

The Use of Transcutaneous and Percutaneous Ablation for the Treatment of Benign and Malignant Tumors of the Breast

Purpose

To outline current data on transcutaneous and percutaneous ablation methods for treatment of benign and malignant tumors of the breast.

Associated ASBrS Guidelines or Quality Measures

1. Concordance Assessment of Image-Guided Breast Biopsies and Management of Borderline or High-Risk Lesions – Revised November 6, 2016
2. Image-Guided Percutaneous Biopsy of Palpable and Non-palpable Breast Lesions – Revised November 7, 2017

Methods

Literature review inclusive of recent randomized controlled trials evaluating the use of transcutaneous and percutaneous ablation methods of treating benign and malignant tumors of the breast. This is not a complete systematic review but a comprehensive review of the modern literature on the subject. The ASBrS Research Committee developed a consensus document which was reviewed and approved by the ASBrS Board of Directors.

Summary of Data Reviewed

1. **Indications for percutaneous treatment of benign tumors of the breast (fibroadenoma):** The malignant potential of fibroadenomas is low, thus treatment of a biopsy proven, clinically benign fibroadenoma is not required on an oncologic basis. However, for some patients, these tumors can be bothersome and most surgeons will respect an informed patient's preference for treatment. Traditional open excisional biopsy is effective treatment, but results in a scar. Two percutaneous treatments have also been investigated in the United States and abroad and have been found to be similar in efficacy to open surgical excision. Importantly, percutaneous treatments, result in produce only a small scar from the placement of the biopsy device or treatment probe: ultrasound guided cryoablation¹⁻⁴ and ultrasound guided percutaneous excision.^{5, 6} Both cryoablation and ultrasound guided therapeutic excisional vacuum assisted biopsy are approved by the U.S. Food and Drug Administration for excision of small benign fibroadenomas.