Colonic stenting – Is the bridge to surgery worth its cost?
A single Asian institution experience with cost-effectiveness analysis

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Introduction

In patients presenting with left-sided colonic obstruction, guidelines recommend stenting as a valid alternative to emergency surgery.

Benefits of Colonic Stenting in Obstructed Patients

1. Convert emergency surgery to semi-elective, avoid anesthetic risks
2. Avoid stoma creation and subsequent reversal
3. Avoid exploratory laparotomy

However there has been controversy with regards to clinical safety and efficacy of colonic stenting. In our single institution, we reviewed outcomes prospectively and performed a cost analysis on colonic stenting for acute colonic obstruction.

Methods

Over a period from Apr 19 to Nov 22

Prospective cohort study

Endoscopic, surgical and financial data

Inclusion criteria

- Presenting with left sided colonic obstruction
- Underwent emergent colonic stenting

Exclusion criteria

- Eventually declined surgery in favour of expectant management

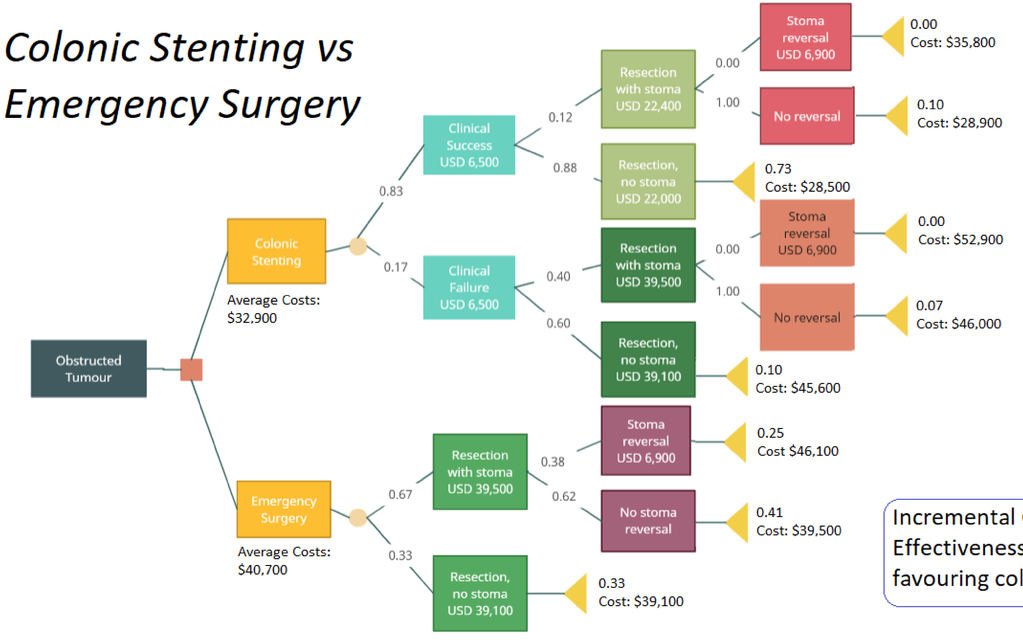
Results

40 patients underwent stent insertion

Total 11 patients
8 metastatic disease
3 comorbids
1 on neoadjuvant

29 bridge to surgery

26 achieved technical success (89.7%)
24 achieved clinical success (82.8%)



Incremental Cost - Effectiveness Ratio 0.81, favouring colonic stenting

Patients who underwent colonic stenting	
Median Age (range)	66 (27 – 82)
Malignant cause	27 (93%)
Days of symptoms (range)	2 days (1-14)
TNM stage I : II : III : IV	0 (0%): 17 (59%): 6 (21%): 4 (14%)
Tumour location	
Transverse colon	1 (3%)
Splenic flexure	1 (3%)
Descending colon	8 (28%)
Sigmoid colon	19 (66%)

Outcomes	
Stent complications	
Perforation	3 (10%)
Migration	0 (0%)
Time to surgery (range)	13 days (0-41)
Open vs Laparoscopic	8 (28%) vs 21 (72%)
Median procedure time (IQR)	226 (189-271)
Surgical complication	
I / II	1 (3%)
III	2 (7%)
IV	1 (3%)

In conclusion, colonic stenting has been shown to be

- Safe
- High rates of clinical success
- Cost effective ICER < 1
- Decrease in stoma rates