

NATIONAL INSTITUTE FOR CLINICAL EXCELLENCE

Health Technology Appraisal

Laparoscopic surgery for the treatment of colorectal cancer (Review of Technology Appraisal Guidance No. 17)

Draft scope

Draft remit / appraisal objective

To review and update as necessary guidance to the NHS in England and Wales on the clinical and cost effectiveness of laparoscopic surgery for the treatment of colorectal cancer which was issued in December 2000.¹

The original guidance will remain in place unless and until any new guidance has been issued. The review will consider whether any new evidence that has become available justifies a change to the original guidance.

Background:

Colorectal cancer is a malignant neoplasm arising from the lining (mucosa) of the large intestine (colon and rectum).

In 2001, there were 27,529 new cases of colorectal cancer diagnosed in England (we were not able to locate the figures for Wales). Colorectal cancer is the third most common cancer in the UK after breast and lung cancer, with an annual incidence of 60.2 cases per 100,000 and an estimated prevalence of 77,000. The lifetime risk of developing colorectal cancer is 1 in 18 for men and 1 in 20 for women. Colorectal cancer predominantly affects older people and over half of all deaths occur in people older than 75 years of age.

Surgery is the only curative treatment for colorectal cancer with between 70 and 90% of patients considered eligible for surgical intervention at diagnosis. During surgery the area of the bowel where the tumour is located is removed along with nearby lymph nodes. The choice of surgical technique depends on whether surgery is carried out electively or as an emergency, the location of the tumour in the bowel, and its distance from the anal sphincter.

Surgical resection of colon cancer may involve removal of the entire colon (colectomy), the transverse section of the colon (transverse colectomy), or part of the colon (hemi-colectomy) depending on the location of the tumour.

Tumours of the upper rectum are removed by anterior resection. Tumours of the lower rectum are removed by abdomino-perineal resection. This includes removal of the whole rectum and anus so that patients require a permanent colostomy. Total mesorectal excision (TME) involves the removal of the whole rectum, surrounding fatty tissue, and lymph nodes, and patients are less likely to need a permanent colostomy.

¹Guidance on the use of laparoscopic surgery for colorectal cancer (No.17, December 2000). National Institute for Clinical Excellence

The technology

There are three laparoscopic techniques available to the surgeon; laparoscopic colectomy, laparoscopically assisted colectomy and hand-assisted colectomy. These techniques vary in the proportion of the procedure that is performed laparoscopically. With laparoscopic colectomy the entire procedure is undertaken laparoscopically. Laparoscopically assisted colectomy involves laparoscopic manipulation of the bowel, which is subsequently passed through an enlarged laparoscopic incision with the excision of bowel tissue being performed externally. Hand-assisted colectomy refers to a procedure in which the surgeon's hand is used along with laparoscopic equipment to perform the dissection.

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| Intervention(s) | Laparoscopic surgical techniques including <ul style="list-style-type: none">• Laparoscopic colectomy• Laparoscopically assisted colectomy• Hand-assisted colectomy If appropriate comparison will be made between the different methods of laparoscopic surgery. |
| Population(s) | People with surgically resectable colorectal cancer |
| Current standard comparators | Open colectomy |
| Outcomes | Relevant outcomes measures include: <ul style="list-style-type: none">• Overall survival• Disease-free survival• Time to tumour recurrence• Lymph node retrieval• The incidence of port site metastasis• Operation duration• Length of hospital stay• Post operative and long-term pain• Time to return to usual activities• Incidence of complications• Health-related quality of life |
| Economic analysis | The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year. The time horizon for the economic evaluation should be sufficiently long as to include long-term |

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| | <p>outcomes including the possibility of post-operative complications.</p> <p>Costs will be considered from a NHS and Personal Social Services perspective.</p> |
| <p>Related NICE recommendations</p> | <p>In progress</p> <p>Technology appraisal: Review of the clinical and cost effectiveness of irinotecan, oxaliplatin and raltitrexed for the treatment of advanced colorectal cancer. Expected date of issue Review August 2005.</p> <p>Technology appraisal: The clinical and cost effectiveness of oxaliplatin and capecitabine for the adjuvant treatment of colorectal cancer. Expected date of issue May 2006</p> <p>Technology appraisal: The clinical and cost effectiveness of irinotecan as adjuvant therapy in colorectal cancer. Expected date of issue January 2007.</p> <p>Technology appraisal: The clinical and cost effectiveness of bevacizumab and cetuximab for the treatment of advanced colorectal cancer. Expected date of issue September 2007</p> <p>Guidance on the use of capecitabine and tegafur with uracil for metastatic colorectal cancer. Technology Appraisal 61. Issued May 2003.</p> <p>Guidance on Cancer Services. Improving Outcomes in Colorectal Cancer. Expected date of issue June 2004.</p> |
| <p>Current NICE guidance</p> | <p>1.1 For colorectal cancer, open rather than laparoscopic resection should be the preferred surgical procedure.</p> <p>1.2 Laparoscopic surgery should only be undertaken for colorectal cancer as part of a randomised controlled clinical trial.</p> |