RBSS Royal Belgian Society for Surgery

Contralateral prophylactic mastectomy:

Surgical overtreatment?

Dr. J. Lesaffer – Dr. E. Melsens

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Case – female 66 y

- Multifocal tumor, RX/US: lesion 5-8mm; MRI: 4x6x3cm
- Moderately differentiated invasive adenocarcinoma with lobular aspect
- ER 300/300, PR 105/300, HER2 0
- No familial history - no genetic counseling

- Right mastectomy + axillary dissection
- pT4b(m) N3 M0

- CT – RT – HT - Zometa

- 1 year follow-up: patient asks for CPM (without reconstruction)

Risk of CBC

0.5- 1 % / year

3- 7% / 10 years

BRCA1/2: 30– 40 % / 10 years
Without mutation, second-degree relative: 9%
Without mutation, first-degree relative: 14,7%
Bilaterally affected family member: 23,7%

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AMERICAN COLLEGE OF SURGEONS
Inspiring Quality: Highest Standards, Better Outcomes
100+years

Table 1
Proportion of surgically treated female breast cancer patients with unilateral disease undergoing bilateral mastectomy

Year of diagnosis	No. of surgically treated cases	Bilateral mastectomy	
		n	%
1998	105,864	395	0.4
1999	111,850	635	0.6
2000	120,653	933	0.8
2001	120,583	1,290	1.1
2002	121,534	1,657	1.4
2003	111,676	2,257	2.0
2004	114,327	2,657	2.3
2005	115,844	3,266	2.8
2006	120,574	4,293	3.6
2007	123,551	5,835	4.7
Total	1,166,456	23,218	–

NIH NATIONAL CANCER INSTITUTE
Surveillance, Epidemiology, and End Results Program

2002		2012
3,9%		12,7%

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Surgical overtreatment?

Bridge too far?

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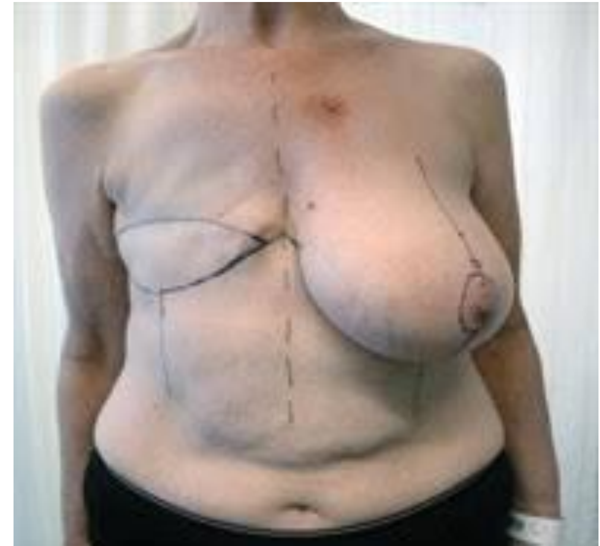
Pros



1. Risk reduction 91- 100%
2. Reduced imaging
3. Symmetry
4. Cosmetics
5. Reduced anxiety

Cons

1. Surgical complications
2. Problems with femininity and sexuality
3. Potential delay of adjuvant therapies of cancer

   (in case of an immediate resection)

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Survival?

- No prospective data

-

No difference in OS or breast cancer–specific survival

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Guidelines?

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2015

Bilateral prophylactic mastectomy:

-> Offered to women at very high risk:

1. BRCA1-2 gene mutation carriers
2. Previous chest irradiation for lymphoma

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Indications for Contralateral Prophylactic Mastectomy

A Consensus Statement Using Modified Delphi Methodology

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(*Ann Surg* 2018;267:271–279)

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1. Medically recommended:

- Unilateral breast cancer + BRCA1-2 mutation
- Unilateral breast cancer + previous Mantle field radiation

2. Case-by-case basis

- Unilateral breast cancer + CHEK2/ PTEN/ P53/ PALB2/CDH1 mutation
- Breast symmetry is a major issue after unilateral mastectomy (with or without reconstruction)

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THE AMERICAN SOCIETY OF
Breast Surgeons

2016

Contralateral Prophylactic Mastectomy (CPM) Consensus Statement from the American Society of Breast Surgeons: Data on CPM Outcomes and Risks

Ann Surg Oncol (2016) 23:3100–3105
DOI 10.1245/s10434-016-5443-5

1. Should be considered:
   - BRCA1-2 mutation
   - Strong familial history, no genetic testing
   - History of mantle chest radiation before age 30 years

1. Can be considered:
   - CHEK-2, PALB2, p53, CDH1 mutation
   - Strong familial history, BRCA negative

3. Other reasons:
   - Limit contralateral surveillance
   - Improve symmetry
   - Manage risk aversion
   - Manage extreme anxiety

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Case – female 66 y

- Right mastectomy + axillary dissection
- Multifocale invasive adenocarcinoma, lobular aspect, hormone sensitive
- pT4b(m) N3 M0

- 1 year after diagnosis, no recurrence, asks for CPM

- 2 consultations - psychological counseling
- - > CPM

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Case – female 66y

- Very pleased with the result
- Feels relieved
- Higher self-esteem
- Feels better about herself

- AP: invasive ductal adenocarcinoma with lobular growth pattern, diameter 5,6mm, Bloom score 6, ER 28/0/300, PR 280/300 Her2 2+

Conclusion: first do no harm

A. Medically recommended
   1. Unilateral breast cancer with a BRCA1-2 gene mutation
   2. Unilateral breast cancer with a history of mantle chest radiation (before age 30 years)
   3. Unilateral breast cancer with gene carrier of non-BRCA gene (CHEK-2, PALB2, p53, CDH1, PTEN)

B. Patient's request
   1. Improve symmetry
   2. 'Peace of mind'

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Questions?

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