



## Radiofrequency ablation offers new treatment options in the elderly breast cancer patient

Bob G. Looij, Gerrit J. Jager & Matthieu J. C. M. Rutten

**To cite this article:** Bob G. Looij, Gerrit J. Jager & Matthieu J. C. M. Rutten (2008)  
Radiofrequency ablation offers new treatment options in the elderly breast cancer patient,  
Acta Oncologica, 47:6, 1156-1156, DOI: [10.1080/02841860802060851](https://doi.org/10.1080/02841860802060851)

**To link to this article:** <https://doi.org/10.1080/02841860802060851>



Published online: 08 Jul 2009.



Submit your article to this journal [↗](#)



Article views: 490



View related articles [↗](#)

## LETTERS TO THE EDITOR

### Radiofrequency ablation offers new treatment options in the elderly breast cancer patient

BOB G. LOOIJ, GERRIT J. JAGER & MATTHIEU J. C. M. RUTTEN

*Department of Radiology, Jeroen Bosch Hospital, 's-Hertogenbosch, The Netherlands*

#### To the Editor

Bernardi et al. [1] conducted an excellent review of the literature-based evidence concerning the treatment of breast cancer in older women.

They briefly outlined the dilemma of choosing the appropriate treatment in this group of patients. The gain of life expectancy of standard therapies may be predominated by the morbidity and mortality of surgery due to coexistent diseases. On the other hand under-treatment is a subject of concern because it has been linked to higher rates of breast cancer recurrence and mortality in this group of patients [2].

We would like to give an addition to this article, because the new therapies discussed are focussed on medical treatment and the newer minimally invasive non-surgical ablation therapies such as radio frequency ablation (RFA) remain unmentioned.

RFA works by transforming radio frequency energy into heat, which causes local tumor destruction with relatively sparing of adjacent healthy tissue. RFA has demonstrated to be effective and relatively safe in the treatment of non-resectable hepatic tumors, renal cell carcinoma, some forms of lung carcinoma, bone tumors and other tumors [3].

Several pilot and feasibility studies show that RFA is a safe procedure and it provides good local tumor control in small (<2 cm) breast carcinoma with an ablation ratio of 80–100% [4]. RFA can be applied in combination with standard treatment such as radiotherapy, chemotherapy and/or hormonal therapy. The treatment can be performed in an outpatient setting under local subcutaneous lidocaine injection combined with epidural anesthesia. It could be an

alternative for surgical treatment in those patients in whom classical anesthesia is contra-indicated.

Currently two case series are reported with total of seven elderly patients, who are no candidate for conventional therapy for several reasons. These studies show promising results with local control and the absence of vital tumors within a period of 18 and 29 months follow-up [5,6].

In summary, RFA offers new opportunities in the treatment of the elderly breast cancer patients who are no candidate for surgery due to co-morbidity, but larger trials are needed to confirm these preliminary results.

#### References

- [1] Bernardi D, Errante D, Galligioni E, Crivellari, Bianco A, Salvagno L. Treatment of breast cancer in older women. *Acta Oncol* 2008;47:187–98.
- [2] Bouchardy C, Rapiti E, Fioretta G, Laissue P, Neyroud-Caspar I, Schäfer P, et al. Undertreatment strongly decreases prognosis of breast cancer in elderly women. *J Clin Oncol* 2003;21:3580.
- [3] Fornage BD, Sneige N, Ross MI, Mirza AN, Kuerer HM, Edeiken, et al. Small (<or=2-cm) breast cancer treated with US-guided radiofrequency ablation: Feasibility study. *Radiology* 2004;231:215–24.
- [4] van der Ploeg IM, van Esser S, van den Bosch MA, Mali WP, van Diest PJ, Borel Rinkes IH, et al. Radiofrequency ablation for breast cancer: A review of the literature. *Eur J Surg Oncol* 2007;33:673–7.
- [5] Marcy PY, Magne N, Castadot P, Bailet C, Namer M. Ultrasound-guided percutaneous radiofrequency ablation in elderly breast cancer patients: Preliminary institutional experience. *Br J Radiol* 2006;80:267–73.
- [6] Susini T, Nori J, Olivieri S, Livi L, Bianchi S, Mangialavori G, et al. Radiofrequency ablation for minimally invasive treatment of breast carcinoma. A pilot study in elderly inoperable patients. *Gynecol Oncol* 2006;104:304–10.