Needle fasciotomy for Dupuytren’s contracture

1 Guidance

1.1 Current evidence on the safety and efficacy of needle fasciotomy for Dupuytren’s contracture appears adequate to support the use of the procedure, provided that normal arrangements are in place for consent, audit and clinical governance.

2 The procedure

2.1 Indications

2.1.1 Dupuytren’s contracture is a benign, slowly progressive condition of unknown origin. The disease is characterised by a thickening of the connective tissue in the palm of the hand, leading to difficulties in extending the fingers.

2.1.2 Most individuals with Dupuytren’s contracture are affected in both hands. The most commonly involved digit is the ring finger, followed by the little finger and then the middle finger.

2.1.3 Treatment seeks to restore hand function and prevent progression, because the underlying disease will remain. Both surgical and non-surgical options exist. Data are lacking on the effectiveness of most non-surgical treatments for Dupuytren’s contracture, such as vitamin E cream and ultrasonic therapy.

2.2 Outline of the procedure

2.2.1 Needle fasciotomy is an outpatient procedure in which one or more fibrous bands (contractures) are divided using a blade or the bevel of a needle. The procedure can be performed in either the palm or the fingers.

2.3 Efficacy

2.3.1 On the basis of the evidence, the main benefit offered by this procedure is a short-term reduction in the degree of contracture. Recurrence rate is approximately 50% at 3–5 years and seems to depend on the severity of the disease. Some data also suggest that individuals with less severe disease and/or with metacarpophalangeal joint contracture benefited most from this procedure. For more details, refer to the Sources of evidence (see below).

2.3.2 One Specialist Advisor commented that although the procedure was not as efficacious in the long term as open surgery, patients experienced less morbidity and had faster recovery.
2.4 Safety

2.4.1 Common complications reported in the studies included splitting of the skin, localised pain and nerve injuries. For more details, refer to the Sources of evidence (see below).

2.4.2 The Specialist Advisors listed nerve injury, tendon injury and infection as the main complications of the procedure, with one Advisor citing a complication rate of 1% or less.

2.5 Other comments

2.5.1 The importance of patient selection was noted and the procedure was considered particularly suitable for older patients who are unsuitable for more major surgery.

2.5.2 It was also noted that Dupuytren’s contracture tends to recur after all types of treatment, but that needle fasciotomy can be repeated.

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Chief Executive
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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, in English and Welsh, from www.nice.org.uk/IPG43publicinfo.

Sources of evidence

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

Interventional procedures overview for needle fasciotomy for Dupuytren’s contracture, April 2003
Available from: www.nice.org.uk/ip177overview