Outline

- Introduction
- Gynaecological Cancer
- Breast Cancer
- Colo-rectal Cancer
- Therapy
- Take Home Messages
CASE
Mrs M.J.K., 34 yo

2010: Cervicalca., stage IB
- Surgery followed by radiotherapy
  - Why radiotherapy?
  - Side effects?

2013
- No libido, no arousal
- Limited lubrication, but no dyspareunia
  - Diagnostics?
CASE
Mrs M.J.K., 34 yo (cont’d)

- Low testosterone: 0.1 nmol/L
  - Treatment?
  - Preparation, dose?

- September 2014
  - TST 2.1 nmol/L
  - Very happy, libido normal, more energy, and no side effects
Female Cancer and Sexual Function

- **Direct effects**
  - Reduced desire & dysfunction from disease or treatment, and from pain

- **Indirect effects**
  - Decreased self image
  - Depression
  - Limited energy
  - Partnership difficulties
  - Fear that sex may worsen condition
Gynaecological Cancer
Gynaecological Cancer

- Radical surgery impacts the pelvis; radiotherapy damages the membranes of the vagina; chemotherapy the mucosa and blood vessels
- Vaginal atrophy, decreased lubrication, fibrosis, narrowing of introitus
  - 30% sexual dysfunctions
  - 50% dyspareunia
  - 50% still sexually active

Jensen et al. IJROBP 2003;56-937-49

- Body image concerns
Table 4. Patient’s rating of changes 12 months after radiotherapy completion

<table>
<thead>
<tr>
<th>Changes since diagnosis of cancer (%)</th>
<th>Improved</th>
<th>No change</th>
<th>Deteriorated</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest in sexual relations</td>
<td>0</td>
<td>39.1</td>
<td>60.9</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Vaginal lubrication</td>
<td>4.2</td>
<td>33.3</td>
<td>62.5</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Dyspareunia</td>
<td>16.7</td>
<td>27.8</td>
<td>55.6</td>
<td>0.05</td>
</tr>
<tr>
<td>Vaginal dimensions*</td>
<td>4.0</td>
<td>48.0</td>
<td>48.0</td>
<td>0.002</td>
</tr>
<tr>
<td>Partner’s interest in sexual relations</td>
<td>0</td>
<td>86.8</td>
<td>13.2</td>
<td>0.03</td>
</tr>
<tr>
<td>Interest in intimacy</td>
<td>6.5</td>
<td>58.7</td>
<td>34.8</td>
<td>0.003</td>
</tr>
<tr>
<td>Having had close physical contact with family and close friends</td>
<td>4.3</td>
<td>76.1</td>
<td>19.6</td>
<td>0.04</td>
</tr>
</tbody>
</table>
Assessment of treatment-induced female sexual morbidity in oncology: is this a part of routine medical follow-up after radical pelvic radiotherapy?

ID White*,1, H Allan2 and S Faithfull2

British Journal of Cancer (2011) 105, 903–910
TABLE 1. Estimated New Female Breast Cancer Cases and Deaths by Age, United States, 2011*

<table>
<thead>
<tr>
<th>Age</th>
<th>In Situ Cases</th>
<th>Invasive Cases</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 40</td>
<td>1,780</td>
<td>11,330</td>
<td>1,160</td>
</tr>
<tr>
<td>Under 50</td>
<td>14,240</td>
<td>50,430</td>
<td>5,240</td>
</tr>
<tr>
<td>50-64</td>
<td>23,360</td>
<td>81,970</td>
<td>11,620</td>
</tr>
<tr>
<td>65+</td>
<td>20,050</td>
<td>98,080</td>
<td>22,660</td>
</tr>
<tr>
<td>All ages</td>
<td>57,650</td>
<td>230,480</td>
<td>39,520</td>
</tr>
</tbody>
</table>

a. In Situ Incidence
b. Invasive Incidence
c. Mortality
Treatment
Surgery

- Breast conserving surgery (and radiation)
- Mastectomy
Lumpectomy (BCS) or lumpectomy with radiotherapy

Bartelink et al. The Breast 2007;16:S84-88
Effects of Surgery

- Pathophysiology of sexual problems:
  - Scars, node dissection, causing loss of (sexual) self image
  - Painful lymphedema
  - Loss of breast and nipple sensitivity
Effects of Radiotherapy

- Pathophysiology of sexual problems:
  - Skin fibrosis, causing altered appearance and sensitivity of skin
  - Concerns about “radioactivity”
  - Fatigue, reduced activities (including sex)
About half of the women receiving chemotherapy at 40 become menopausal (loss of fertility, dyspareunia)

Alopecia (pubic hair)

Weight gain, contributing to lost attractiveness

Demark-Wahnefried et al., J Clin Oncol 2001;19:2381-89

Tamoxifen, aromatase inhibitors cause adverse endometrial effects
  • lubrication problems
  • vaginal bleeding
  • dyspareunia
  • reduced genital sensitivity
  • loss of sexual desire
Objective measured breast symmetry has no influence on quality of life in breast cancer patients

R. Exner^a, W. Krois^a, M. Mittlböck^b, P. Dubsky^a, R. Jakesz^a, M. Gnant^a, F. Fitzal^a

^a Department of Surgery, Medical University Vienna, Breast Health Care Center, Wachring Gurtel 18-20 Vienna, Austria
^b Center for Medical Statistics, Informatics and Intelligent Systems, Vienna, Austria

We conclude that breast symmetry is not a major factor for patients’ quality of life after breast cancer surgery. The improved breast self esteem in our patients after the use of oncoplastic techniques is independent of symmetry, but our numbers are small and further investigation is needed.

N=101
Breast-conserving surgery only
Cosmetic result was important in 53% of the women

<table>
<thead>
<tr>
<th>Associations of QOL with patient demographics described by Spearman correlation (rg); median (min-max) or mean (±SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIS</strong></td>
</tr>
<tr>
<td>Breast Symmetry Index</td>
</tr>
<tr>
<td>Age (years)</td>
</tr>
<tr>
<td>Follow-up time</td>
</tr>
<tr>
<td>Tumour size (cm)</td>
</tr>
<tr>
<td>Tumourbread-ratio</td>
</tr>
<tr>
<td>Oncoplastic no (n=92)</td>
</tr>
<tr>
<td>yes (n=9)</td>
</tr>
</tbody>
</table>
Sexual Complaints
Summary

- Desire disorders: 23-64%
- Arousal and lubrication concerns: 20-48%
- Orgasmic disorders: 16-36%
- Dyspareunia: 35-40%
- Decrease of intercourse and kissing

- About 30% report psychological distress: anxiety, depression, concerns on body image, fear of recurrence, post-traumatic stress disorder

Colorectal Cancer

- Abdominoperineal resection leads to more female and male sexual problems than other surgeries.

- Combination of radiotherapy and surgery leads to more dysfunction than either treatment alone.
Therapy

- **Non-hormonal lubricants (Replens)**
  
  Bygdeman & Swahn, Maturitas 1996;23:259-63
  Nachtigall, Fertil Steril 1994;61;178-80

- **Vaginal dilators**
  
  Jeffries et al., IJROBP 2006;65:401-11
Couples

- Anxiety, depression, anger, financial difficulties and occupational changes may all contribute to the disruption of sexual activity
- Sexual activity drops down
- Sexual problems developing after cancer treatment are caused by the emotional and medical impact of the disease and by the stress in the couple’s relationship

Schover et al., Arch Sex Behav 1987;16:445-61
Take Home Messages

- Prevalence of sexual dysfunction after treatment of cancer is high
- Proper counseling is necessary
- Encourage a multidisciplinary approach
- Limited treatment options
Thank you

www.issc.nu