

Radiofrequency ablation of hepatocellular carcinoma

1 Recommendations

- 1.1 Current evidence of the safety and efficacy of radiofrequency ablation (RFA) for hepatocellular carcinoma appears adequate to support use of the procedure, provided that normal arrangements are in place for consent, audit and clinical governance.
- 1.2 It is recommended that:
 - patient selection should be carried out by a multidisciplinary team that includes a hepatobiliary surgeon
 - the procedure should be monitored by CT or ultrasound.

2 The procedure

2.1 Indications

- 2.1.1 Hepatocellular carcinoma is one of two common malignant tumours affecting the liver. The majority of malignant liver tumours are unsuitable for surgical excision because of their number, distribution and/or the presence of residual disease elsewhere. Therefore, a number of alternative treatments have been developed, of which RFA is one.

2.2 Outline of the procedure

- 2.2.1 RFA is a recently developed minimally invasive technique that destroys tissue by heating. Electrodes are inserted percutaneously into the tumour and current is applied to generate local heating and destroy tissue.

2.3 Efficacy

- 2.3.1 There is evidence that RFA results in tumour destruction, which may be associated with higher survival rates. For more details refer to the overview (see below).

2.4 Safety

- 2.4.1 Complications of RFA are not common, but include hepatic abscess and injury to bile ducts. The rate of complications appears lower than that with alternative treatments. Evidence suggests a mortality rate of 1% or less. For more details refer to the overview (see below).
- 2.4.2 The specialist advisors suggested the complication rate to be 3–5%.

Interventional Procedure Guidance 2

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.

2.5 Other comments

2.5.1 The Committee noted that there was less evidence available about the safety and efficacy of RFA in treatment of colorectal metastases. Guidance for this indication will be postponed pending the publication of a systematic review by the Australian Medical Services Advisory Committee.

Andrew Dillon
Chief Executive
July 2003

Sources of evidence considered by the Committee

The following source of evidence was considered by the Interventional Procedures Advisory Committee.

Interventional procedure overview of radiofrequency ablation for the treatment of liver tumours, October 2003

Available from:
www.nice.org.uk/cms/ip/ipcat.aspx?o=56893

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 from www.nice.org.uk/IPG002publicinfoenglish

Ordering information

Copies of this guidance can be obtained from the NHS Response Line by telephoning 0870 1555 455 and quoting ref: N0241. Information for the public can be obtained by quoting reference number N0242 for the English version and N0243 for a version in English and Welsh.

Distribution. The distribution list for this guidance is available on the NICE website at URL www.nice.org.uk/IPG002distributionlist

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