Health Technology Appraisal

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

Personal Statement of Professor T A Rockall MD FRCS

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I have already submitted to NICE a detailed and referenced appraisal of this technology on behalf of the Association of Laparoscopic Surgeons of Great Britain and Ireland (ALS) and a further detailed response to the report from the Aberdeen Health Technology Assessment Group. There follows a brief personal statement pertaining to the uptake of this technology.

I believe that there is now a considerable body of evidence from small and large trials that laparoscopic colorectal surgery is safe, efficacious and improves outcome, both in the short and medium to long term.

In the short term the differences are dramatic. We have recently reported on the applicability of this form of surgery for 90% of patients with colorectal disease. Our conversion rate to open surgery is 5% and our median hospital stay is 4 days. We have seen the near abolition of certain complications such as significant wound complications, which remain commonplace in the open surgery group. The short term benefits are seen more clearly in case series from experienced centers than in randomized controlled trials, which have all suffered from the fact that data has been entered from a wide range of relatively inexperienced surgeons, often on the early part of their learning curve and from a period in time from which the level of laparoscopic skills has undoubtedly now changed.

The most dramatic difference in outcome compared to open surgery is that of hospital stay which is a well recognized surrogate marker of recovery. Large randomized studies suggest a reduction in hospital stay by 3 days. Surgeons with large personal series recognize that the difference is potentially much greater and in my own unit at the Royal Surrey County Hospital the hospital stay is a median of 4 days following colorectal resection which compares to a national average after open surgery of 12 to 14 days. The cost benefit of this is difficult to measure but can be put in perspective when one realizes that a surgeon could potentially undertake three colorectal resections laparoscopically with the same bed occupancy that an open surgeon could undertake one. Reducing hospital stay has many impacts other than the obvious. Laparoscopic surgery is associated with reduced wound infection rates and other infectious complications. Wound and chest infections are a cause of morbidity, delayed discharge and significant

resource utilization both in hospital and after discharge. Hospital acquired infections are mainly a problem in patients who stay in hospital for long periods of time.
The analysis of data so far suggests there may be a minimal cost disadvantage of about £250.00. Not only is this a very small proportion of the total cost but is likely to within the variation between different open surgeons. Many of the short term cost advantages have I believe been inadequately costed, including, wound care, nursing, GP visits etc.. and I believe that it is likely that more detailed and perceptive studies will show this to be of significant socio-economic benefit.

In the medium to long term the data on oncological outcomes shows no evidence that laparoscopic surgery has a measurable negative impact. Indeed there is some evidence that patients may in fact benefit oncologically. Patients will benefit from a reduction in adhesions and wound related complications such as bowel obstruction and incisional hernia both of which are common after laparotomy.

With improved training and the availability of preceptorship through the ALS I believe that this is a technology that can be gradually and successfully introduced into general surgical practice without compromising standards of care.