VIDEO REPORT

Breast Cancer Treatment with Targeted Intraoperative Radiotherapy

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Video Report Online
http://youtu.be/fF_W_GmVcSU

Discussion

Targeted intraoperative radiation with INTRABEAM is a risk-adapted individualised therapy. The 30-minute irradiation procedure is performed during the operation immediately after the tumor is excised. During this procedure, the isotropic dose distribution is applied directly into the tumor cavity using a spherical applicator in a way that ensures direct contact with the target tissue. Radiation is applied precisely to the area with the highest risk of tumor recurrence. The surrounding healthy tissue is spared.

TARGIT single fraction treatment for breast cancer:

Radiotherapy administered in 30 minutes instead of six weeks

The targeted, intraoperative single dose of radiation with INTRABEAM is on the way to becoming the new treatment standard of care for breast cancer. This risk-adapted therapeutic solution makes it possible for a patient cohort with a favorable prognosis to complete surgery and irradiation in a single session. Traditional
radiotherapy, including the stress of protracted treatment regimes, is eliminated for these patients. In situations, in which definitive irradiation cannot be performed, such as local recurrence, the TARGIT single dose of radiation also provides an opportunity for a second attempt at breast-preserving therapy.1

Study verifies effectiveness of the TARGIT single radiation dose

The results of a multinational, randomized clinical study (TARGIT A) of 2,232 patients at 28 centers in nine countries verifies: for patients with a favorable prognosis, the intraoperative, targeted radiotherapy (TARGIT) with INTRABEAM is equivalent to traditional external beam radiotherapy (EBRT) for invasive ductal mammary carcinomas. After a follow-up of 4 years, no statistically significant difference was established between the rate of local recurrence (primary endpoint) in EBRT and TARGIT. A collective with a favorable risk profile (median age 63 years, median tumor size 13 mm, 83% pN0, 91% estrogen receptor positive) was treated.2

Tolerance in the TARGIT single fraction cohort

Both study groups in the TARGIT-A study showed good tolerance of the radiotherapy. More seroma aspirations were carried out in the TARGIT Arm; however, there were fewer radiation-induced skin complications in this group. The results of the study show that the TARGIT treatment is a safe method.

Targeted irradiation allows second breastconserving therapy

A special case is the treatment of patients in whom a tumor recurrence is found in an already treated breast. Here, thanks to the targeted irradiation of the tumor bed and the protection of the surrounding tissue, the therapy with the INTRABEAM can offer the patient the possibility of a second breast-conserving treatment.3,4

Key advantages for patients with lower risk profile

• Reduction of the radiotherapy treatment duration to around 30 minutes.
• Targeted irradiation of the tissue of interest, avoiding collateral damage.

• Less physical and psychological stress on patients.

• Time and cost savings.

References


