

Selective peripheral denervation for cervical dystonia

1 Guidance

- 1.1 Current evidence on the safety and efficacy of selective peripheral denervation for cervical dystonia appears adequate to support the use of this procedure provided that the normal arrangements are in place for consent, audit and clinical governance.
- 1.2 The procedure should be performed by a multidisciplinary team in a specialist neurosurgical unit.
- 1.3 Patient selection for this procedure is important. Patients should be offered the procedure only when their disease has become refractory to best medical treatment.

2 The procedure

2.1 Indications

- 2.1.1 Cervical dystonia is a condition in which the muscles of the neck contract painfully and cause twisting of the head. The head may be pulled backwards (retrocollis), forwards (anterocollis) or to the side (torticollis), depending on which muscle groups are affected. This muscle spasm may occur intermittently or continuously. The cause of cervical dystonia is not known. In children, it is sometimes associated with congenital abnormalities of the shape of the head or of the spine, but it may occur at any age. Cervical dystonia may persist for several years, or sometimes for life. Some patients recover spontaneously.

- 2.1.2 Standard treatment for cervical dystonia includes physiotherapy, drugs to reduce spasm, injections of botulinum toxin, and brain surgery. Selective peripheral denervation may be an alternative, especially for people who have not responded to other treatments.

2.2 Outline of the procedure

- 2.2.1 Selective peripheral denervation is a surgical procedure that varies according to the muscle groups affected. It is performed under general anaesthetic and involves cutting, through a skin incision, the nerves that supply the affected muscles. Sometimes the muscles themselves may be divided.

2.3 Efficacy

- 2.3.1 The evidence was limited to one systematic review and several case series studies. The review found no controlled studies and no reliable evidence to compare the procedure with other treatments. Two of the larger case series studies found 'very good to excellent' results in 88% (228/260 and 182/207) of patients at follow-up. However, the time to follow-up and how these outcomes were assessed were not specified in either of these two studies. For more details, refer to the Sources of evidence (see overleaf).
- 2.3.2 One Specialist Advisor noted that careful patient selection should improve the efficacy of the procedure.

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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. Health professionals are expected to take it fully into account when exercising their clinical judgement. This guidance does not, however, override the individual responsibility of health professionals to make appropriate decisions in the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

2.4 Safety

- 2.4.1 The largest case series study identified reported the following complications: occasional tic-like pain (1%, 3/260); tonsillar abscess (0.4%, 1/260); transient swelling of the neck in a few patients (number not specified); and pins and needles or sensation of tightness or fullness in a few patients (number not specified). For more details, refer to the Sources of evidence (see right).
- 2.4.2 The Specialist Advisors listed potential adverse events as difficulty in swallowing, as well as the usual potential complications of surgery, such as infection and haemorrhage.

2.5 Other comments

- 2.5. It was noted from the evidence that almost all patients suffered some sensory loss.
- 2.5.2 There was good long-term follow-up.

Andrew Dillon
Chief Executive
August 2004

Information for the Public

The Institute 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/IPG080publicinfo

Sources of evidence

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

Interventional procedure overview of selective peripheral denervation for cervical dystonia, December 2002

Available from: www.nice.org.uk/ip083overview

Ordering information

Copies of this guidance can be obtained from the NHS Response Line by telephoning 0870 1555 455 and quoting reference number N0662. *Information for the Public* can be obtained by quoting reference number N0663 for the English version and N0664 for a version in English and Welsh.

The distribution list for this guidance is available on the NICE website at URL www.nice.org.uk/IPG080distributionlist

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