NICE National Institute for Health and Care Excellence

NICE guidance

Endoscopic dacryocystorhinostomy

HealthTech guidance
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Your responsibility

This guidance represents the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take this guidance fully into account, and specifically any special arrangements relating to the introduction of new interventional procedures. The guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

All problems (adverse events) related to a medicine or medical device used for treatment or in a procedure should be reported to the Medicines and Healthcare products Regulatory Agency using the Yellow Card Scheme.

Commissioners and/or providers have a responsibility to implement the guidance, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this guidance should be interpreted in a way that would be inconsistent with compliance with those duties. Providers should ensure that governance structures are in place to review, authorise and monitor the introduction of new devices and procedures.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Contents

This guidance replaces IPG113.

1 Recommendations

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, see the overview.

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.

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, see the overview.

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.

3 Further information

Sources of evidence

The evidence considered by the committee is in the overview.

Information for patients

NICE has produced information on this procedure for patients and carers ('Understanding NICE guidance'). It explains the nature of the procedure and the guidance issued by NICE, and has been written with patient consent in mind.

Update information

Minor changes since publication

January 2026: Interventional procedures guidance 113 has been migrated to HealthTech guidance 68. The recommendations and accompanying content remain unchanged.

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Endorsing organisation

This guidance has been endorsed by Healthcare Improvement Scotland.