

Start	End	Topic	Speakers
13:30	13:40	Introduction	Nelly Faghani
13:40	13:50	Cancers of the pelvis	Vanessa Kennedy
13:50	14:05	Cancer treatment: surgery, radiation, chemotherapy, hormonal	Vanessa Kennedy
14:05	14:15	Pelvic dysfunction in women affected by cancer	Michelle Lyons
14:15	14:25	Medical assessment	Vanessa Kennedy
14:25	14:35	Physiotherapy assessment	Michelle Lyons
14:35	14:50	Physiotherapy treatment	Nelly Faghani
14:50	15:00	Questions	All

### **Speaker Powerpoint Slides**

Please note that where authorised by the speaker all PowerPoint slides presented at the workshop will be made available after the meeting via the ICS website [www.ics.org/2017/programme](http://www.ics.org/2017/programme) Please do not film or photograph the slides during the workshop as this is distracting for the speakers.

### **Aims of Workshop**

The number of women surviving or living with cancer has significantly increased through the years. Treatments such as surgery, chemotherapy, radiotherapy and hormonal therapy contribute to pelvic dysfunctions such as sexual pain, anatomic alteration, neurologic, myofascial and pelvic organ injury. Asking the right questions and performing a thorough physical examination are essential steps in addressing the concerns of these women. This workshop will go over the literature of treating pelvic dysfunction in women surviving or living with cancer and provide assessment and treatment options to enhance the quality of life in this under serviced population.

### **Learning Objectives**

After this workshop participants should be able to:

- 1) Understand the types of female pelvic cancers.
- 2) Understand the types of medical treatments for female pelvic cancer and implications on the pelvic floor.
- 3) Review the role of physiotherapy in the treatment of pelvic dysfunction for women surviving or living with cancer.

### **Learning Outcomes**

After this workshop participants should be able to:

- 1) Understand the various types of female cancer.
- 2) Understand the various types of medical treatment for the female pelvic cancers and the clinical presentation on the pelvic floor.
- 3) To plan an individually tailored treatment plan for a women surviving or living with cancer.

### **Target Audience**

Physiotherapists, obstetricians, gynaecologists, oncologists, urogynaecologists, nurses, urologists, gastroenterologists, general practitioners, colorectal, midwives, sex therapists, sexologists

### **Advanced/Basic**

Advanced

### **Suggested Learning before Workshop Attendance**

Review pelvic floor anatomy

Hazewinkel MH, Sprangers MA, van der Velden J, et al. Long- term cervical cancer survivors suffer from pelvic floor symptoms: a cross-sectional matched cohort study. *Gynecol Oncol.* 2010;117:281–6.

Yang EJ, Lim JY, Rah UW, Kim YB. (2012). Effect of a pelvic floor muscle training program on gynecologic cancer survivors with pelvic floor dysfunction: A randomized controlled trial. *Gynecologic Oncology*, 125:705-711.

### **Suggested Reading**

Coady D, Kennedy V. Sexual Health of Women Affected by Cancer: Focus on Sexual Pain OBGYN VOL. 128, NO. 4, OCTOBER 2016

Hazewinkel MH, Sprangers MA, van der Velden J, et al. Long- term cervical cancer survivors suffer from pelvic floor symptoms: a cross-sectional matched cohort study. *Gynecol Oncol.* 2010;117:281–6.

Huffman LB, Hartenbach EM, Carter J, Rash JK, Kushner DM. Maintaining sexual health throughout gynecologic cancer survivorship: A comprehensive review and clinical guide. *Gynecol Oncol.* 2016;140(2):359-368.

Miles, T. and N. Johnson, Vaginal dilator therapy for women receiving pelvic radiotherapy. *The Cochrane database of systematic reviews*, 2010(9): p. CD007291-CD007291.

Rutledge T et. al. (2014). A pilot randomized control trial to evaluate pelvic floor muscle training for urinary incontinence among gynecologic cancer survivors. *Gynecologic Oncology*, 132: 154-158.

Yang EJ, Lim JY, Rah UW, Kim YB. (2012). Effect of a pelvic floor muscle training program on gynecologic cancer survivors with pelvic floor dysfunction: A randomized controlled trial. *Gynecologic Oncology*, 125:705-711.

#### **Other Supporting Documents, Teaching Tools, Patient Education etc**

Blog from the NY Times

<http://well.blogs.nytimes.com/2013/02/14/life-interrupted-crazy-unsexy-cancer-tips/>

Interview with Dr Sharon Bober from Dana Farber about sexual health in cancer patients

<http://www.dana-farber.org/Adult-Care/Treatment-and-Support/Patient-and-Family-Support/Sexual-Health-Program/Program-helps-cancer-survivors-reclaim-sexual-health.aspx>

#### **Nelly Faghani, Physiotherapist, Canada**

Over the years the treatment of pelvic cancers has become increasingly successful with the rate of survivorship on the rise. What is unfortunately overlooked are the many women surviving or living with cancer that experience life altering, adverse consequences including various pelvic floor dysfunctions. Common long-term side effects of cancer treatment include urinary incontinence, bowel complaints and issues with sexuality that have both physical and psychological consequences. Urinary incontinence is associated with social isolation, poor self-related health, decreased psychological well being and impaired sexual relations. Many women experience negative body image, decreased self-esteem and perceived loss of sexual attractiveness but have difficulty discussing their sexual problems with their physicians. It is not surprising that these dysfunctions have a significant effect on women's quality of life. Pelvic health concerns are far too common and rarely talked about. Many women suffer silently without realizing that there are effective, evidence-based treatment solutions.

The prevalence of pelvic floor dysfunction in survivors of gynecologic and other pelvic malignancies is high. This is an incredibly under-served population and it is imperative that all health care professionals look beyond the initial good outcomes of survival in oncology patients and address the long lasting physical and psychological effects of cancer treatments. We need to take a multidisciplinary approach to treatments to help these patients. Physiotherapists must be part of the team with the aim of increasing overall function and quality of life. We need to ask the right questions and let our patients know that there are evidence-based conservative treatment options that can improve their bladder, bowel and sexual dysfunctions. We must do a thorough subjective and objective evaluation and recognize our role in the treatment plan.

There is an important role of physiotherapy in the management of pelvic dysfunction for women surviving or living with cancer. We can help address pain (pelvic, abdominal or other), fatigue, incontinence (urinary and/or fecal), constipation, urinary retention, sexual dysfunction (dyspareunia), lymphedema, poor lifestyle (obesity, diet, smoking) and altered sleep. Appropriate patient centered short-term and long-term goals must be made and regularly re-evaluated to monitor progress.

Physiotherapy treatment can include: appropriate pain education, bowel and bladder education/training, diet modification, deep breathing, pacing and prioritizing of activities, postural and ergonomic education, manual therapy to address pelvic floor over-activity or under-activity, diet modification, improvement of pelvic floor proprioception, possible use of dilators, appropriate cardiovascular exercise, lymphatic drainage, guided relaxation and/or meditation, mindfulness practice, cognitive behavioral therapy, graded imagery/exposure, improve sleep hygiene, yoga, Qi Gong and Tai Chi. There is strong evidence of the effective role of physiotherapy in treatment of pelvic dysfunction after pelvic cancer.

Pelvic cancer survivorship requires better management and physiotherapists play an important role on the multidisciplinary team. Together we can address cancer related changes in bladder, bowel, sexual and pelvic floor health, and in doing so improve quality of life for these often neglected and overlooked cancer survivors.

#### **Vanessa Kennedy, Gynecologic Oncologist, USA**

Pelvic dysfunction is common in women with cancer, particularly those with cancer arising from the pelvic organs. The most common culprits are gynecologic malignancies, including vulvar, vaginal, cervical, uterine, and ovarian,

fallopian tube or primary peritoneal cancers. Malignancies of the bladder, and of the lower gastrointestinal tract, including anal and colorectal cancers, often also lead to pelvic dysfunction.

Although pelvic dysfunction can be the result of cancer directly involving the pelvic structures, more often, dysfunction is a consequence of cancer treatment. Cancer treatments implicated in the development of pelvic dysfunction include surgery, radiotherapy, chemotherapy, and hormonal therapies. These treatments can lead to alterations in functional anatomy, particularly neurologic, vascular and myofascial changes through both direct and indirect effects. Breast cancer treatment, for example, frequently induces or exacerbates menopause, subsequently leading to dysfunction in the pelvis.

A comprehensive medical assessment is essential for women presenting with pelvic dysfunction during or after cancer. This assessment must include a thorough history, with a detailed discussion of the onset, timing, duration, intensity and quality of symptoms, as well as an assessment of function prior to cancer diagnosis and treatment. It is also important that the provider have an understanding of the woman's cancer history and treatment. Physical exam is crucial in the assessment of pelvic dysfunction. While the report of subjective symptoms may suggest benefit from a particular course of treatment, exam is necessary to verify the presumed dysfunction, and to assess for other causes of the patient's symptoms, the most important of which is cancer recurrence. A thorough physical exam includes, but is not limited to, pelvic exam with evaluation of the vulva, including the vestibule; pelvic floor muscle palpation and strength assessment; vaginal mucosa examination; visualization and palpation of the cervix or vaginal cuff; visual inspection of the anus; rectal exam to assess rectal tone and palpate for nodularity or irregularity of the distal rectum. Physical exam should include evaluation for side effects associated with the patient's cancer treatment course, including radiation changes, such as pallor and scarring of the vaginal tissues; surgical effects and complications, such as shortening of the vagina or fistula formation; chemotherapy induced alopecia; and menopause related changes second to hormone blocking therapies.

### **Michelle Lyons, Physiotherapist, Ireland**

Treatment for gynaecological cancers, including vulvar, vaginal, cervical, endometrial and ovarian cancers, may include surgery, radiation therapy, chemotherapy, and/or hormonal therapy. We know that any of these approaches can have an adverse effect on the pelvic floor, as well as systemic effects on a woman's body. Issues can include pain, fibrosis, scar tissue adhesions, diminished flexibility, fatigue and feeling fatigued and unwell. The effects on body image should not be under-estimated either. In their paper 'Sexual functioning among breast cancer, gynaecological cancer, and healthy women', Anderson & Jochimsen explore how '...body-image disruption may be a prevalent problem for gynaecological cancer patients...more so than for breast cancer patients'. The judicious use of pelvic physiotherapy may be an excellent pathway for women who have undergone treatment for gynaecological cancer to re-integrate with her body.


A woman who has had a vulvectomy will need sensitive counselling to understand that she can still respond sexually. Patients who have had a vaginectomy with reconstruction as part of a pelvic exenteration will need extensive rehab to help them achieve successful sexual functioning. We as pelvic rehab practitioners are in a uniquely privileged position – not only can we ask the questions and discuss the options but we are licensed to be 'hands on' professionals, using our core skills of manual therapy, bespoke exercise advice and educating our patients about a range of issues from the correct usage of lubricants, dilators, sexual ergonomics and brain/pain science

In Farmer et al's 2014 paper, 'Pain Reduces Sexual Motivation in Female But Not Male Mice', the authors found that 'Pain from inflammation greatly reduced sexual motivation in female mice in heat -- but had no such effect on male mice'. Unfortunately, ongoing pelvic pain is a common sequela of treatment for gynaecological cancers – reasons ranging from post-operative adhesions, post-radiation fibrosis or vaginal stenosis or genital lymphedema. It is also worth bearing in mind the 'rare but real' scenario of pudendal neuralgia following pelvic radiation, as discussed by Elahi in his 2013 article 'Pudendal entrapment neuropathy: a rare complication of pelvic radiation therapy.'

The good news is that we have much to offer. Yang in 2012 ('Effect of a pelvic floor muscle training program on gynecologic cancer survivors with pelvic floor dysfunction: A randomized controlled trial') showed that pelvic rehab improved overall pelvic floor function, sexual functioning and QoL measures for gynecological cancer patients. Yang's pelvic rehab group, administered by an experienced physiotherapist, displayed statistically significant differences in physical function, pain, sexual worry, sexual activity, and sexual/vaginal function. Gynecological cancer and treatment procedures are potentially a fourfold assault: on sexual health, body image, sexual functioning, and fertility. Sexual morbidity is an undertreated problem in gynecological cancer survivorship that is known to occur early and to persist beyond the period of recovery (Reis et al 2010). We have a good and growing body of evidence that pelvic rehab, delivered by skilled therapists, has the potential to address each of these issues. And perhaps, most encouraging, here is Yang's conclusion: '...'Pelvic Floor Rehab is effective even in gynecological cancer survivors who need it most.' (Yang 2012).

# W16: Pelvic Health in Women Affected by Cancer

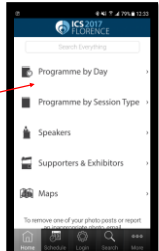
Nelly Faghani  
Vanessa Kennedy  
Michelle Lyons



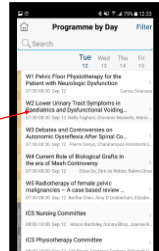
**\*\*NEW FOR 2017\*\***


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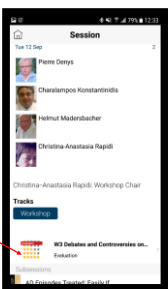


Step 2, locate workshop

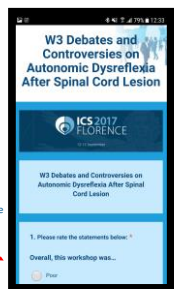





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Nelly Faghani



**Affiliations to disclose<sup>†</sup>:**

No disclosures


† All financial fees (over the last year) that you may have with any business organisation with respect to the subjects mentioned during your presentation

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## Learning Objectives

1. Understand the types of female pelvic cancers
1. Understand the types of medical treatments for female pelvic cancer and implications on the pelvic floor
2. Review the role of physiotherapy in the treatment of pelvic dysfunction for women surviving or living with cancer



## Cancer

- Leading causes of death worldwide <http://www.who.int/mediacentre/factsheets/fs297/en/>
- Techniques for prevention, diagnosis and treatment continue to improve
- Women surviving longer
- Survivorship = life-altering long-term effects



## Canadian Percent Distribution of Estimated New Cancer Cases (2015)

FIGURE 1.2 Percent distribution of estimated new cancer cases by sex, Canada, 2015



- 2 in 5 will develop cancer in their lifetimes [www.cancer.ca](http://www.cancer.ca)
- 23% located in pelvis
- Add breast cancer = 49% have had a cancer which directly impacts sexual organs



## Bladder & Bowel Symptoms after Gynecologic Cancer

- Research suggest symptoms are common among survivors Hazewinkel et al 2010, Pieterse et al 2006, Vistad et al 2008, Dunberger et al 2010
- Symptoms may persist long after treatment finished Maher et al 2008, Skjeldestad et al 2009
- Survivors that were disease and treatment free for >1yr, 67% of women reported moderate to severe urinary incontinence Rutledge et al 2010
- Adversely affect quality of life Hsu et al 2009, Vas et al 2011, Ereksen et al 2009, Barker et al 2009, Herzog 2007



## Pelvic Floor Disorders in Gynecologic Cancer Survivors Rutledge et al 2009

- Clinician must look beyond the initial good outcome of survival in oncology patients and focus on the effects of treatment
- Changes in the pelvic floor caused by treatment for gynecological cancer affects:
  - Urinary and bowel dysfunction
  - Impaired sexual health



## Pelvic Dysfunction Yang et al 2012

- Radical hysterectomy and radiotherapy disrupts the anatomy of the pelvic floor and the local nerve supplying to the PFMs
- Pelvic floor dysfunction may manifest as storage and voiding difficulties of the bladder, urinary or fecal incontinence and/or sexual difficulties



## Sexual Health

- Sexual health impacts can affect up to 80% of women following gynecological cancer treatment Fahimi et al 2015
- Changes in sexual function may not be recognized or addressed under the care of an oncologist Zhou et al 2015

*“Are we asking the right questions”  
“Do patients know there are conservative options”*



## Sexual Dysfunction Systematic Review

- Prevalence of sexual pain ranged from 29-64% in approximately 2/3 of studies Jeffrey et al 2015
- Rates of dyspareunia are 45% or higher in breast cancer survivors Pumo et al 2012, Puiera et al 2013
- Women treated for: gynecological cancer, rectal cancer or have undergone radiotherapy treatments, report dyspareunia up to 55% of the time McCallum et al 2014, Bregendahl et al 2015



## Physical Impairments Cause Distress

- The stress, anxiety and depression found in this population is often due to the physical impairments that have not been addressed Silver et al, 2013




## Sexual Health in Women Affected by Cancer

Coady, Kennedy 2016

- Patients want to know how their treatment options will effect their sexual function Bradford et al 2015, White et al 2015
- They often find it hard to bring up the subject themselves Falk et al 2013, Flynn et al 2012, Hill et al 2011
- Women would like their doctors to ask about sexuality



Vanessa Kennedy 


Affiliations to disclose\*:  
 No disclosures

\* An Essential Site (over the last year) that you may have with any business organization with respect to the subjects mentioned during your presentation

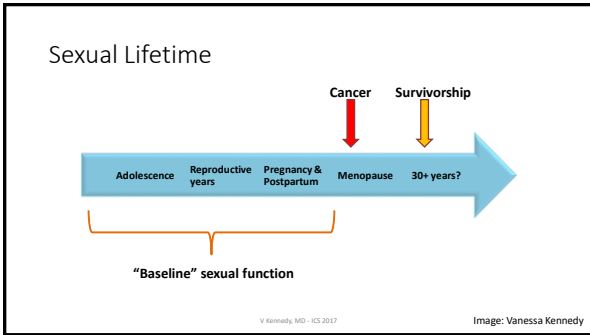
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### Cancer of the Pelvis

- Advances in oncology
  - Screening
  - Risk reduction strategies
  - Genetic testing (germline and somatic)
  - Diagnostic tools
  - Treatment options, including targeted therapies

 **More woman affected by cancer are living longer**

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### Cancer of the Pelvis

CLINICAL OPINION Gynecology aig.org

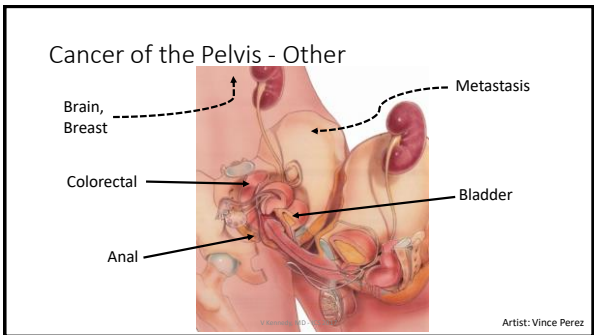
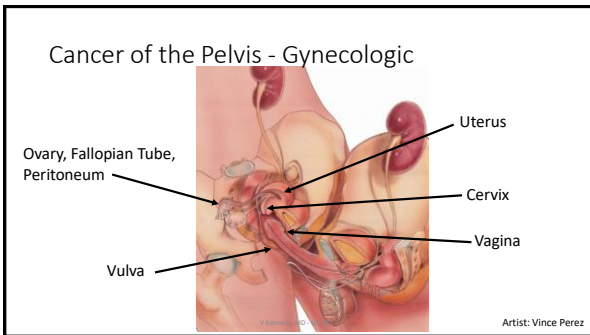
**A manifesto on the preservation of sexual function in women and girls with cancer**

Shary Taylor Linder, MD, MAPP Emily M. Krawinkel, MPP; Asher C. Matthews, BA

- Women comprise the majority of the population (in number and proportion) that are diagnosed with cancers that directly affect the sex organs.

- The vast majority of women in the age groups affected by gynecologic and breast cancers are sexually active in the year prior to diagnosis, including the majority of menopausal women in the 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> decades who have a partner. (Lindau, 2015)

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### Cancer of the Pelvis

- The majority of women in partnered relationships, are **sexually active** in the year prior to cancer diagnosis (Lindau, 2007)
  - Including middle-aged and older women
    - 57-85y report an average of 2-3 sexual encounters per month
    - Younger women report an average of 1-2 per week
- Women with cancer **value** their sexual health (Kennedy, 2015; Hill, 2010)
  - An assessment of 261 women with prior Gynecologic or Breast cancer:
    - 42% were interested in receiving care
    - 7% had sought care

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### Cancer of the Pelvis

- In women presenting for Gynecologic Oncology consultation (Kennedy, 2015)
  - 62% reported sex was *moderately* to *extremely* important
  - 50% reported a problem with sexual function
- Of those aged 71-91y
  - 25% reported having a romantic, sexual, or intimate partner
  - 14% reported sexual activity in the past year
  - 24% reported sex was *moderately* to *extremely* important

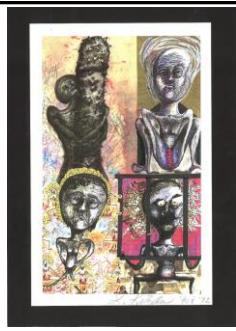
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### Cancer treatment

- Surgery
- Radiation Therapy
- Chemotherapy
- Hormonal therapies

Artist: Linda Katzdom

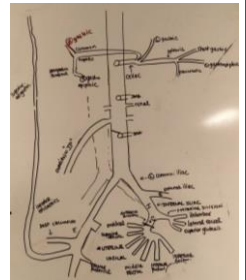
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### Cancer treatment: Surgery

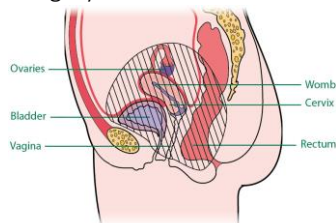
- Anatomic and functional alterations
  - "Minor" procedures:
    - Laser ablation
    - Wide local excision
    - Laparoscopy
  - Major procedures:
    - Radical vulvectomy
    - Radical hysterectomy
    - Lymph node dissection
    - Tumor debulking
    - Pelvic exenteration

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### Cancer treatment: Surgery

#### Total Pelvic Exenteration



Source: <http://www.macmillan.org.uk>

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### Cancer treatment: Radiation

- Used for local treatment or as an adjunct for many cancers
  - Uterine, Cervical, Vaginal, Vulvar, Rectal, and Anal
  - External beam radiation
  - Brachytherapy

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## Cancer treatment: Chemotherapy

- Used in primary treatment of most cancers
  - Neoadjuvant
  - Adjuvant setting
  - Maintenance

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## Cancer treatment: Hormonal

- Indications:
  - Uterine, Ovarian/Tubal/Peritoneal, Breast
- Hormone blocking therapies
  - Progestins
  - GnRH agonists
  - SERMs
  - Aromatase inhibitors

Artist: Vanessa Kennedy

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## Pelvic Dysfunction in Women affected by Cancer

Michelle Lyons, MISCP, RPT

NO DISCLOSURES

SELF FUNDED ATTENDANCE



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## Is Pelvic Function affected by Cancer?

Surgery

Radiation

Chemotherapy

Hormonal therapy



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## Cancer & Pelvic Pain?

Pelvic floor dysfunction (in the gynecological cancer survivor) may manifest as **storage and voiding difficulties of the bladder, urinary or fecal incontinence, sexual problems**

E.J. Yang et al. / Gynecologic Oncology 125 (2012) 705–711

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## Sequelae of Gynae Cancer Rx

Urinary dysfunction	Fatigue
Bowel dysfunction	Lymphedema
Sexual dysfunction	Peripheral Neuropathy
Pelvic Pain: Lumbo-pelvic or Intra Pelvic	Cognitive changes
Osteoporosis	Heart Health

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## The scale of the problem

Herwig R, et al. Late urologic effects after adjuvant irradiation in stage I endometrial carcinoma. Urology 2004;63:354–8.

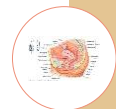
Jackson KS, Naik R. Pelvic floor dysfunction and radical hysterectomy. Int J Gynecol Cancer 2006;16:354–63.

Lalos O. Urinary, climacteric and sexual symptoms one year after treatment of endometrial and cervical cancer. Eur J Gynaecol Oncol 1996;17:128–36

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## Hysterectomy

Radical hysterectomy comprises excision of the uterus and cervix including parametrial tissue and upper vagina which disrupt pelvic autonomic nerve innervation causing pelvic floor dysfunction (Jackson et al., 2006)



This includes the dysfunction in at least one of three systems: **urinary, anorectal, and genital system.**

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## Crosstalk

One study reported up to two-third of cervical cancer survivors after RH showed urodynamic abnormalities.

One-third of them had storage dysfunction and half of them had voiding dysfunction (Manchana et al., 2010)

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## Yang et al 2012

Radical hysterectomy and radiotherapy disrupt the pelvic anatomy and the local nerves supplying the pelvic floor muscles, which are a part of the trunk stability mechanism and are involved in continence, elimination, sexual arousal, and intra abdominal pressure

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## Urinary & Bowel Dysfunction: Hazewinkel et al 2010

Genuine stress incontinence after RH and LND is reported in 19–81% of patients and reduced bladder volumes in 22–57% of the patients and constipation is common

Surgery with adjuvant radiotherapy, as compared to surgery alone, is associated with two times more severe urological complications and three times more severe gastrointestinal adverse events

Primary radiotherapy is associated with increased urgency to void and fecal incontinence in 8% to 67% of patients (Hazewinkel et al 2010)

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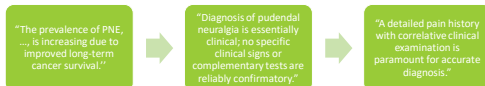
## Pudendal dysfunction

'...Preoperative chemoradiation for rectal cancer carries a significant risk of pudendal neuropathy, which might contribute to the incidence of faecal incontinence after restorative proctectomy for rectal cancer.' Lim et al 2006

'Pudendal entrapment neuropathy: a rare complication of pelvic radiation therapy.' Elahi et al Pain Physician Nov-Dec 2013

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## Elahi et al 2013



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## But...

**'Reasons for not seeking medical help for severe pelvic floor symptoms: a qualitative study in survivors of gynaecological cancer'**

Hazewinkel et al BJOG 2010;117:39–46

Vulvar, endometrial or cervical cancer survivors

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## Results

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Most reported reasons for not seeking help were that women found their symptoms bearable in the light of their cancer diagnosis and lacked knowledge about possible treatments....

'...women stated that care should be improved, specifically by timely referral to pelvic floor specialists'

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## Take Home Message: (with thanks to Hazewinkel et al 2010)

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'...There is a need for standardised attention to adverse effects on pelvic floor function after cancer treatment. This could be realised by quantifying symptoms using questionnaires, standardised attention for such symptoms by gynaecological oncologists or oncology nurses, and timely referral to pelvic floor specialists of women with bothersome pelvic floor symptoms...'

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### Medical assessment

- Comprehensive assessment is CRITICAL
  - History
  - Physical exam
- History
  - Subjective report of the problem / concern
  - Symptom onset, timing, duration, intensity, quality
  - Function prior to cancer
  - Cancer history, including treatment, disease status



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### Medical assessment

ACOG's advice for patients:

How can I address sexual problems with a health care provider? You could start off with a statement like:

- "I am having some concerns about my sex life."
  - "I do not enjoy sex like I used to."
  - "I am feeling sad lately; my partner is complaining I never want sex."
  - "Lately, I have been having trouble with intimacy. What can I do?"
  - "I am just not interested in sex. Do you have any advice?"
  - "Getting older has affected my love life. Is there a fix?"
- (ACOG FAQ072, 2011)

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### Medical assessment

We **MUST** communicate to patients:

- "You are not alone"
- "This is not all in your head"
- "You are not broken"
- "It is ok to want sexual activity"



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### Medical assessment

- Physical Exam
  - Objective assessment
  - Evaluation for cancer recurrence
- Include:
  - Abdomen and groin
  - Vulva, vestibule, perineum, Urethral meatus
  - Vaginal mucosa, cervix or vaginal cuff
  - Pelvic floor musculature
  - Bimanual and rectovaginal exam
  - Anus, anal sphincter



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### Medical assessment

Layered approach:

(Coady, 2015)

- Surface layer
- Nerve layer
- Myofascial layer
- Orthopedic layer
- Organ layer
- Body-wide systems



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Artist: Jamie McCartney

### Physiotherapy assessment - Michelle

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Physiotherapy treatment - Nelly

V Kennedy MD - ICS 2017

Questions?

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Physiotherapy Assessment



Michelle Lyons, MISCPRPT

## BioPsychoSocial

'The impact on QoL of PFD's in the general female population is well recognised. In the context of having survived (pelvic) cancers, PFD may be seen as relatively trivial. However in the context of resuming normal living, the symptoms experienced by survivors may be significant'

Malone et al, 2017

'The patient's voice: What are the views of women on living with pelvic floor problems following successful treatment for pelvic cancers?'

## Lifestyle Compromise (Malone et al 2017)

Emotional Impact of Bladder, Bowel, Sexual function changes

'Is today the day...'

Tolerance vs Intolerance

Survivor Guilt?

## Anderson et al 2012

### Physical dimensions

Dyspareunia, changes in vagina and decreased sexual activity

### Psychological dimension

Decreased libido, alterations in body image, anxiety related to sexual performance

### Social dimension

Difficulty maintaining previous sexual roles, emotional distancing from partner, perceived change in partner's level of sexual interest

Although sexual changes can be categorised into physical, psychological and social, the categories cannot be neatly delineated in the lived experience (Malone et al 2017)

### Factors to consider:

Physical issues leading to dyspareunia, including musculo-skeletal

Psychological issues, including loss of libido

Other pelvic health issues impacting sexual function: Faecal/urinary incontinence

Pain

## Survivor guilt?

'...most women did not seek medical help, because having had cancer overruled the importance of their pelvic floor symptoms.'

'They called themselves lucky if these symptoms were the only complaints they suffered from after cancer treatment'

Hazewinkel et al 2009

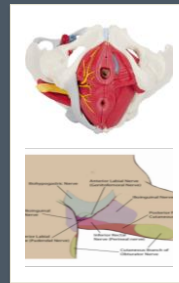
The importance of providing a safe environment to discuss pelvic health issues

### Sensitivity to changed appearance

Body image disturbance has been found to be associated with more severe PF symptoms in a study that looked at bowel and bladder dysfunction following treatment for gynaecologic cancer

Hazewinkel et al 2012

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### Systems Approach

- Musculo-skeletal: Spine, Hips, Pelvis
  - Urinary
  - Colorectal
  - Pain: Pudendal dysfunction (Elahi 2013)
  - Sexual
  - Lymphatic
- Within the context of the patient: Goals & Quality of Life

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### Outcome Measures

The Australian Pelvic Floor Questionnaire

Pelvic floor muscle strength: perineometer and sEMG (vaginal electrode)

Patient reported HRQOL: EORTC QLQ-C30 is a multidimensional questionnaire consisting of 30 items containing a global health status/QoL scale

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### Parker et al 2016

'A Pilot Study Using the Gynecologic Cancer Lymphedema Questionnaire (GCLQ) as a Clinical Care Tool to Identify Lower Extremity Lymphedema in Gynecologic Cancer Survivors'

- Do you have limited movement of your hip/ knee/ ankle?
- Have you experienced tenderness/ swelling?
- Have you experienced numbness/heaviness/aching?

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### Triggers for Cancer Survivors

- Catastrophisation
- Fear of Movement
- Neglect & Ownership
- Disrupted Body Awareness
- Lower Pain Tolerance
- Fewer Coping Strategies
- Fear of Recurrence

Jackson et al, 2005, Nijs et al 2010

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### Assessment of Tissue Integrity

- Mobility of tissues- Sensitivity to movement of skin – abdomen, adductors, perineum
- Clitoral hood mobility
- Symmetry/colour of tissues
- Sensation changes - Innervations
- Perineal body and introitus- Size, tone, position
- Q tip/Cotton swab evaluation

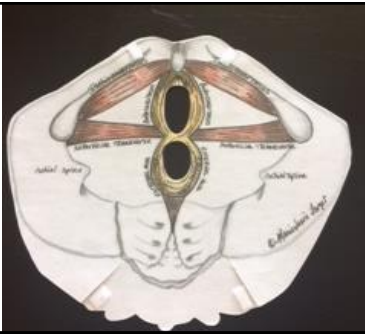
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**Pelvic Floor Muscle Assessment**

Layer 1 Muscles:  
 Bulbocavernosus  
 Ischiocavernosus  
 Superficial Transverse Perineal  
 External Anal Sphincter

Model courtesy of MJ Forget




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**Pelvic Diaphragm**

Puborectalis  
 Pubococcygeus  
 Iliococcygeus

Obturator Internus  
 Piriformis  
 Coccygeus



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**Take Home Message:**

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'PFRP is effective even in gynecological cancer survivors who need it most.' (Yang 2012)

Acknowledgement of issue  
 Confident conversation and assessment by clinicians

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## W16: Pelvic Health in Women Affected by Cancer

### Physiotherapy Treatment

Nelly Faghani

Registered Physiotherapist

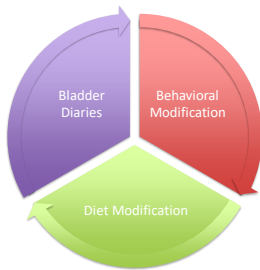


## Problem List

- Incontinence
- Urgency/frequency
- Bowel dysfunction
- Urinary retention
- Sexual dysfunction
- Pain
- Lymphedema
- Depression / anxiety / stress
- Fear avoidance
- Catastrophization
- Deconditioning
- Cancer related fatigue
- Poor sleep



## Urinary Symptoms



## Bowel Symptoms

- Water
- Fibre
- Bowel routine
- Knees above hips
- Breathing/imagery
- Improve pelvic floor proprioception



## Urinary Incontinence (UI) Following Gynecological Cancer Treatment Rutledge et al 2014

- 80% of patients in pelvic floor muscle training and behavioral modification treatment group reported significant improvement in UI
- Behavioral modification included education on:
  - fluid intake
  - constipation management
  - bladder irritants



## Effect of PFMT Program on Gynecological Cancer Survivors with PFD Yang et al 2012

- Conclusions: Pelvic floor rehabilitation program improved pelvic floor dysfunction, sexual function and quality of life of patients who have survived gynecological cancer



## Interventions for Sexuality after Pelvic Radiation Therapy and Gynecological Cancer

Katz et al 2009

- Not enough attention paid to sexual difficulties after radiation
- Profound effect on sexual functioning, all phases of sexual response cycle & body image
- Psychological impact combined with physical sensations can lead to a lower interest in sex and decreased frequency



## Sexual Function

- Treat vaginal dryness (moisturizer/lubricant)
- Educate couple about how to schedule time to optimize pleasurable touch in a sensual environment (both non-sexual and sexual touch)
- Take the focus off of intercourse, increase pleasure, expand sexual repertoire



## Pain Education

- Pain education effective but underused for treating cancer related pain Nijs et al 2016
- Thoughts are nerve impulses, and negative thinking alone can drive the pain Moseley 2008
- Evidence that pain education reduces pain, disability, catastrophization and improves physical performance Louw et al, 2012



## Treatment

- Abdominal massage McClurg et al 2011
- Abdominal scars
- Over activity of muscles externally
- Connective tissue restriction
- Visceral mobilization
- Nerve mobilizations
- Lymphedema treatment



## Treatment

- Breathing
- Global contributors
- Pelvic floor contraction, relaxation and coordination
- Internal techniques to address overactive pelvic floor muscles
- Clitoral hood mobility
- Accommodation/dilators



## International Guidelines on Vaginal Dilation after Pelvic Radiotherapy

- Good practice points on the use of vaginal dilation have been developed to guide patients and clinicians
- Literature varies in supporting dilators in both treatment and prevention of stenosis
- There is Level 2+ evidence that dilation can be used to treat vaginal shortening once it has occurred



## Dilators

- No reliable evidence that routine, regular vaginal dilation during radiotherapy prevents stenosis or improves quality of life Miles et al Cochrane database Sys Rev 2014
- Sexual Rehabilitation after pelvic radiotherapy and vaginal dilator use: Support for gradual vaginal dilator/accommodator program Bakker et al 2014



## Dilators

- Educate patients of their options
- Address fear
- Graded exposure
  - Lubrication
  - Non-nociceptive
  - Imagery
  - Various positions
  - Start small and progress in non threatening way
  - Increase speed of insertion



## Other Treatments for Cancer Survivors

- Yoga has physical and psychosocial benefits Buffart et al 2012
- CBT for insomnia (Garland et al 2014)
- Mindfulness-based stress reduction and meditation for improving overall quality of life Legacher et al, Lerman et al 2012, Carlson et al 2013
- Physical activity appears to reduce the risk of cancer recurrence and mortality Meyerhardt et al 2006, Wahnefried et al 2006



## Summary

- Pelvic dysfunction is common among gynecologic cancer survivors
- Multidisciplinary biopsychosocial approach
- Ask patients the right questions
- Physiotherapy is an effective intervention



# Thank you

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