

Quality of life (QOL) and symptom burden (SB) in patients with breast cancer treated with mastectomy and lumpectomy

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Objective

- Examine SB and QOL of patients with breast cancer that had undergone mastectomy (MAS) or lumpectomy (LUMP)

Methods

- English-speaking patients who had undergone MAS or LUMP were eligible for recruitment
- Edmonton Symptom Assessment System (ESAS) was used to evaluate nine symptoms on an 11-point scale
- The Functional Assessment of Cancer Therapy-Breast (FACT-B) cancer edition was used to evaluate five facets of QOL

Results

- 614 MAS and 801 LUMP patients were accrued from January to August 2014

Patient demographics of all MAS and LUMP patients

Demographics	LUMP	MAS	p-value
Mean Age	60.66 ±11.34	56.07 ± 11.78	<0.0001
Stage			<0.0001
DCIS	97 (12%)	35 (6%)	
Early	506 (64%)	238 (39%)	
Locally advanced	139 (18%)	243 (40%)	
Metastatic	48 (6%)	95 (16%)	

Comparison of QOL and SB between all MAS and LUMP patients

Outcome of QOL	Coefficient	p-value
ESAS Scales		
Pain	0.088	0.0291
Tired	0.059	0.1585
Nausea	0.044	0.0595
Depression	0.075	0.0627
Anxious	0.096	0.0214
Drowsy	0.094	0.0152
Appetite Loss	0.079	0.0314
Well-Being	0.073	0.0758
Dyspnea	0.041	0.2570
FACT-B Scales		
Physical Well-Being	-1.248	<0.0001
Social Well-Being	-0.359	0.2104
Emotional Well-Being	-0.940	<0.0001
Functional Well-Being	-1.414	<0.0001
Breast Cancer Subscale	-2.023	<0.0001
FACT-G Total Score	-4.016	<0.0001
FACT-B Trial Outcome Index	-4.673	<0.0001
FACT-B Total Score	-5.962	<0.0001

- MAS patients had worse pain, anxiety, drowsiness and appetite loss scores
- LUMP patients had better QOL scores

Patient demographics of MAS and LUMP patients without bone or visceral metastases

Demographics	LUMP	MAS	p-value
Mean Age	60.47 ±11.25	55.73 ± 11.65	<0.0001
Stage			<0.0001
DCIS	97 (13%)	35 (7%)	
Early	505 (68%)	238 (46%)	
Locally advanced	139 (19%)	243 (47%)	
Metastatic	1 (1%)	1 (1%)	

Comparison of QOL and SB between MAS and LUMP patients without bone or visceral metastases

Outcome of QOL	Coefficient	p-value
ESAS Scales		
Pain	0.056	0.1798
Tired	0.032	0.4653
Nausea	0.027	0.2543
Depression	0.053	0.1982
Anxious	0.069	0.1069
Drowsy	0.068	0.0885
Appetite Loss	0.044	0.2404
Well-Being	0.042	0.3196
Dyspnea	0.004	0.9083
FACT-B Scales		
Physical Well-Being	-0.893	0.0013
Social Well-Being	-0.271	0.3657
Emotional Well-Being	-0.713	0.0027
Functional Well-Being	-1.105	0.0015
Breast Cancer Subscale	-1.928	<0.0001
FACT-G Total Score	-3.087	0.0006
FACT-B Trial Outcome Index	-3.944	<0.0001
FACT-B Total Score	-4.912	<0.0001

- No difference in symptom scores between MAS and LUMP patients
- LUMP patients had better QOL scores

Conclusions

- This study, one of the largest QOL and SB analyses conducted of breast cancer surgical treatments, supports existing literature that SB of LUMP and MAS patients are similar
 - The difference in SB between all LUMP and MAS patients may be a result of a higher proportion of metastatic patients among MAS patients
- MAS patients may experience lower QOL due to noticeable difference in body image