The Patient's Perspective on Breast Radiation Therapy: Initial Fears and Expectations versus Reality

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Background

- Radiation therapy plays an key role in the curative treatment of breast cancer
- Proportion of women electing for mastectomy continues to rise
- Underutilization of post-mastectomy radiation even in high-risk patients
- Patients and breast surgeons are influenced by fears and misconceptions of radiation therapy
Purpose & Methods

AIM: To explore the modern breast radiotherapy treatment experience from the patient’s perspective to better inform future patients and providers

• Evaluate original fears
• Compare perceptions of actual toxicities to baseline expectations
• Compare pre-treatment beliefs about radiotherapy to the actual experience

METHODS

• Women with pre-invasive or invasive breast cancer treated from 2012 to March 2016
• Patients all received radiation therapy after either breast conservation (82%) or mastectomy (18%)
• Patients completed our Breast Radiation Therapy Experience Questionnaire
Results

327 (65%) of 502 eligible women completed the questionnaire

- Median age: 59 years (range: 28-89)
- Race / Ethnicity: 77% White, 11% Asian-American, 10% Latino, 3% African-American
- Education: ≥ 77% college degree
- Disease Stage: Stage 0 18%, Stage I 39%, Stage II 34%, Stage III 9%

Baseline perceptions and knowledge

- 68% (n=221) responded that they had little or no prior knowledge
- 47% (n=152) had previously read or heard “frightening” stories of women having serious side effects
Results: Perceptions of Side Effects

- Short-Term Side Effects: Better than expected by 61% of all patients
- Long-Term Side Effects: Better than expected by 57% of all patients
Results: Reality of Radiation Therapy

"My radiation therapy experience was less scary than I thought it would be"

- All Patients: 53% Definitely true, 34% Mostly true, 13% Neither true nor false, 0% Mostly false, 0% Definitely false
- Breast Conservation: 58% Definitely true, 32% Mostly true, 8% Neither true nor false, 0% Mostly false, 0% Definitely false

"After treatment, I now realize that RT is not as 'bad as they say it is'"

- All Patients: 59% Definitely true, 29% Mostly true, 7% Neither true nor false, 0% Mostly false, 0% Definitely false
- Breast Conservation: 64% Definitely true, 27% Mostly true, 5% Neither true nor false, 0% Mostly false, 0% Definitely false

"If future patients knew the 'real truth', they would be less scared about treatment"

- All Patients: 59% Definitely true, 31% Mostly true, 5% Neither true nor false, 0% Mostly false, 0% Definitely false
- Breast Conservation: 64% Definitely true, 29% Mostly true, 6% Neither true nor false, 0% Mostly false, 0% Definitely false

"I was surprised by how severe my actual side-effects of RT were"

- All Patients: 28% Definitely true, 54% Mostly true, 8% Neither true nor false, 10% Mostly false, 0% Definitely false
- Breast Conservation: 26% Definitely true, 59% Mostly true, 5% Neither true nor false, 7% Mostly false, 0% Definitely false
Conclusions

• There are significant baseline fears and misconceptions regarding breast radiation therapy.

• The majority of breast radiation patients found their perceptions of short and long-term toxicities to be better than or as expected.

• Patients overwhelmingly agreed that initial negative impressions of breast radiotherapy were unfounded, and that if future patients knew the “real truth” they would be less scared of treatment.

• These data suggest that radiation therapy, particularly in the setting of breast conservation, is a far superior treatment experience than perceived, and may better inform future women and providers.