

Cryotherapy for Benign Breast Lesions Preliminary Results of a Single Center Experience



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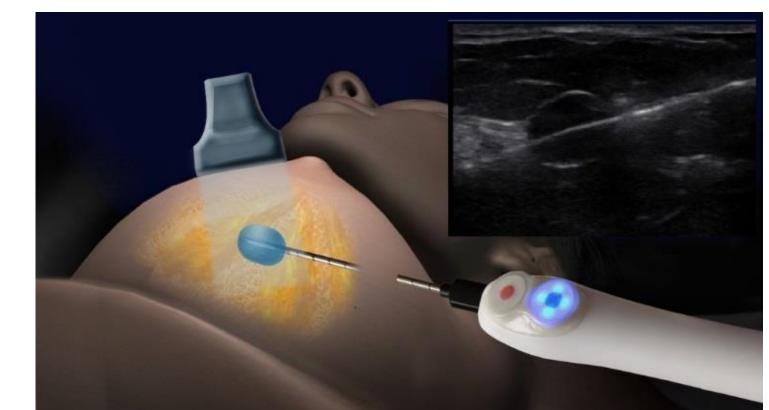
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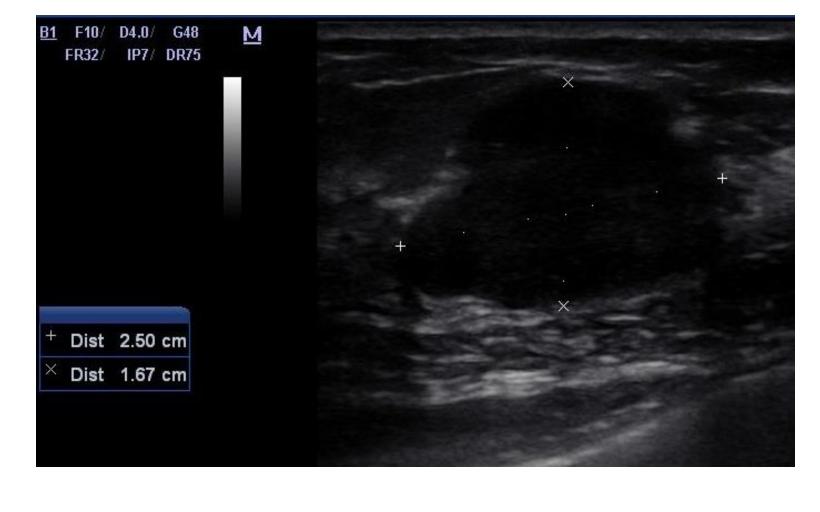
Background

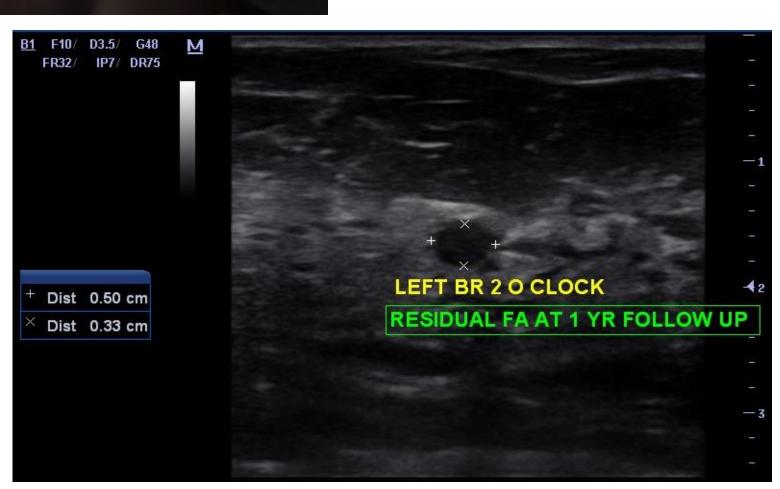
- Fibroadenomas are one of the most common benign breast lesions, especially among younger patients below age 30.
- > Alternatives to open surgery include tumor removal using automated coring device and tumor ablation using cooling elements.
- The aim of this study was to assess effectiveness of using cryoablation under ultrasound guidance in the office setting as treatment for biopsy proven benign breast lesions.

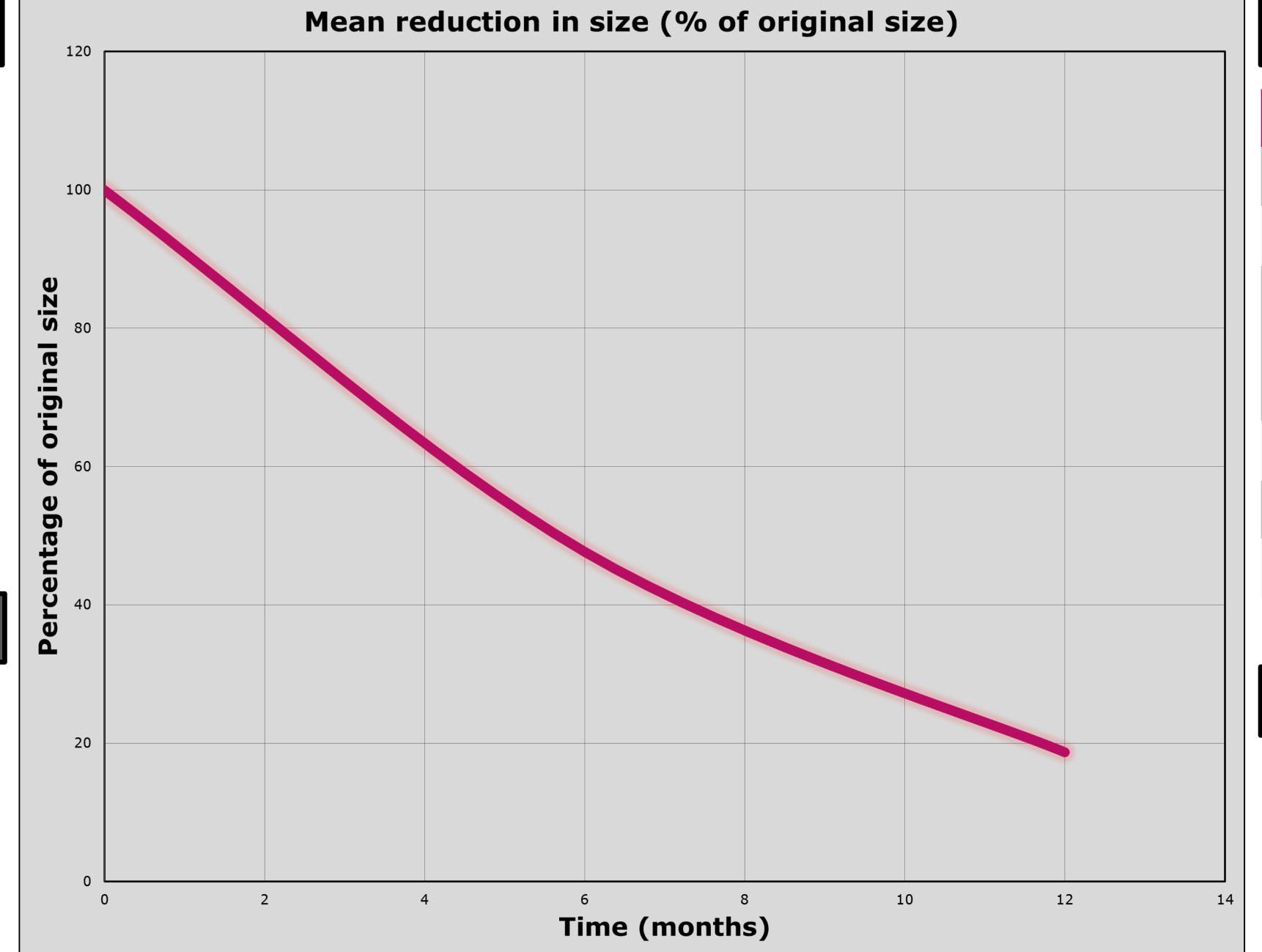
Methods

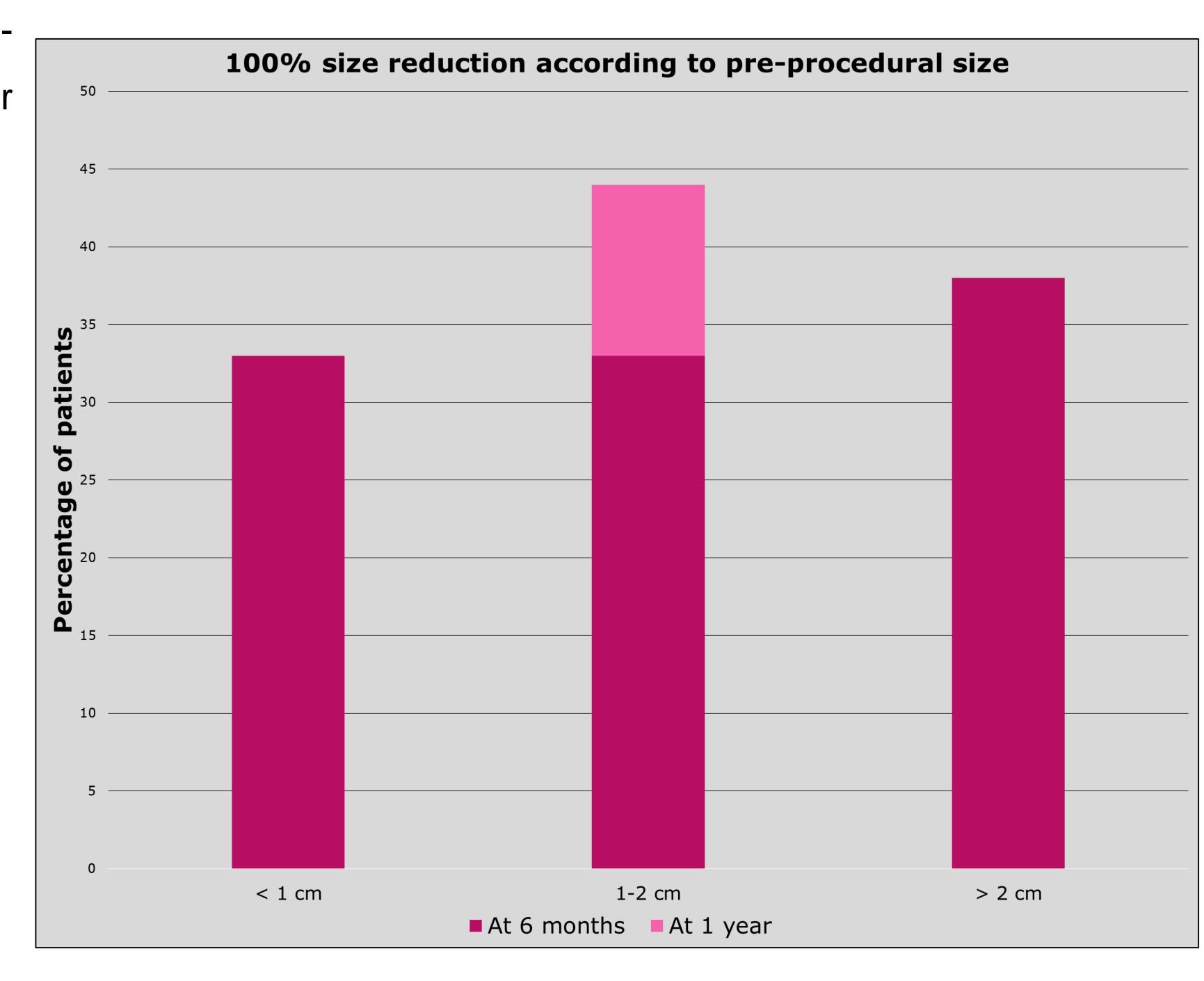
- ➤ Retrospective analysis of a prospective database of all ultrasound guided cryoablation procedures performed for biopsy proven benign breast lesions at a single center between September 2016 and January 2019.
- ➤ Procedure: Visica 2TM treatment system used with standard freethaw-freeze cycle as recommended for benign lesions under ultrasound guidance.
- > Data collected: age, BMI, ethnicity, size of the breast lesion.
- Follow up: clinical exam and ultrasound every 6 months.











Results	
Characteristic	
Mean (SD) age	31.5 (11.5) years
Mean (SD) BMI	25.6 (4.54)
	9 (47.4%) Hispanic 7 (36.8%) White 3 (15.8%) Asian
Mean (SD) size pre-treatment	19.1 mm
Mean (SD) reduction in size at 6 months	52.3% (35.4%)
Patients with 100% resolution	7 (36.8%)

Conclusion

- ➤ Using office based cryoablation for the treatment of benign breast lesions is safe and cost-effective.
- ➤ Lesions with pre-treatment size less than 20 mm have the highest rate of complete resolution at 6 and 12 months.
- ➤ Larger studies are warranted to identify the size cut-off and timing of complete resolution.

References

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- ➤ [2] Lieberman L, Zakowski MF, Avery S, et al. Complete percutaneous excision of infiltrating carcinoma at stereotactic breast biopsy: how can tumor size be assessed? *Am J Roentgenol.* 1999; 173: 1315-1322.
- > [3] Staren ED, Sabel MS, Gianakakis LM, et al. Cryosurgery of breast cancer. *Arch Surgery.* 1997; 132: 28-33.