

## **Executive summary**

### **Ultrasound-assisted lipoplasty**

(Adapted from the report of the Review Group by Ms Wendy Babidge)

#### **Background**

The aim of this review was to assess the safety and efficacy of ultrasonically-assisted lipoplasty (UAL).

#### **Method**

*Search Strategy* – Three search strategies were devised to retrieve literature from the Medline, Current Contents, Embase and Cochrane Library databases up until January 1999.

*Study Selection* – Inclusion of papers was largely determined using a pre-determined protocol. English language papers were selected. Acceptable study designs included randomised-controlled trials, controlled clinical trials, case series or case reports.

*Data Collection and Analysis* – Thirty-nine papers met the inclusion criteria. They were tabulated and critically appraised in terms of methodology and design, outcomes, and the possible influence of bias, confounding and chance. Other papers were also included to provide background material.

#### **Results**

There was little high level evidence available comparing UAL and SAL, with no conclusive evidence that UAL has a safety benefit, although low quality evidence suggests that UAL is associated with reduced surgeon fatigue as well as increased operating times, slower aspiration rates and an increased learning curve. There is inadequate evidence to determine whether the theoretical potential for DNA damage from ultrasound is realised in the clinical setting.

#### **Conclusions**

The evidence base for UAL is inadequate to determine the procedure's safety and efficacy. The potential for DNA damage must be investigated with appropriate *in vivo* animal models. Recommendations for the safe use of UAL are discussed.

#### **Safety and Efficacy Classification for Ultrasound-Assisted Lipoplasty**

*2: The safety and/or efficacy of the procedure cannot be determined at the present time due to an incomplete and/or poor quality evidence-base. It is recommended that further research be conducted to establish safety and/or efficacy. An audit is required to assess both safety and efficacy.*

The ASERNIP-S Ultrasound-assisted Lipoplasty Review Group recommends that ultrasound-assisted lipoplasty should not be performed to contour female breast tissue.

## **Review Group Membership**

ASERNIP-S Director	Professor Guy Maddern
Protocol Surgeon	Mr Rodney Cooter
Advisory Surgeon	Mr Rodney Cooter
Other Specialty Surgeon	Mr George Kiroff
Nominated Surgeons	Mr Keith Mutimer, Mr David Robinson, Mr Peter Wickham
ASERNIP-S Researchers	Dr Wendy Babidge

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**Important note**      The information contained in this report is a distillation of the best available evidence located at the time the searches were completed as stated in the protocol. Please consult with your medical practitioner if you have further questions relating to the information provided, as the clinical context may vary from patient to patient.

### **For further information about ASERNIP-S**

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