



Original article

Portrait, treatment choices and management of breast cancer in nonagenarians: An ongoing challenge



Benoite Méry^a, Avi Assouline^b, Romain Rivoirard^a, Claire Bosacki^a, Pierre Auberdiaç^c, Alexander T. Falk^d, Jane-Chloé Trone^e, Jean-Baptiste Guy^e, Jean-Philippe Jacquin^a, Yacine Merrouche^a, Cyrus Chargari^f, Nicolas Magné^{e,*}

^a Département de Medical Oncology, Institut Lucien Neuwirth, St. Priest en Jarez Cedex, France

^b Département de Radiothérapie, Clinical Center of Porte de Saint Cloud, Boulogne-Billancourt, France

^c Département de Radiothérapie, Clinique Claude Bernard, Albi, France

^d Département de Radiothérapie, Centre Antoine Lacassagne, Nice, France

^e Département de Radiothérapie, Institut Lucien Neuwirth, St. Priest en Jarez Cedex, France

^f Département de Radiothérapie, Instruction Armed Val-de-Grace Hospital, Paris 75230, France

ARTICLE INFO

Article history:

Received 10 November 2013

Received in revised form

4 March 2014

Accepted 17 March 2014

Available online 13 April 2014

Keywords:

Breast cancer

Nonagenarians

Elderly

Radiation therapy

ABSTRACT

There are only scarce data on the management of nonagenarians with breast cancer, and more particularly on the place of radiation therapy (RT). We report a retrospective study on patients aged 90 years old or older, with breast cancer, receiving RT.

Records from RT departments from five institutions were reviewed to identify patients 90 years old of age and older undergoing RT over past decade for breast cancer. Tumors' characteristics were examined, as well treatment specificities and treatment intent.

44 patients receiving RT courses were identified, mean age 92 years. Treatment was given with curative and palliative intent in 72.7% and 27.3% respectively. Factors associated with a curative treatment were performance status (PS), place of life, previous surgery, and tumor stage. Median total prescribed dose was 40 Gy (23–66). Hypo fractionation was used in 77%. Most toxicities were mild to moderate. RT could not be completed in 1 patient (2.3%). No long-term toxicity was reported. Among 31 patients analyzable for effectiveness, 24 patients (77.4%) had their diseased controlled until last follow-up, including 17 patients (54.8%) experiencing complete response. At last follow-up, 4 patients (12.9%) were deceased, cancer being cause of death for two of them.

The study shows that breast/chest RT is feasible in nonagenarians. Although the definitive benefit of RT could not be addressed here, hypofractionated therapy allowed a good local control with acceptable side effects.

© 2014 Elsevier Ltd. All rights reserved.

Introduction

Breast cancer is a major source of morbidity and mortality in elderly women and an increasing healthcare issue [1,2]. The number of persons aged 90 or more in the world has increased significantly over the last two decades: from 6.714 million people in 1995, their number rose from 12.15 million people in 2013. Two-thirds of those over 85 are women [3]. In the US population,

breast cancer is relatively common among women age >80 years and older with nearly 400 cases per 100 000 women [4]. Despite the high incidence, few data are available on breast cancer characteristics, treatment choices, and survival for women age 90 years or older [5]. There is a lack of evidence on the optimal management of this group of patients because of their low enrollment in randomized clinical trials [6,7]. Treatment decisions have been largely based on studies in younger patients, which may not be applicable to nonagenarians with breast cancer. Due to their geriatric vulnerability and lack of specific guidelines, elderly breast cancer patients receive frequently less aggressive adjuvant therapies, even for node-positive cases [8–11]. Despite scarce data in nonagenarians, many series confirm that radiation therapy is well tolerated in the elderly. Besides, clinical trials show that RT after BCS compared

* Corresponding author. Département de Radiothérapie, Institut de Cancérologie Lucien Neuwirth, 108 bis, avenue Albert Raimond, BP 60008, 42271 St Priest en Jarez Cedex, France. Tel.: +33 (0) 4 77 91 74 34; fax: +33 (0) 4 77 91 71 97.

E-mail address: nicolas.Magne@icloire.fr (N. Magné).

with BCS alone reduces breast cancer recurrence among older women with early-stage disease. It could seem therefore reasonable to refer to RT only patients with life expectancy greater than 5 years and a poor prognosis tumor (large tumors, positive lymph nodes, or negative hormone receptors) [12]. The standard fractionation for curative adjuvant RT following primary surgery for early breast cancer classically delivers a dose of 50 Gy in 25 daily fractions (\pm boost) over 5 weeks. However, very old patients with poor performance status tolerate hardly such treatment without deterioration of their quality of life. Hypofractionated regimens are frequently used, to minimize the burden of a relatively protracted treatment. Randomized trials indicate that a lower total dose delivered in fewer, larger fractions is as safe and effective. However, to our knowledge, no randomized study has specifically assessed the role of hypofractionated regimens in the management of elderly breast cancer patients [13,14]. In order to provide broader clinical data about effectiveness, delivery modalities and safety of radiation therapy in nonagenarians with breast cancer, we report on our experience of 44 patients aged 90 years or older with breast cancer in five different French centers.

Materials and methods

Patients and tumors

Records from RT departments from two university hospitals and from two private centers were reviewed to identify patients who underwent RT for breast cancer over past decade and who were aged 90 years or older. Patients' characteristics (age, gender, living place, general health status) were examined, as well as tumor stage. As none of the centers involved in this study had oncogeriatric resource at this time, patients did not receive routinely an integrated oncogeriatric assessment before beginning therapy.

Treatment characteristics

Treatment intents were classified as potentially curative or palliative, according to the judgment of physician at time of therapeutic decision. The following treatment characteristics were examined: total dose, treatment duration, fractionation, and the use of concomitant radiosensitizers.

Data analysis

Toxicity was assessed weekly during the RT course using CTCAE v3.0 criteria (National Cancer Institute Common Toxicity Criteria), then at regular intervals until last follow-up. All patients were analyzed for acute toxicity, whatever follow up time. Late toxicity was any toxicity occurring more than 6 months after completion of RT. Only patients with at least three weeks follow-up were analyzed for effectiveness and survival. Effectiveness was defined according to the treatment intend. In curative intent, we examined local control at last follow up. In palliative intent, we analyzed control of symptoms.

Results

Patients

From 2003 to 2013, 44 female patients aged 90 years or older receiving breast or chest RT for a breast malignant tumor were identified, in five French institutions (two university hospitals, two private centers, one general public hospital). These patients accounted for 0.2–0.5% (depending on the institution) of all breast cancer patients receiving RT during this time interval. Although this

is a roughly estimate due to the lack of exhaustive cancer registry in our institutions in the earlier years of this time interval, about 15% of breast cancer patients with localized tumor were referred to a radiotherapist. Mean age was 92 years. Twenty-one patients (48%) had a general health status altered (PS 2–3) at the beginning of RT, according to the World Health Organization classification. Most patients were living at home. Patients' characteristics at time of RT course are given in Table 1.

Tumors and previous therapies

Histologically, most frequent breast tumors were invasive ductal carcinoma (82%), followed with invasive lobular carcinoma (6.8%), sarcoma (2.3%) and mucinous carcinoma (2.3%). Three patients (6.8%) had an invasive carcinoma without further details. Most patients (37%) presented with locally advanced (IIIB) disease. The SBR grade was mainly 2 and 3 for half of the patients. Most tumors expressed estrogen receptor (77%) or progesterone receptor (61.4%). Human epidermal growth factor receptor 2 (HER2) was expressed in only two tumors (4.5%). At time of RT, 39 patients

Table 1
Characteristics of patients and tumors.

	n	(%)
<i>Patients' characteristics</i>		
Number	44	(100)
Mean age (SD)	92 [89.1–97.8]	
Gender		
Female	44	(100)
PS		
0–1	23	(52)
2–3	21	(48)
Living place		
Home	28	(64)
Institution	10	(23)
Unknown	6	(13.6)
<i>Tumors' characteristics</i>		
<i>Histology</i>		
Invasive ductal carcinoma	36	(82)
Invasive lobular carcinoma	3	(7)
Invasive carcinoma	3	(7)
Sarcoma	1	(2)
Mucinous carcinoma	1	(2)
<i>Stage</i>		
I	4	(9)
IIA	9	(20)
IIB	8	(18)
IIIA	5	(11.4)
IIIB	16	(37)
IIIC	0	(0)
IV	1	(2)
No staging	1	(2)
<i>SBR grade</i>		
SBR 1	3	(7)
SBR 2	19	(43)
SBR3	16	(37)
Unknown	6	(14)
<i>ER status</i>		
Positive	34	(77)
Negative	9	(20)
Unknown	1	(2.3)
<i>PR status</i>		
Positive	27	(61)
Negative	16	(36)
Unknown	1	(2.3)
<i>HER2 status</i>		
Positive	2	(5)
Negative	41	(93)
Unknown	1	(2)

ER: estrogen receptor; HER2: human epidermal growth factor receptor 2; PS: performance status; PR: progesterone receptor; SBR: Scarf Bloom and Richardson; SD: standard deviation.

Download English Version:

<https://daneshyari.com/en/article/6170111>

Download Persian Version:

<https://daneshyari.com/article/6170111>

[Daneshyari.com](https://daneshyari.com)