

BREAST CANCER AND THE OLDER WOMAN

Is radiation necessary?



By Dr Justus Appfelstaedt, specialist surgeon with an interest in breast, thyroid and parathyroid health as well as soft tissue surgical oncology.

Downscaling of treatment has been a buzzword in breast cancer treatment for the last couple of years. It means that medical, surgical and radiation oncologists have learnt that in the quest for long-term survival, many patients were overtreated.

A recent paper¹ in *Clinical Interventions in Aging* investigated various therapies for breast cancer in women over the age of 65 and came to the conclusion that, 'In an era of population ageing, clinical decisions should be optimized based on several factors rather than patients' age alone. These factors are related to patients' comorbidities, performance status, life expectancy and tumor pathological and molecular characteristics.' In other words, treatments such as chemotherapy and radiation with their plentiful significant side-effects should be administered only after careful deliberation of the potential benefit they can have for the patient.

Selection criteria for radiotherapy after surgery in the elderly have been refined and subgroups identified, in whom radiotherapy may safely be avoided. These are women with small tumors that are strongly oestrogen receptor positive and where nodes are not infiltrated. These patients present a sizable group of the 65+ year old breast cancer patients.

But the news is also good for patients who do not fulfil these criteria.

Current radiation regimens that are less onerous than the standard 25 – 32 daily radiation sessions are on the scene; and proven to be effective.

These are:

1. Accelerated whole-breast radiation where radiation of the whole breast is compressed into 15 daily sessions.
2. Accelerated partial breast irradiation regimens where only the quadrant of the breast where the tumor had been removed is radiated in 5 to 10 sessions².
3. Intraoperative radiation where the tumor bed is irradiated with a single dosage during surgery.³

¹ [Clin Interv Aging](#). 2022; 17: 1445–1460.

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² [Shortened radiation therapy schedules for early-stage breast cancer: a review of hypofractionated whole-breast irradiation and accelerated partial breast irradiation](#).

Shaitelman SF, Khan AJ, Woodward WA, Arthur DW, Cuttino LW, Bloom ES, Shah C, Freedman GM, Wilkinson JB, Babiera GV, Julian TB, Vicini FA. *Breast J*. 2014 Mar-Apr;20(2):131-46. doi: 10.1111/tbj.12232. Epub 2014 Jan 31.

³ *Int J Surg* 2016 Sep;33 Suppl 1:S88-91.

doi: 10.1016/j.ijsu.2016.05.046. Epub 2016 May 30. Intraoperative radiotherapy in elderly patients with breast cancer: Is there a clinical applicability? Review of the current evidence

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These newer regimens have been shown to be as effective as the lengthy traditional regimes while making radiation for those who need it much more accessible.

In the older patient, treatment selection is much more complex than in the young. A naturally declining life expectancy meets with pre-existing, other diseases such as hypertension, heart problems and diabetes, which often limit therapeutic options.

On the other hand, the treatment team must not undertreat as uncontrolled cancer with its accompanying open, smelly wounds increase social isolation and is problematic in nursing home care. Therefore, a seasoned treatment team that is familiar with the latest scientific advances is needed to assess the patient's tumor and its aggressiveness, the patient's general constitution and their socio-economic environment to avoid the opposing traps of under- and overtreatment.

As a surgeon who has worked in the field for 3 decades and been responsible for the treatment of more than 10 000 women with breast cancer, I truly believe that research is a guide, and each patient needs to be seen as an individual case. We cannot treat everyone the same way.

Risk of breast cancer increases with age and treating older patients can often be tricky. A patient who has long life expectancy due to genetics and overall good health should be given all the treatments that they can afford and that their bodies can handle – including radiation. If there is long life expectancy, then the cancer should be treated aggressively (as we would do with much younger patients who have breast cancer). While for a patient who is at greater risk for other ailments like heart disease or a stroke, who doesn't have a very long-life expectancy, the indication for radiotherapy should be examined critically, as it may be unnecessary and could do more harm than good.

The side effects of the treatments can be detrimental to even the young and fit, making them that much harder to manage when the body is older. It's an ongoing balance that the patients have to manage closely with their doctors. Factors to be considered over and above side effects and the expected survival benefit are: the ability to self-manage regular medications, support systems at home and often whether they are fighting more than one major health issue at the same time. While 'de-escalation of treatment' is an overhyped buzzword that may create overly optimistic expectations, we have found that in comparison to 20 years ago we can safely de-escalate treatment in about 80 – 90% of patients. Unfortunately, there are 10 – 20% of patients, in whom treatment has to be intensified. I therefore prefer the term 'individualization' of treatment.

Older women are at greater risk of developing breast cancer but with early detection and carefully managed treatment breast cancer, therapy in the elderly can be particularly rewarding as good results are often easily obtainable with less aggressive therapy than in younger patients.



About the author

Dr Justus Apffelstaedt is a former Professor of Surgery and Head: Surgical Oncology Service, University of Stellenbosch. Dr Justus Apffelstaedt earned a Medical Degree and a Doctorate in Medicine in Germany, as well as an MMed and FCS(SA) in South Africa and an MBA from Bond University in Australia.

He has represented developing countries on the Breast Surgery International (BSI) council and is a founding member and first chairman of the Breast Interest Group of Southern Africa (BIGOSA).

He is a fellow and life member of the International Union Against Cancer (UICC) Fellows.

He is excellent at translating complex medical terminology into easily understood language and is a proponent of proactive breast health management through extensive dissemination of information to the general public.

His breast service is the only one in Africa to publish peer-reviewed data comparable to international breast practices in breast screening. He is also the author and co-author of several publications in peer-reviewed national and international journals on breast cancer screening and breast health issues.

His current interest and field of practice includes breast health, thyroid, parathyroid and soft tissue tumours.

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