Sexual & Marital Dysfunction in Women with Gynecologic Cancer

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Disclosures

- I have no financial or relevant disclosures for this talk.
Background

• Malignancies of the Gynecologic tract: Cervix, Uterus, Ovary, Fallopian Tube, Vagina and Vulva

• Gynecological Cancers represent the 3rd most common cancer for women in the US.
• Estimated 83,000 new cases a year
• Estimated >70% survival rate
cancer mortality

breast cancer, 15%

lung cancer, 26%

colorectal cancer, 9%

pancreatic cancer, 6%

ovarian cancer, 6%

non-Hodgkin lymphoma, 3%

leukemia, 3%

uterine cancer

liver & intrahepatic bile duct cancer

brain and other nervous system cancer, 2%

other, 25%
Survivorship

- As we have improved the survival for women with gynecologic cancer, we must now answer questions about long term care and survivorship.
- One of the least addressed issues in this regard is sexual dysfunction
  - Embarrassment
  - Ignorance about this issue
  - Lack of prioritization
  - Lack of resources
HOW TO TALK TO YOUR DOCTOR ABOUT SEX WHEN YOU HAVE CANCER

BY ABIGAIL JONES ON 7/23/17 AT 8:10 AM

IN THE MAGAZINE TECH & SCIENCE

CANCER AND SEX: WHY IS NOBODY TALKING ABOUT IT?

BY ABIGAIL JONES ON 7/19/17 AT 7:10 AM
'How I Got Back To Being Intimate After Cancer Robbed Me Of My Vagina'
"My final surgery removed my urinary system, gastrointestinal system, and my vagina."
Sexual Dysfunction

- Defined as "a problem during any phase of the sexual response cycle that prevents the individual or couple from experiencing satisfaction from the sexual activity."

- **Organic causes** diabetes, heart disease, neurological diseases, hormonal imbalances, menopause plus such chronic diseases as kidney disease or liver failure, and alcoholism or drug abuse, medications, antidepressant drugs.

- **Inorganic Causes** work-related stress and anxiety, concern about sexual performance, marital or relationship problems, depression, feelings of guilt, or the effects of a past sexual trauma.
Sexual dysfunction in cancer survivors

• Range of sexual dysfunction among female cancer survivors is quite high

Dizon et al found that up to 70% of women with cancer reported significant sexual dysfunction.

Significant embarrassment on the part of patients to bring up issues of sexual problems.

Impression that there was “nothing that could be done”

Sadly only 14% of physicians who treat cancer brought up sexuality/sexual dysfunction as an issue.
Sexual Dysfunction in Cancer Survivors

Fang et al examined global sexual dysfunction in a cohort of 100 women in with cervical cancer in Taiwan.

- Calculated the crude prevalence of 66%.
- Factors significantly associated with dysfunction included older age and no previous health counseling (p<.001).
What about marital function and relationships?

- To date no study has examined in great detail the effect that gynecologic cancer has on marital and domestic partner relationships.
- What are the affects of impaired sexual function on spousal relationships?
What about marital/spousal relationships?

Gender Disparity in the Rate of Partner Abandonment in Patients With Serious Medical Illness

Michael J. Glantz, MD; Marc C. Chamberlain, MD; Qin Liu, PhD; Chung-Cheng Hsieh, ScD; Keith R. Edwards, MD; Alixis Van Horn, RN; and Lawrence Recht, MD

- Glantz et al examined this question prospectively in a cohort of >500 women, from time of diagnosis till time of death in a group of patients diagnosed with brain tumors.
- Divorce/separations rates were found to be similar to the baseline population of 12%.
- However factors associated with increased risk of divorce/separation included:
  - Female sex (21.2% versus 2%, p<.001)
  - Length of committed relationship (p<.001)
What about marital/spousal relationships?

- Additionally female patients who separated or divorced from their spouses were (all $P<.01$)
  - More likely to be hospitalized
  - Less likely to participate in clinical trials
  - Less likely to complete cranial radiation
  - Less likely to die at home
  - Less likely to receive multiple regimens of chemotherapy

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stayed Married After Diagnosis (n = 191)</th>
<th>Divorced After Diagnosis (n = 23)</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of antidepressants</td>
<td>20 (10.5)</td>
<td>22 (95.6)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Participation in clinical trials</td>
<td>176 (92.2)</td>
<td>15 (65.2)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>$\geq 2$ Hospitalizations</td>
<td>8 (4.2)</td>
<td>22 (95.6)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>$\geq 3$ Treatment regimens</td>
<td>112 (58.6)</td>
<td>1 (4.4)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Completion of radiotherapy</td>
<td>186 (97.4)</td>
<td>17 (73.9)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Died at home</td>
<td>127 (76.5)</td>
<td>4 (20)</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>
Gynecologic cancer?
Hypothesis

There is a significant decline in a woman’s sexual function after undergoing treatment for gynecological cancers. This decline in sexual function has a detrimental effect on a survivor’s quality of life and marital relationships.
• Funded by the Patty Brisben Foundation
  – An organization focusing on Women’s sexual health based out of Cincinnati, OH
Study Aims

Sexual and Marital Dysfunction in Women With Gynecologic Cancer

AQ1 Saketh R. Guntupalli, MD,* Jeanelle Sheeder, PhD, MSPH,* Yevgeniya Ioffe, MD,† Ana Tergas, MD,‡ Jason D. Wright, MD,‡ Susan A. Davidson, MD,§ Kian Behbakht, MD,* and Dina M. Flink, PhD*
Study Aims

• To demonstrate a significant decline in a woman’s sexual function from pre-diagnosis to post treatment for gynecological cancers.

• To explore how a decline in sexual function post treatment is associated with a change in a woman’s marital relationship and well-being.
Participating Sites

• **University of Colorado Denver;** Aurora, CO
  – Principle Investigator: Saketh Guntupalli, MD

• **Denver Health Medical Center;** Denver, CO
  – Co-Investigator: Meredith Alston, MD

• **Loma Linda University Medical Center;** Loma Linda, CA
  -Co-Investigator: Yevgeniya Ioffe, MD

• **Columbia University Medical Center;** NY, NY
  • Co-Investigators: Ana Tergas, MD; Jason Wright, MD
Study Design

• Cross-sectional Study
  – 30 minute survey
• Recruited from January 15, 2014-February 28, 2015
• Primary outcome: **Sexual Dysfunction**
  – Women with sexual dysfunction after cancer were compared to women who reported no sexual dysfunction using paired t-tests and chi-square tests.
  – Sexual dysfunction = decline of 7.6 points in FSFI score
  – Determined using a Reliable Change Index Statistic (RCIS)
Sexual Health Survey

• 181 item questionnaire
  – Pre-cancer and post-treatment
• Completed online or in-person
• Incorporated validated sexual health and relationship instruments
  – Female Sexual Function Index
  – Intimate Bond Measure
Female Sexual Function Index (FSFI)

- 19 item questionnaire
- Specifically designed to measure sexual function in women for clinical trials
- Can be used on healthy women and women with medical conditions (i.e. cancer)
- FSFI completed for pre-cancer and post treatment
- This was used as our primary outcome
Intimate Bond Measure (IBM)

- 24 item survey
- Used to measure care and control of the women’s partner
- Measured both pre-cancer and post treatment
Who was Eligible?

• Females:
  – Between 18-89 years of age,
  – Diagnosed with a gynecological cancer,
  – Were seen post-treatment for their gynecological cancer care from September 1, 2009-February 28, 2015.
Enrollment

1,000 Recruited

320 Enrolled

208 that completed survey at time of analysis

- Sexual Dysfunction
  - N= 81 (39%)
  - 42% under 50
  - 95% in relationships

- No Sexual Dysfunction
  - N= 127 (61%)
  - 21% under 50
  - 83% in relationships
Study Population

- From 23-84 years old, average age 56
- 21% minority

Race/Ethnicity

- White, non-hispanic
- Hispanic
- African American
- Other
Cancer Diagnosis

- Uterine/Endometrial: 41.6%
- Ovarian: 36.6%
- Cervical: 13.8%
- Other: 7.8%

61% were Stage I or II
39% were Stage III or IV
Treatment

- Surgery + Chemo (38%)
- Surgery only (29%)
- Surgery + Chemo + Radiation (17%)
- Surgery + Radiation (7%)
- Chemo + Radiation (6%)
- Chemo only (2%)
- Radiation only (1%)
Sexual Function declined 29% after treatment, p<0.001
Sexual Activity declined 57% after treatment, p<0.001
Sexual Activity

• Sex was less pleasurable for women after cancer, p<0.001

• All types of sexual activity (oral, vaginal, and anal) decreased after cancer (p<0.001 for all)
  – No change in type of sexual activity noted
  – Global decrease in sexual dysfunction
Risk Factors for Sexual Dysfunction

• Women with significant sexual dysfunction, following diagnosis/treatment were more likely to be:
  – Under 50 years old; OR=2.8 (95% CI 1.5-5.2)
  – Received chemotherapy; OR=2.6 (95% CI 1.2-4.8)
  – Have a Ovarian (2.1, 1.1-4.0) or Cervical (3.2 (1..4-7.7) cancer diagnosis
  – In a significant relationship; OR=4.0 (95% CI 1.3-12.0)
After treatment

Women with sexual dysfunction reported:

• Relationship counseling
  – 15.2% vs. 4.0%, OR=4.3 (1.4-12.6)

• Significantly less sexual activity
  – Δ 5.7 ±5.2 vs. Δ 1.7 ±3.6 times per month, p<0.001
Factors not Significant

- Length of relationship
- Surgery or radiation therapies
- Cancer stage
- Menopause status
- Race
Chemotherapy treatment

• 51% of women undergoing Chemotherapy reported sexual dysfunction
• Sexual dysfunction following chemotherapy use was associated with:
  – Younger age, (<50): OR 5.6; 95%CI 1.9-16.6
  – Premenopausal: OR 3.1; 95%CI 1.1-8.2
  – Cervical cancer diagnosis: OR 3.1; 95% CI 1.1-9.4)
  – Low stage (I/II): OR 3.2, 95%CI 1.4-7.7
Chemotherapy

• Factors not related to Sexual Dysfunction
  – Chemotherapy agent
  – Number of regimens
  – Number of cycles
  – Addition of radiation
  – Primary vs. recurrent disease status
  – BMI
Radiation Therapy

• Sexual Dysfunction rates were similar in those with radiation vs. those without radiation (47% vs. 38%)

• Among women who had radiation therapy, those with sexual dysfunction were:
  – Younger (<50 years) OR 5.4, 95%CI 1.6-18.1

• Radiation total dose, EBRT vs. Pelvic, location, BMI, and recurrent disease status were not associated with sexual dysfunction
Surgical Management

• Women with TAH reported greater sexual dysfunction than women with minimally invasive surgery
  – 50% vs. 22%; OR 3.6; 95% CI 1.5-8.4
• Women with TAH were more likely to be
  – Younger (<50 years:) OR 3.4, 95%CI 1.3-8.9
• Operating times, lymphadenectomy, # of lymph nodes, and BMI were found not associated following multivariate regression
Marital Function

• Changes in marital function were not significantly associated with sexual dysfunction
• Intimate bond (care of partner) showed no change from pre-diagnosis to after treatment
• Rates of affair, separation, and divorce after cancer were not associated with sexual dysfunction
Marital Function

• 3% of all women reported their partner had an affair
  • OR=1.6 (0.3-7.9), p=0.68
• 9% of all women reported *separating* from their partner for some time
  • OR=1.8 (0.7-5.0), p=0.30
• 5% of all women reported *divorcing* after cancer
  • OR=2.0 (0.5-7.8), p=0.31

All not significant
Psycho-social Health

• Compared to before cancer, women reported that after cancer:
  – Sex was less enjoyable (p<0.001)
  – Frustration with sex life (p<0.001)
  – Feeling depressed (p=0.014)
  – Feeling less of a woman (p<0.001)
  – Losing confidence in sex life (p=0.021)
  – Worry about the future of their sex life (p=0.013)
Conclusions

• Women treated for gynecologic cancer are at significant risk for impaired sexual function irrespective of diagnosis.

• Younger women, those treated with chemotherapy, Ovarian and Cervical cancer diagnosis, and women in relationships are at particularly high risk for sexual function decline.

• Patients with sexual dysfunction reported greater incidence of sexual activity decline and relationship counseling following treatment.
Next Steps

• Practitioners should be aware of these issues and pro-actively engage patients and their partners during treatment for improved survivorship outcomes.
Next Steps

• Sexual and Marital Dysfunction study: Phase 2
  – Women at highest risk will be randomized to receive counseling and/or sexual desire therapy during treatment

• Woman to Woman Support Program
  – Gynecologic cancer patients will be matched with survivors for one-on-one support through treatment
Flibanserin.....the new solution?

• In 2015, the FDA approved Flibanserin as a treatment for hypoactive sexual disorder in women.

• This has received a significant amount of media attention with regards to treating this order
Acknowledgments

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-Dina Flink, M.Sc

-All participants in our survey
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• All of our survivors!
And finally......
Sex After Cancer

Living With Cancer
By SUSAN GURBA JAN, 18, 2018
Thank you!!!!