



Community Memorial Health System
Ventura, California

Comparative Trends in Contralateral Prophylactic Mastectomy Between a County and Private Hospital Setting

Kelly Fairbairn DO, Andrew Cervantes MS, Constanze Rayhrer MD, Shawn Steen MD
Ventura County Medical Center, Ventura CA
Community Memorial Health System, Ventura CA



INTRODUCTION

- Many women choose contralateral prophylactic mastectomy (CPM) for reasons including fear of recurrence or developing a new contralateral cancer
- Increased surgery comes with increased risk
- CPM has been extensively studied and should only be recommended in patients with deleterious genetic mutations or lobular histology in a primary tumor
- Despite these recommendations by multiple professional societies, the rate of CPM in the US has been increasing
- Our aim is to evaluate the trends in CPM between neighboring county and private hospital settings

METHODS

- All patients who underwent bilateral mastectomy between July 2013 and December 2018 at a county safety-net hospital (CH) and a neighboring private hospital (PH) were identified based on CPT codes
- Only exclusion criteria was a preoperative diagnosis of bilateral breast cancer
- Patient and tumor characteristics were collected via a retrospective chart review

RESULTS

- 100 patients included, 76 from the CH, 24 from the PH
- Patient demographics were not statistically different except for age
- No statistical difference in tumor size, Her2/Neu status, neoadjuvant therapy, suspicious MRI findings, positive genetic testing results, rate of unindicated CPM, or reconstruction rate
- PH treated more ER/PR + tumors, had more immediate reconstruction and cited personal preference for CPM more often
- Pre-operative MRI was more common and suspicious MRI findings were cited as the indication for CPM more often at CH

FIGURES



Patient Comparison Factors				
Factor	PH	CH	Z Value	P Value
Average Age (years)	54.8	46.7		0.002
Caucasian	83%	87%	0.46	NS
English as Primary Language	96%	83%	1.6	NS
Married	65%	47%	1.41	NS
Family History of Breast Ca	33%	17%	1.51	NS
Private Insurance	82%	24%	4.66	<0.01
Ipsilateral Tumor Size (cm)	2.65	2.25		0.18
Ipsilateral Tumor ER +	96%	70%	2.39	<0.05
Ipsilateral Tumor PR +	91%	70%	1.96	0.05
Ipsilateral tumor Her2/Neu +	86%	75%	1.15	NS
Neoadjuvant Therapy	21%	34%	1.2	NS
Preoperative MRI	17%	62%	3.84	<0.01
Suspicious MRI Findings	25%	60%	1.36	NS
Preoperative Genetic Testing	25%	63%	3.26	<0.01
Positive Genetic Testing Result	66%	54%	0.6	NS
Rate of Unindicated CPM	71%	65%	1.39	NS
CPM Reason: Personal Preference	67%	32%	3.05	<0.01
CPM Reason: Suspicious MRI findings	0%	17%	2.16	<0.01
Reconstruction Rate	46%	47%	0.09	NS
Immediate Reconstruction Rate	91%	50%	2.43	<0.01

DISCUSSION

- Overall rates of unindicated CPM were high (59%), which is consistent with the literature
- As expected, patients treated at the CH were on average younger, with less private insurance, and more ER/PR negative tumors indicating a more aggressive disease pattern
- MRI should be used with caution due to its low positive predictive value (16%) and specificity (55%) in our study, as a suspicious MRI finding was cited as the most common indication for CPM in our CH setting
- Patient preference was cited as the most common indication for CPM in our PH setting, indicating the possibility that patient directed care may be more prevalent in the private setting
- Increased consideration for preoperative plastics consultation is warranted, especially in the CH setting as reconstruction can lead to improved quality of life scores in body image and sexual enjoyment, and increase post operative satisfaction
- Community wide patient and provider education regarding CPM is necessary to match disease burden with surgical intervention, allow for better referral patterns, access to genetic testing, and increase appropriate patient counseling
- Weaknesses of our study include a small sample size and the retrospective nature of the data collection

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