Is the Age of the patients a Contraindicating Factor to Breast Conservation?

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St.Gallen 2013 Voting results by Panelists

When considering breast conserving surgery the following factors are contraindications:

		Yes	Νο	Abstain
Age < 35 yrs	absolute	6.3	89.6	4.2
	relative	30.4	60.9	8.7
Age < 40 yrs	absolute	4.3	93.5	2.2
	relative	9.1	88.6	2.3

Goldhirsch A et al: Annals of Oncology 24:2206,2013

Is the Age of the patients, by itself a Contraindicating Factor to Breast Conservation?

Absolute ?	Νο
Relative ?	30% of the panelists believe Yes

What is the evidence behind this response ?

Higher Local Recurrence rates in the younger patients

- reported in several retrospective observations -

				Local recurrence (%)			is age	
author	year	# of pts	follow up	age cut-off	younger	older	p	independent in mv-analyses?
Kurtz	1990	469	71 mos.	40	21	11	<0.025	No
Vrieling	2003	5,569	5 yrs.	35 40 50 60	18 15 8	4 3	<0.0001	Yes
Miles	2012	3,064	8.9 yrs.	40 50 60 70	<mark>9.5</mark> 4.6 4.5	4.6 5.3	0.09	Yes

Kurtz JM et al. Journal of Clinical Oncology 8:591, 1990 Vrieling C et al. European journal of cancer 39:932, 2003 Miles R et al. Annals of Surgical Oncology 19:1153, 2012

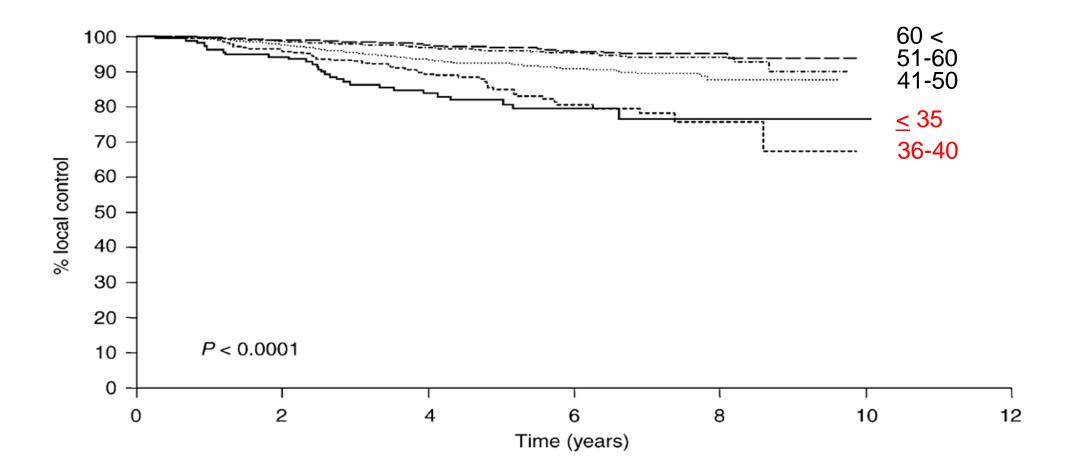
Contradicting results?

Age confounds with bad prognostic factors for LR. large size, higher grade, dense breast appropriate multivariate analyses reveal them

Age may confounds with unknown "evil prognostic factors"



Local Recurrence rates by age group



Vrieling C et al. European journal of cancer 39:932, 2003

Does Local Recurrence Matter?



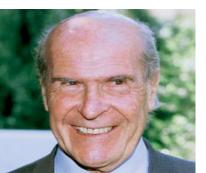
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ORIGINAL ARTICLE

Twenty-Year Follow-up of a Randomized Study Comparing Breast-Conserving Surgery with Radical Mastectomy for Early Breast Cancer

Umberto Veronesi, M.D., Natale Cascinelli, M.D., Luigi Mariani, M.D., Marco Greco, M.D., Roberto Saccozzi, M.D., Alberto Luini, M.D., Marisel Aguilar, M.D., and Ettore Marubini, Ph.D. N Engl J Med 2002; 347:1227-1232 October 17, 2002 DOI: 10.1056/NEJMoa020989



Veronesi, U. et al. N Engl J Med 2002;347:1227-1232

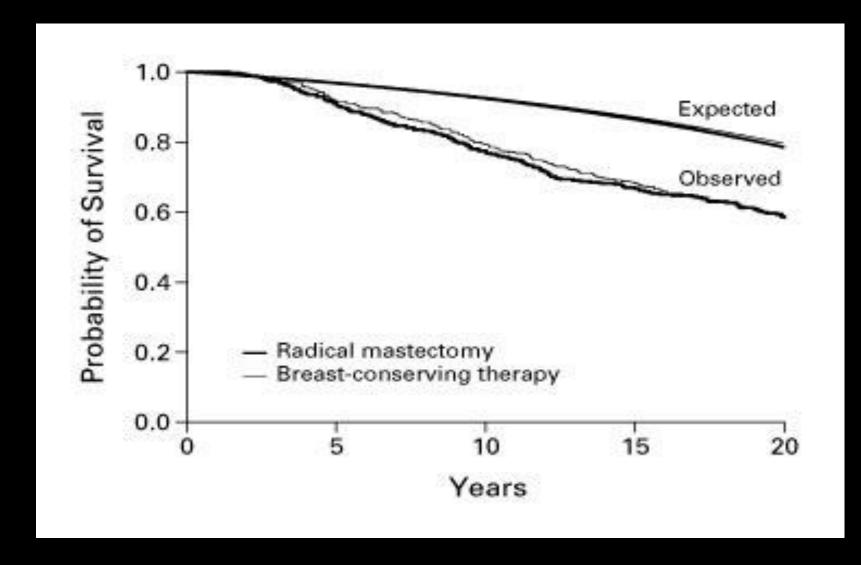
Crude Cumulative Incidence of Local Recurrences after Radical Mastectomy and Recurrences in the Same Breast after Breast-Conserving Therapy



Veronesi, U. et al. N Engl J Med 2002;347:1227-1232



Kaplan-Meier Estimates of Survival after Radical Mastectomy or Breast-Conserving Therapy



Veronesi, U. et al. N Engl J Med 2002;347:1227-1232





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ORIGINAL ARTICLE

Twenty-Year Follow-up of a Randomized Trial Comparing Total Mastectomy, Lumpectomy, and Lumpectomy plus Irradiation for the Treatment of Invasive Breast Cancer

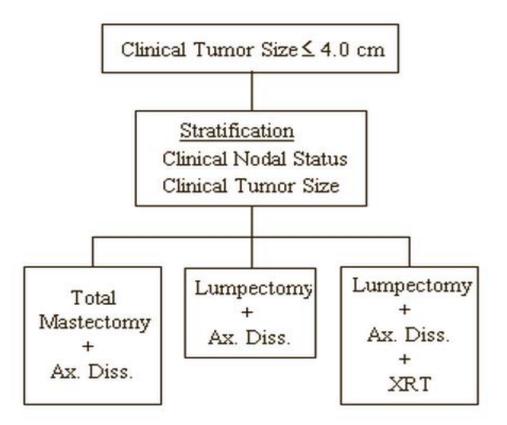
Bernard Fisher, M.D., Stewart Anderson, Ph.D., John Bryant, Ph.D., Richard G. Margolese, M.D., Melvin Deutsch, M.D., Edwin R. Fisher, M.D., Jong-Hyeon Jeong, Ph.D., and Norman Wolmark, M.D. N Engl J Med 2002; 347:1233-1241 October 17, 2002 DOI: 10.1056/NEJMoa022152



Fisher, B. et al. N Engl J Med 2002;347:1233-1241

NSABP-B06 trial

A protocol to Compare Segmental Mastectomy and Axillary Dissection With and Without Radiation of the Breast and Total Mastectomy and Axillary Dissection



All patients with histologically positive axillary nodes receive L-PAM + 5 FU.

Total mastectomy performed in event of ipsilateral breast tumor recurrence.

Does Local Recurrence Matter?

TABLE 2. FIRST REPORTED RECURRENCE AND OTHER FIRST EVENTS.*

Event	TOTAL MASTECTOMY (N=589)	LUMPECTOMY ALONE (N=634)	LUMPECTOMY PLUS IRRADIATION (N=628)
		no. of women (%	%)
Recurrence Local† Regional Distant	219 (37.2) 60 (10.2) 27 (4.6) 132 (22.4)	269 (42.4) 56 (8.8) 55 (8.7) 158 (24.9)	$\begin{array}{c} 214 \ (34.1) \\ 17 \ (2.7) \\ 34 \ (5.4) \\ 163 \ (26.0) \end{array}$
Diagnosis of cancer in contralateral breast	50 (8.5)	56 (8.8)	59 (9.4)
Diagnosis of second cancer‡	43 (7.3)	32 (5.0)	49 (7.8)
Death without evidence of breast cancer	59 (10.0)	51 (8.0)	69 (11.0)
Total	371 (63.0)	408 (64.4)	391 (62.3)
Alive, event-free	218 (37.0)	226 (35.6)	237 (37.7)

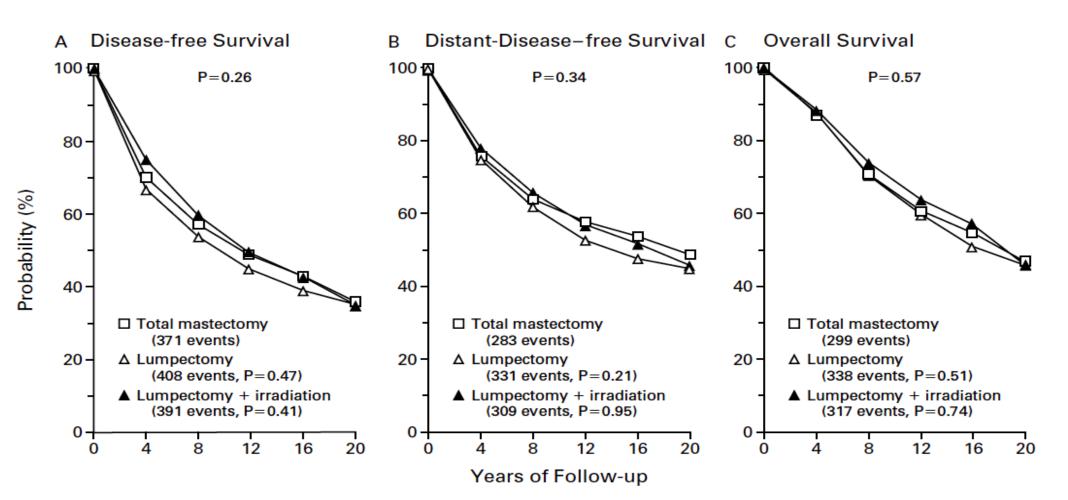
*The women in all groups underwent axillary dissection.

[†]Tumors in the ipsilateral breast after lumpectomy were not considered recurrences, and women in the lumpectomy groups who had such tumors were classified as event-free.

‡A second cancer was defined as any second primary cancer other than cancer in the contralateral breast.

Fisher, B. et al. N Engl J Med 2002;347:1233-1241

Overall Survival is the same



Fisher, B. et al. N Engl J Med 2002;347:1233-1241

Conclusions

- The long-term survival rate among women who undergo breast-conserving surgery is the same as that among women who undergo radical mastectomy
- Breast-conserving surgery is therefore the treatment of choice for women with relatively small breast cancers







Conclusions



Lumpectomy followed by breast irradiation continues to be appropriate therapy for women with breast cancer, provided that the margins of resected specimens are free of tumor and an acceptable cosmetic result can be obtained Ann Surg Oncol (2009) 16:2682–2690 DOI 10.1245/s10434-009-0635-x Annals of
SURGICALONCOLOGY
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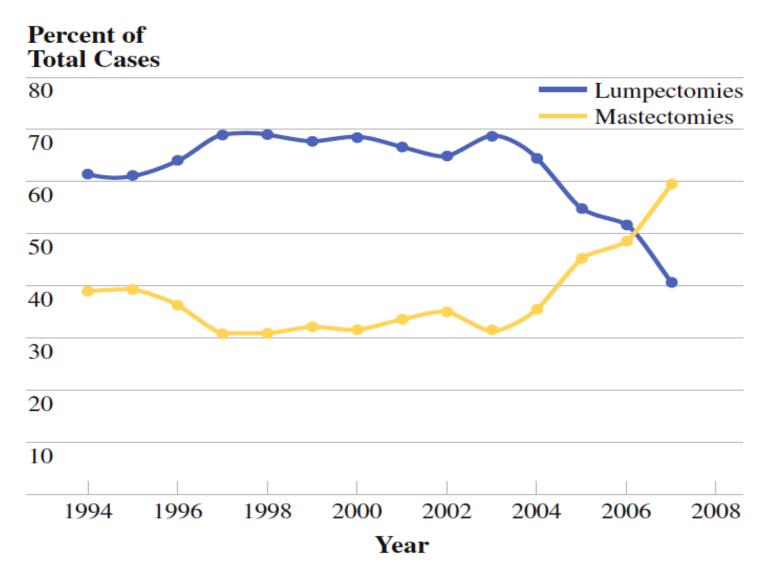
ORIGINAL ARTICLE – BREAST ONCOLOGY

Are Mastectomies on the Rise? A 13-Year Trend Analysis of the Selection of Mastectomy Versus Breast Conservation Therapy in 5865 Patients

Kandace P. McGuire, MD¹, Alfredo A. Santillan, MD, MPH¹, Paramjeet Kaur, MD¹, Tammi Meade, BS¹, Jateen Parbhoo, BS¹, Morgan Mathias¹, Corinne Shamehdi, BS¹, Michelle Davis, BS², Daniel Ramos, BS², and Charles E. Cox, MD, FACS²

¹Moffitt Cancer Center, Tampa, FL; ²University of South Florida, Tampa, FL

Breast Conservation is decreasing



Factors predicting Mastectomy

Woman younger than age 40 years

association of BRCA mutation

St.Gallen 2013 Voting results by Panelists

When considering breast conserving surgery the following factors are <u>relative</u> contraindications:

	Yes	Νο	Abstain
Family history	4.1	95.9	0
BRCA1 mutation	54.3	43.5	2.2
BRCA 2 mutation	51.1	46.8	2.1

Factors predicting Mastectomy

Woman younger than age 40 years

association of BRCA mutation

Larger tumor size

Multi-focal or multi-centric disease detected with MRI

Fear of recurrence \implies worse QOL

Lymphovascular invasion

Lobular histology (tend to be margin positive)

Conclusive Remarks (1)

The Age itself of the patients is NOT a Contraindicating Factor to Breast Conservation.

Conclusive Remarks (2)

Newer technology and information changed decision making process of the patients.

Appropriate use of testing and counseling for BRCA related issues are needed in younger patients.

Use of tailored pre-operative systemic therapy provides a better treatment solution for patients with larger sized tumor.

Shared decision making is a supremely important approach to best support our patients for achieving satisfactory outcome.