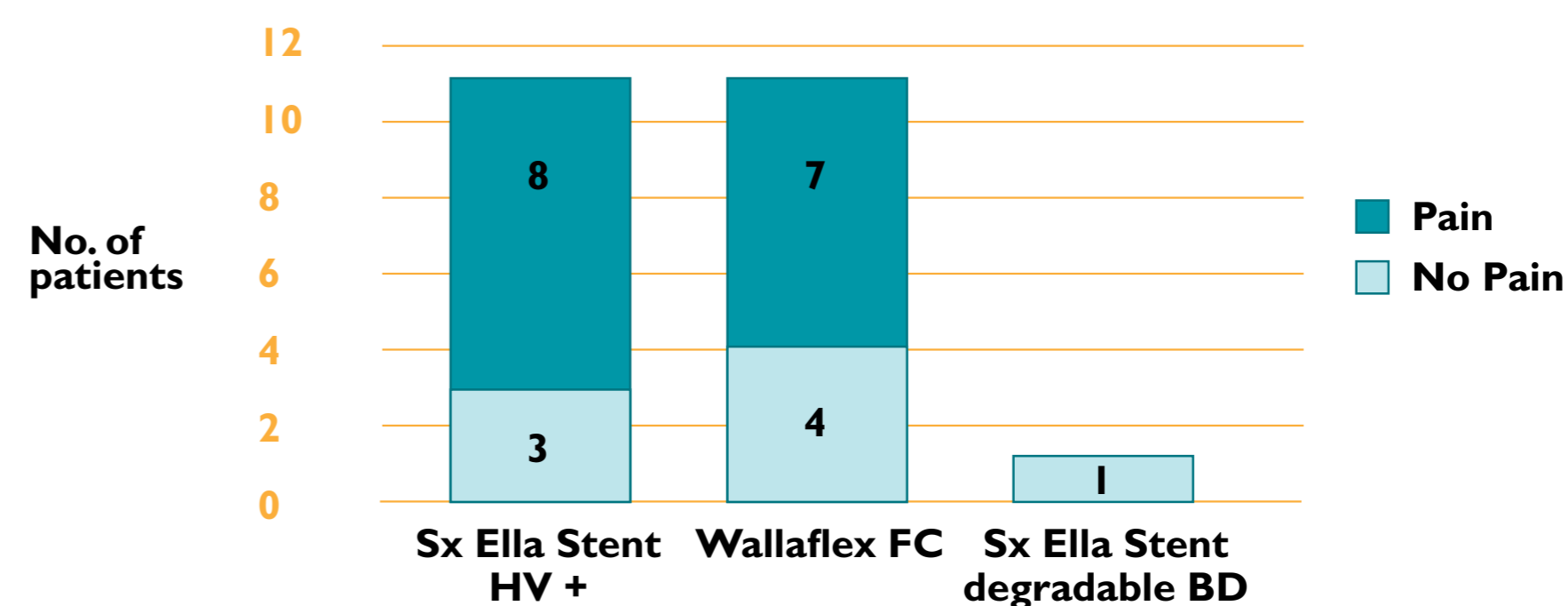
Graph 3: Severity of retrosternal pain



### 4) Correlation with type of stent deployed

Data for the type of stent inserted was only available for 23 out of the 26 patients. The Sx Ella HV Stent Plus was used for 11 patients, 8 suffered post stent pain, 3 did not. The Wallflex FC stent was also used for 11 patients, 7 suffering pain and 4 not. Both these stents are partially or fully covered metal stents with a silicone cover. One patient thought to be suffering with a post-oesophagectomy stricture had a degradable stent inserted (see Graph 4).

Graph 4: Correlation between type of stent deployed and presence or absence of pain



## Discussion

These results suggest that most stent insertion in our patient group is appropriate and timely, but raises concerning results regarding post stent pain.

Although pain is well documented in the literature as a complication of oesophageal stent insertion, data from trials suggest the proportion of patients suffering with post stent pain is usually lower (from 10-30%) and is transient (although there are few studies looking at longer term follow up). Severe pain as complication of stent insertion requiring the removal of the stent is documented in several studies.

It is impossible to know, from this review, whether the stent may be the cause of the pain and what the mechanism underlying this is, or whether there is another cause, such as the tumour itself. Since the stents are inserted for dysphagia, it is inevitable that the patients being referred for stenting are likely to be the patients with the largest local tumours.

It is not possible to understand from this data (or from available literature) whether one particular type of stent, or a particular site of disease might contribute more to the presence of pain.

Further evaluation is required and a prospective survey using a symptom assessment tool pre and post stent insertion is now underway.

## References

M Golder. Chest pain following oesophageal stenting for malignant dysphagia. Clin Radiol 2001 56 (3): 202-5

P Hindy. A comprehensive review of oesophageal stents. Gastroenterol Hepatol 2012 8(8): 526-534