Patient Satisfaction Rates Following Tumor Ablation Procedures Across Various Tumor Types

Authors: Ankit Patel, Satya K. Morar, MHM, Mina S Makary, MD

Institutions: Northeast Ohio Medical University, Case Western Reserve University Wexner Medical Center, Department of Vascular and Interventional Radiology

Purpose

Tumor ablations have emerged as a popular procedure for the treatment of solid malignancies, with many patients expressing high satisfaction with their treatment. This exhibit will review patient satisfaction rates for tumor ablations in the treatment course of multiple tumor types and discuss possible avenues for improving patient satisfaction.

Materials and Methods

A review of randomized control and clinical trials published between 2015 and 2025 investigating post-ablation patient satisfaction on Pubmed was performed to evaluate the following:

- 1. Patient reports and opinions regarding ablation procedures through results from satisfaction surveys conducted during the post-operative period
- 2. Expert opinion on future directions to improve satisfaction scores

Tumor Ablation

Thyroid Nodule Ablation

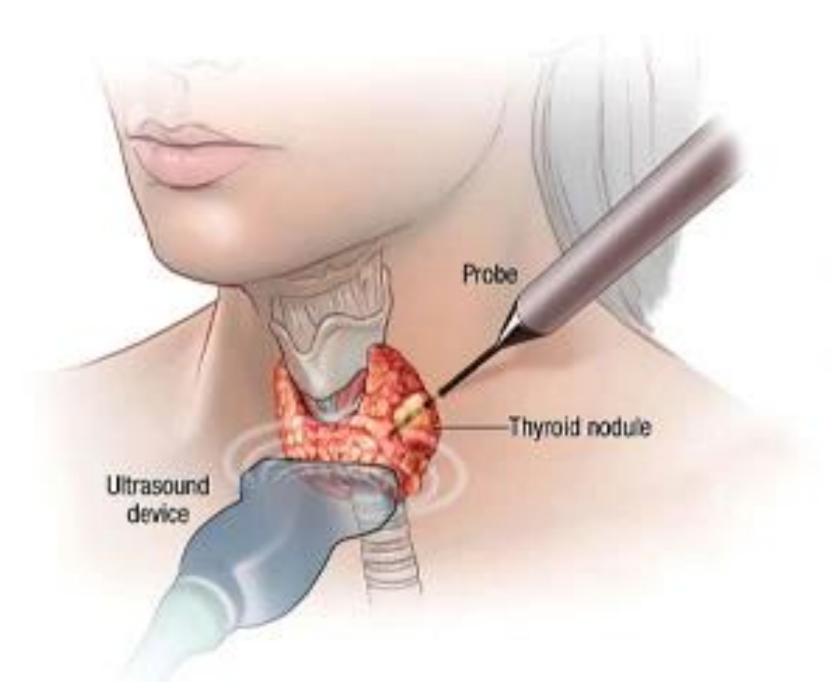


Fig 1. Diagram of thyroid nodule ablation procedure (Anandpara, K. (2024). *Thyroid Nodule Ablation*. Heart and Vascular Superspecialty Hospitals. Retrieved 2025, from https://www.hvshospitals.com/thyroid-nodule-ablation.)

Results

- Overall, variations in reported patient satisfaction were observed between tumor types
- Patients that underwent ablation for breast cancers generally reported more favorable outcomes, regardless of specific ablation procedure
- Patients that underwent thermal ablations for thyroid neoplasms reported more mixed satisfaction reports

Table 1: Patient-Reported Satisfaction Outcomes Following Ablation of Different Tumor Types

Study	Tumor Type	Studied Procedure	Control Procedure	Means of Outcome Measurement	Findings
Wooldrik et. al	Breast	Percutaneous Thermal Ablation	N/a	Patient Satisfaction Questionnaire	94% of patients reported being either "satisfied" or "very satisfied", 95% would recommend the technique to others, and 90% would choose an ablation procedure over conventional surgery
Galata et. al	Breast	Cryoablation	N/a	Patient Satisfaction Questionnaire	All of their patients responded favorably to questions regarding post-operative pain and aesthetic appearance. No reported complication were reported.
Bo et. al	Thyroid	Thermal Ablation	Endoscopic Thyroidectomy, Conventional Thyroidectomy	Telephone Survey	No significant differences in patient satisfaction rates
Kuo et. al	Thyroid	Thermal Ablation	Transoral Endoscopic Thyroidectomy Vestibular Approach	Clinician Grading at Regularly Scheduled Follow-up Appointments	Significantly greater satisfaction rates in the endoscopic thyroidectomy group

Conclusion

Tumor ablations have been shown to yield superior satisfaction outcomes to surgical alternatives. However, these findings are not yet universal, as some studies have not identified improvements in satisfaction rates. Expert-suggested solutions to this phenomenon include increasing general practitioner referrals to IR, as well as increased screening and consultation efforts in outpatient IR settings prior to inpatient elective procedures. Overall, more research is needed both in the evaluation and improvement of patient satisfaction following minimally-invasive ablation procedures.

References

1. Wooldrik, SophieM., van de Voort, EllesM. F., Struik, GersonM., Schouten, BartJ. M., Wilhelmus, S., Birnie, E., van Dalen, T., Verhoef, C., & Klem, TacoM. A. L. (2025). Cosmetic outcome and patient satisfaction following percutaneous thermal ablation of early-stage breast cancer; results of an open label Randomized Phase 2 trial. *European Journal of Surgical Oncology*, *51*(10), 110305. https://doi.org/10.1016/j.ejso.2025.110305

2. https://eurradiolexp.springeropen.com/articles/10.1186/s41747-024-00515-

4#Sec12
3. Bo, X.-W., Lu, F., Yu, S.-Y., Yue, W.-W., Li, X.-L., Hu, M., Wu, L.-L., Lv, Z.-Y., Sun, L.-P., & Xu, H.-X. (2022). Comparison of efficacy, safety, and patient satisfaction between thermal ablation, conventional/open thyroidectomy, and endoscopic thyroidectomy for symptomatic benign thyroid nodules. *International Journal of*

https://doi.org/10.1080/02656736.2022.2040608

Hyperthermia, 39(1), 379–389.

4. Kuo, T.-C., Chen, K.-Y., Lai, C.-W., Wang, Y.-C., Lin, M.-T., Chang, C.-H., & Wu, M.-H. (2024). Comparison of safety, efficacy, and patient satisfaction with thermal ablation versus endoscopic thyroidectomy for benign thyroid nodules in a propensity-matched cohort. *International Journal of Surgery*, *110*(5), 2568–2576. https://doi.org/10.1097/js9.000000000001201

5. Anandpara, K. (2024). *Thyroid Nodule Ablation*. Heart and Vascular Superspecialty Hospitals. Retrieved 2025, from https://www.hvshospitals.com/thyroid-nodule-ablation.

6. Lutjeboer, J., Burgmans, M. C., Chung, K., & van Erkel, A. R. (2015). Impact on patient safety and satisfaction of implementation of an outpatient clinic in interventional radiology (IPSIPOLI-Study): A quasi-experimental prospective study. *CardioVascular and Interventional Radiology*, *38*(3), 543–551. https://doi.org/10.1007/s00270-015-1069-4

7. Cazzato, R. L., de Rubeis, G., de Marini, P., Auloge, P., Dalili, D., Weiss, J., Koch, G., Rao, P. P., Boatta, E., Garnon, J., & Gangi, A. (2020). Interventional Radiology Outpatient Clinics (IROC): Clinical impact and patient satisfaction. *CardioVascular and Interventional Radiology*, *44*(1), 118–126. https://doi.org/10.1007/s00270-020-02677-1