INAHTA Briefs

Issue 2002/21

Title: Lung Volume Reduction Surgery (LVRS), February 2001

Agency MSAC, Medical Services Advisory Committee

Commonwealth Department of Health and Aged Care, GPO Box 9848, Canberra ACT 2601 Australia;
tel: +61 2 6289 6811, fax: +61 2 62 6289 8799, msac.secretariat@msac.gov.au, www.msac.gov.au

Reference MSAC application 1011. Assessment report, ISSN 1443-7120.

Aim

To assess the safety and effectiveness of the procedure and under what circumstances public funding should be supported for the procedure.

Conclusions and results

Safety: The test is safe.

Effectiveness: Genotying and viral load testing are predictive of the response to interferon therapy. As patients with a high viral load and more resistant genotypes can respond to interferon therapy, the predictive value of genotyping and viral load testing is insufficient to exclude a patient from treatment. Viral testing during interferon therapy has greater predictive value than pretreatment determinations and can guide decisions to continue therapy.

Cost-effectiveness: Cost savings would occur if 15% of patients tested decided not to proceed with interferon therapy as a result of testing. Although viral load testing and genotyping is expensive, it may be cost effective with careful patient selection.

Recommendations

1. Funding should not be supported for this procedure until international clinical trial data is available.
2. Surgeons who wish to continue performing this procedure should seek in principle approval from hospital ethics committees or equivalent.
3. Patients should be informed of the risk of the procedure.

Method

MSAC conducted a systematic review of the biomedical literature from 1998 to April 2000 using biomedical electronic databases, the Internet and international health technology agency websites. The two primary sources of information were:

1. A systematic review by the University of Birmingham in 1999.
2. A systemic review of Australian Safety and Efficacy Register of New Interventional Procedures-Surgical (ASERNIP-S) in 1998.

Assessment of clinical effectiveness relied heavily on one controlled randomized trial (Geddes et al) and one controlled trial (Licker et al) that compared patients with LVRS and those receiving standard medical treatment or pulmonary rehabilitation. One UK study (Young et al) that also examined cost-effectiveness was considered as a possible framework for evaluation.

Further research

Four trials are ongoing and should report within the next 2 years: NETT (USA), CLVR (Canada), OBEST (USA), Lomas et al. (UK) and VOLREM (Sweden).

Prepared by the Centre for Clinical Effectivness, Australia