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NHS
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Endoscopic dacryocystorhinostomy

1 Guidance

1.1 Current evidence on the safety and efficacy of endoscopic dacryocystorhinostomy appears adequate to support use of the procedure provided that the normal arrangements are in place for consent, audit and clinical governance.

1.2 Specific training is particularly important and the Royal College of Ophthalmologists and the British Association of Otorhinolaryngologists – Head & Neck Surgeons have agreed to produce joint standards for training.

2 The procedure

2.1 Indications

2.1.1 Endoscopic dacryocystorhinostomy (DCR) is indicated for patients with lacrimal sac obstruction or nasolacrimal duct obstruction (NLDO). NLDO is common, and presenting symptoms include watering of the eye and dacryocystitis (infection). Endoscopic DCR is usually considered for patients who have been refractory to conventional treatment such as warm compresses, massage and probing of the nasolacrimal duct. If NLDO is left untreated, the symptoms persist and may be distressing for the patient.

2.1.2 Endoscopic DCR is one of several techniques used to unblock the nasolacrimal duct. The standard approach for DCR is open surgery.

2.2 Outline of the procedure

2.2.1 Endoscopic DCR is a minimally invasive procedure used to bypass the nasolacrimal duct.

2.2.2 Under local anaesthesia, an endoscope is inserted into the nose. Surgical instruments or a laser are used to create an opening between the nose and the lacrimal sac through the mucosa and intervening bone. Silicone tubes can be inserted with the aim of improving long-term patency.

2.3 Efficacy

2.3.1 One randomised controlled trial reported success rates of 75% (24/32) for endoscopic DCR. After 12 months, 59% (19/32) of patients were asymptomatic. A large study that compared the use of lasers with electrocautery instruments for endoscopic DCR in 398 patients reported success rates of 92% (222/242) and 90% (28/31) using two different laser types, and 87% (39/45) for electrocautery instruments. At 1-year follow-up, 83% (65/78) of patients were symptom-free after a laser-assisted procedure in a case series of patients with dacryostenosis. For more details, refer to the Sources of evidence.

2.3.2 The Specialist Advisors stated that endoscopic DCR is now established practice, that failure rates are similar to conventional treatment, and that healing rates may be quicker.

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2.4 Safety

2.4.1 The rates of reported complications were low and they commonly included minor bleeding. Adverse events were found to occur at similar rates with or without the use of lasers. One study of 78 consecutive patients undergoing laser-assisted DCR observed no incidents of bleeding or infection. For more details, refer to the Sources of evidence.

2.4.2 The Specialist Advisors stated that infection was a potential adverse event, and that scar tissue formation at the site of the laser beam caused lower success rates.

2.5 Other comments

2.5.1 It was noted that the impact of using a silicone tube to maintain patency was uncertain.

2.5.2 The evidence on this procedure related to adults. The treatment of the watering eye in infants was not considered.

Andrew Dillon
Chief Executive
February 2005

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, in English and Welsh, from www.nice.org.uk/IPG113publicinfo

Sources of evidence

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

Interventional procedure overview of endoscopic dacryocystorhinostomy, August 2004.

Available from: www.nice.org.uk/IP022overview

Ordering information
Copies of this guidance can be obtained from the Department of Health Publications Order Line by telephoning 0870 1555 455 and quoting reference number N0816. *Information for the public* can be obtained by quoting reference number N0817 for the English version and N0818 for a version in English and Welsh.

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