00578 Cryoablation for Breast Lesions: A Rapid Review

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Aims: The aim of this review is to determine the safety, effectiveness and cost-effectiveness of cryoablation in the treatment of breast lesions, with a view to implementing it in a tertiary care hospital.

Methodology: A rapid review was performed for patients presenting with small or early stage tumours in breast or with fibrodenomas. The intervention of interest was cryoablation and the comparators were vacuum assisted surgery and radiofrequency ablation .The outcomes of interest were successful tumour resolution and complication rates.

The UK NHS Centre for Reviews and Dissemination databases, Cochrane Library, MEDLINE (PubMed) and the US National Guidelines Clearinghouse, were searched from 2000 to 2017 for systematic reviews, health technology assessment reports, clinical practice guidelines, and economic evaluations. Studies on children and adolescents were excluded. Only English publications were included.

Result: Four systematic reviews, one clinical guideline, one horizon scanning report, one recent single arm Phase II trial on breast cancer were found. One single arm study and a registry trial on breast fibrodenoma were also found.

The systematic reviews stated that the local tumour control range from 73% to 75.8%. Only minor complications, including swelling, mastalgia and necrosis, were reported. The studies noted that cryoablation can be performed in the outpatient setting, potentially reducing costs. Cryoablation was not recommended by the only clinical guideline found the treatment of breast cancer.

The studies also reported that cryoablation was effective in treating fibrodenoma, with the clinical trial showing that 93% of fibrodenomas were completely resolved one year post treatment. A clinical guideline also recommended cryoablation for the treatment of fibrodenomas.

Conclusion: The evidence for the use of cryoablation for the breast lesions is mixed. However, it is noted that the more recent studies report that the outcomes for cryoblation are improving and there are ongoing trials that may provide more evidence in the future.