

## **Executive summary**

### **Minimally invasive parathyroidectomy (2001 Update)**

(Adapted from the report of the Review Group by Dr Ann Scott)

#### **Background**

The aim of this review was to compare the safety and efficacy of less or minimally invasive parathyroidectomy techniques against the current benchmark treatment, bilateral neck exploration (BNE).

#### **Methods**

All original, published studies on less or minimally invasive laser parathyroidectomy techniques were identified by searching Medline between 1966 and 7/2000; Current Contents between 1993 and Week 35 (2000); Embase between 1980 and 8/2000; and The Cochrane Library between 1966 and 8/2000 (Issue 3). The search terms used were ((endoscop\* or (minimal\* and invasive) or unilateral) and parathyroid\*) for Medline, Current Contents and Embase, and (parathyroidectomy or parathyroid resection\*) for the Cochrane Library. Human and animal subjects were included for review. For human studies, only adult patients undergoing treatment for primary hyperparathyroidism were included. Papers that included patients with secondary or tertiary hyperparathyroidism, parathyroid carcinoma or multiple endocrine neoplasia, types I and II, were excluded.

#### **Results**

The small sample size, poor evidence quality and limited methodological rigour of many studies meant that no definitive conclusion could be made as to the safety and efficacy of scan-directed unilateral exploration, video-endoscopic parathyroidectomy or minimally invasive radio-guided parathyroidectomy in comparison to BNE. Nonetheless, the current limited evidence suggested that the less or minimally invasive parathyroidectomy procedures were likely to approach BNE in terms of safety and efficacy.

#### **Conclusion and recommendations**

The ASERNIP-S Review Group concluded that the updated evidence base for less or minimally invasive parathyroidectomy techniques was still inadequate for establishing their safety and efficacy. The original ASERNIP-S safety and efficacy classification of '2' (*the safety and efficacy of the procedure cannot be determined at the present time due to an incomplete and poor quality evidence-base*), with a recommendation for a controlled clinical trial of less or minimally invasive parathyroidectomy techniques, was upheld.

## **Review Group Membership**

ASERNIP-S Director

Protocol Surgeon

Advisory Surgeon

Nominated Surgeon

Invited Surgeon

Other Specialty Surgeon

ASERNIP-S Researcher

Professor Guy Maddern

Mr Robert Parkyn

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Mr Jonathan Serpell

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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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