In reply

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To the Editor,

We thank Looij et al. [1] for their comment on our review [2], dealing with local treatment for older patients affected by breast cancer.

The role of RFA has not yet been established in this setting of patients, due to its very restricted use and because there are more valuable alternatives to the local surgical treatment in those older patients with breast cancer who cannot tolerate classical anesthesia. For instance, we mentioned the results of randomized studies comparing hormonal treatment versus surgery+hormonal treatment. In particular, Mustacchi et al. [3], reported that tamoxifen alone is an adequate alternative treatment in very old or frail patients and that surgery (radical or minimal) followed by adjuvant tamoxifen did not modify overall and breast cancer survival as compared with tamoxifen alone in early breast cancer in older women.

The use of RFA is limited by the fact that it has been shown to provide good local control when tumour size does not exceed 2 cm; tumours of such size or smaller are more commonly observed in younger patients, undergoing screening programs that usually exclude older women. There are other important limitations in using RFA to treat patients with early-stage breast carcinoma [4]. Ultrasonographic monitoring of the RFA treatment does not provide accurate measurement of the histopathologic zone of complete coagulative necrosis. There are no data on the long-term morphologic changes in the tumour and surrounding breast tissue after RFA. Superficial tumours close to the skin probably should not be treated with RFA because of the risk of thermal injury to the skin. Furthermore, many patients will be candidates for adjuvant breast irradiation, which will complicate further the local healing process after RFA. Another issue relates to the marked heterogeneity in breast size and composition of fatty and stromal elements between individual patients. RFA treatment time and efficacy may be affected by differences in breast tissue composition, vascularity, inflammatory conditions, or by the location of tumours near the chest wall or axilla. RFA may increase patient anxiety about the presence of tumour cells in the treated breast, because there is uncertainty whether all tumour cells have been ablated [5]. One more problem of RFA is the inability to assess the margins of the treated lesion. Finally, regardless of cosmetic effect, the ultimate assessment will be oncologic effectiveness of RFA compared with complete margin negative resection of breast carcinoma.

The success of RFA depends on patient selection and accurate imaging. RFA is currently contraindicated in women with evidence of multifocal or multicentric tumours, or in women with biopsy-proven evidence of extensive DCIS or lobular cancer. In order to allow full deployment of the electrode tips and to avoid skin burns, the tumour should be located at least 1 cm from the chest wall and from the surface of the breast [6].

Given all these limitations, the use of RFA is still at a developmental stage, with researchers exploring ways in which this technology will be most valuable. Many questions still need to be answered and clinical trials will be needed to provide answers to these questions, and determine if local ablative therapies like RFA will really be the next step forward in the management of breast cancer [6].

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