Laparo-endogastric surgery

1 Guidance

1.1 Current evidence on the safety and efficacy of laparo-endogastric surgery does not appear adequate to support the use of this procedure without special arrangements for consent and for audit or research. Clinicians wishing to undertake laparo-endogastric surgery should inform the clinical governance leads in their Trusts. They should ensure that patients offered it understand the uncertainty about the procedure’s safety and efficacy and should provide them with clear written information. Use of the Institute’s Information for the Public is recommended. Clinicians should ensure that appropriate arrangements are in place for audit or research. Publication of safety and efficacy outcomes will be useful in reducing the current uncertainty. NICE is not undertaking further investigation at present.

1.2 The procedure should only be performed by specialists in laparoscopic surgery who have observed at least one patient undergoing the procedure.

2 The procedure

2.1 Indications

2.1.1 Laparo-endogastric surgery is also known as laparoscopic endoluminal surgery, endo-organ gastric surgery and laparoendoscopic gastric surgery. It is used to treat lesions located in the fundus of the stomach, the gastroesophageal junction, and near the pylorus. These include gastric polyps, gastric wall tumours (lymphomas, leiomyomas, leiomyosarcomas, carcinoids), gastric cancer, Dieulafoy’s lesion (arterial malformation) and intractable gastroduodenal ulcers. Lesions on the greater and lesser curvatures are relatively inaccessible.

2.1.2 Large or advanced gastric cancers are rarely suitable for laparo-endogastric surgery.

2.1.3 Traditional approaches to gastric surgery are resection operations through a laparotomy incision or laparoscopy.

2.2 Outline of the procedure

2.2.1 Laparo-endogastric surgery is a minimally invasive approach to surgery for gastric wall lesions, and attempts to avoid resection of the full thickness of the stomach wall. With the patient under general anaesthetic, the surgeon passes an endoscope through the oesophagus into the stomach. A laparoscope is inserted through a small incision in the upper abdominal wall, passed into the stomach, and surgery is performed from inside the stomach.

2.3 Efficacy

2.3.1 Evidence was from small, uncontrolled case series. The efficacy of the procedure compared with conventional open laparotomy or laparoscopic partial gastrectomy remains uncertain. For more details refer to the sources of evidence below.
2.3.2 Specialist Advisors considered laparo-endogastric surgery to be a very new procedure carried out in very few specialist units worldwide. The technique is not widely disseminated, and there are few opportunities for training. One Specialist Advisor questioned the procedure's efficiency in excising small malignant lesions completely.

2.4 Safety

2.4.1 Few complications were reported in the studies. As the case series are so small, it is not possible to reliably estimate the frequency of complications. For more details refer to the sources of evidence below.

2.4.2 Specialist Advisors noted that possible complications include leaking at the site of repair to the stomach following surgery and subsequent infection or bleeding, but these were uncommon.

2.5 Other comments

2.5.1 The Interventional Procedures Advisory Committee noted that the inadequate visualisation of tumours might lead to staging errors, and identified tumour spillage as a potential risk.

2.5.2 The Advisory Committee also noted that the technique is likely to have limited application in the foreseeable future.

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Information for the Public

NICE has produced information describing its guidance on this procedure for patients, carers and those with a wider interest in healthcare. It explains the nature of the procedure and the decision made, and has been written with patient consent in mind. This information is available from www.nice.org.uk/IPG025publicinfoenglish and in English and Welsh from www.nice.org.uk/IPG025publicinfowelsh.

Sources of evidence

The evidence considered by the Interventional Procedures Advisory Committee is described in the following document.


Available from: www.nice.org.uk/IP043overview