

Laparoscopic distal pancreatectomy

1 Guidance

- 1.1 Current evidence on the safety and efficacy of laparoscopic distal pancreatectomy appears adequate to support the use of this procedure provided that normal arrangements are in place for consent, audit and clinical governance.
- 1.2 Laparoscopic distal pancreatectomy should only be performed in centres specialising in pancreatic surgery and with appropriate expertise in advanced laparoscopic techniques, and in the context of a multidisciplinary team, which should usually include a pancreatic surgeon, a gastroenterologist, an endocrinologist and a pathologist.

2 The procedure

2.1 Indications

- 2.1.1 Laparoscopic pancreatectomy can be used in the treatment of a number of different conditions.
- Pancreatic neuroendocrine tumours (most commonly insulinoma) and cystic tumours (benign or malignant) are usually treated surgically. Small benign insulinomas can be removed by enucleation. Larger tumours in the body or tail of the pancreas or close to the pancreatic duct are conventionally removed by open distal pancreatectomy. Chemotherapy may also be used to treat some malignant tumours.
 - Chronic pancreatitis refers to long-term inflammation of the pancreas, which eventually causes irreversible damage to the tissue. Treatment includes medication such as enzyme supplements and analgesics, and avoiding alcohol consumption. Surgery may occasionally be necessary, for patients with chronic pancreatitis complicated by pseudocyst formation.

- Adenocarcinoma seldom presents as a tumour in the tail of the pancreas but may occasionally be found on histological examination following resection of a space-occupying lesion.

2.2 Outline of the procedure

- 2.2.1 Laparoscopic pancreatectomy is performed under general anaesthesia. The abdomen is insufflated with inert gas and a number of small incisions are made to provide access for the laparoscope and surgical instruments. The pancreas is exposed, dissected to detach the body and tail from the adjacent retroperitoneal tissues, and transected. The resected tissue is usually enclosed in a bag and removed through a small incision in the umbilical area. The spleen may be preserved, or removed along with the pancreas. A drain is often left in the pancreatic bed and is removed a few days after surgery.

2.3 Efficacy

- 2.3.1 The evidence on efficacy comes from one review that included 15 studies describing a total of 282 laparoscopic distal pancreatectomies and 87 enucleations, and one non-randomised controlled trial of 30 patients.
- 2.3.2 The review reported a mean hospital stay of 7.5 days. The non-randomised controlled trial reported a significantly shorter median postoperative hospital stay after laparoscopic distal pancreatectomy than after open surgery (5 days versus 8 days, $p = 0.02$). The non-randomised controlled trial also reported that patients who underwent laparoscopic surgery felt that they had returned to normal activity after 3 weeks (median), compared with 6 weeks for patients who underwent open surgery ($p = 0.03$).

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This guidance is written in the following context

This guidance represents the view of the Institute, which was arrived at after careful consideration of the available evidence. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. This guidance does not, however, override the individual responsibility of healthcare professionals to make appropriate decisions in the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Interventional procedures guidance is for healthcare professionals and people using the NHS in England, Wales, Scotland and Northern Ireland.

This guidance is endorsed by NHS QIS for implementation by NHSScotland.

- 2.3.3 The review reported a tumour recurrence rate of 5.7% at a mean follow-up of 27 months. For more details, refer to the 'Sources of evidence' section.
- 2.3.4 The Specialist Advisers stated that this is a novel procedure, with a lack of data on long-term follow-up.

2.4 Safety

- 2.4.1 The evidence on safety relates to one review that included 15 studies describing a total of 282 laparoscopic distal pancreatectomies and 87 enucleations.
- 2.4.2 The rate of conversion to open surgery was approximately 14% (range 0–40%). The mean rate of re-operation to treat complications was 8% (range 0–17%). The mean incidence of pancreatic fistula was 13%.
- 2.4.3 The review reported 30-day mortality as 0.5%. For more details, refer to the 'Sources of evidence' section.
- 2.4.4 The Specialist Advisers stated that potential adverse effects of the procedure include haemorrhage, pancreatic fistula, anastomotic leakage and inadequate resection margins.

2.5 Other comments

- 2.5.1 It was noted that some of the evidence related to laparoscopic enucleation procedures rather than to laparoscopic distal pancreatectomy.

Andrew Dillon
Chief Executive
January 2007

Information for patients

NICE has produced information describing its guidance on this procedure for patients and their carers ('Understanding NICE guidance'). 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/IPG204publicinfo

Sources of evidence

The evidence considered by the Interventional Procedures Advisory Committee is described in the following document. 'Interventional procedure overview of laparoscopic distal pancreatectomy', May 2006.

Available from: www.nice.org.uk/IP315overview

Ordering information

Copies of this guidance can be obtained from the NHS Response Line by telephoning 0870 1555 455 and quoting reference number N1191. 'Understanding NICE guidance' can be obtained by quoting reference number N1192.

The distribution list for this guidance is available at www.nice.org.uk/IPG204distributionlist

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Interventional procedures guidance makes recommendations on the safety and efficacy of a procedure. The guidance does not cover whether or not the NHS should fund a procedure. Decisions about funding are taken by local NHS bodies (primary care trusts and hospital trusts) after considering the clinical effectiveness of the procedure and whether it represents value for money for the NHS.

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