



Colonic stents in the palliation of colorectal cancer

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Traditional surgical palliation of a patient with non-resectable metastatic (stage 4) colorectal adenocarcinoma utilises major surgery and its associated morbidity and mortality in order to provide symptomatic relief and attempt to increase life expectancy. Patients with widespread peritoneal carcinomatosis may not be amenable to any form of palliative surgery due to the extensive nature of their disease and undergo an 'open-and-close' laparotomy. Such major surgery in a group of patients with widespread malignancy, who may also be nutritionally deplete and elderly, is associated with significant morbidity (5–50%) and mortality (5–25%). These may be even greater in the setting of ascites or jaundice that may accompany large-volume liver metastases. Whether or not resection of the primary tumour improves survival is not entirely clear from the literature, though intuitively one would suspect that the systemic disease is the limiting factor in survival rather than the resection itself. The introduction of self-expanding, metallic endoluminal colonic stents has broadened the palliative armamentarium available to the physician treating this group of patients.

A recent review article has shown that stents can be placed with a morbidity and mortality less than those of traditional open surgery.¹ Re-obstruction due to tumour ingrowth occurred in only 6% of patients. Stent migration rates were also low at 10%. Repeat stenting can be performed should either of these complications occur. The procedure is well tolerated, can be performed under sedation, and usually requires little more than an overnight hospital stay. The avoidance of a stoma is another benefit for the patient. Modern algorithms for palliation of non-resectable metastatic colorectal cancer include the use of stents;^{2,3} however, other than case reports and small case series, objective data on their use for this indication are still evolving.

A recent study from the Royal Marsden Hospital has also suggested that the overall incidence of intestinal complications (haemorrhage, obstruction, peritonitis and fistula formation) related to the primary colorectal tumour in the setting of non-resectable metastatic disease is no different when patients are treated with chemotherapy alone compared with surgery followed by chemotherapy.⁴ This study questions further the role of surgery in this group of patients with incurable disease.

The median survival in a patient with incurable colorectal cancer is 8 months.⁵ On average, palliative chemotherapy adds a median of 3.7 months of life to the patient's survival.⁵ Furthermore, as the treatment-related toxicity and quality-of-life benefits from chemotherapy in this group of patients are poorly studied,⁵ the decision to have chemotherapy is one that can be made only by the individual patient, and it can not be recommended universally.

So when should a palliative stent be placed? The most important factor in determining whether or not a stent should be placed as a definitive procedure is ensuring that the patient does not have potentially resectable metastatic disease. Appropriate staging investigations need to be performed and specialist surgical consultation should be sought according to the site of metastases. Should both the primary and metastatic

disease be resectable, and the patient a suitable candidate, curative surgery should be considered. A stent should not normally be placed in this instance as a definitive measure. The role of stents as a bridge to single-stage surgery in obstructing tumours is another evolving area.

We recommend the placement of stents in patients with non-resectable metastatic disease and symptomatic tumours; either acutely obstructing or if the patient has obstructive symptoms. Generally, we have found that if the passage of the colonoscope is not possible through the tumour a stent should be placed. If the lumen is greater than this, obstructive symptoms are unlikely and the stent is also unlikely to maintain its position. The presence of low rectal tumours, where a deployed stent will impinge on the anal canal, also contraindicates their use. Clearly, the risks and benefits of, and alternatives to, both endoluminal stenting and open surgery need to be fully discussed with the patient and a mutually acceptable management plan formulated.

At this time there has been no prospective, randomized controlled trial published that compares stents to traditional surgery for this group of patients. What little information has been published is limited and uses retrospective controls.⁶ We have found that the procedure has low morbidity and mortality, the hospital stay is short, the potential need for a stoma is almost eliminated, and that there also appears to be no difference in survival when compared with traditional surgical palliation.⁶ A prospective randomized trial is needed though unlikely to be performed. We find that almost all patients, when presented with the options available, will choose the placement of a stent.

Palliative intervention in patients with non-resectable metastatic colorectal adenocarcinoma should provide the greatest symptomatic relief with minimal morbidity and mortality. Endoluminal stenting provides another means of achieving this goal in a group of patients whose life expectancy is short and need for quality of life high.

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