Sexual Consequences of Cancer Treatment
Management Pathway
March 2016
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1 Introduction

As the incidence of cancer rises, and treatment becomes more effective, increasing numbers of people are living with and beyond their cancer diagnosis. While many will return to their previous levels of health and well-being, a significant number will develop consequences of the cancer and its treatment, either during or soon after their treatment, or in some cases many years later. These consequences can have a serious impact on people’s quality of life and their ability to participate in activities which are important to them.

Sexual consequences following cancer treatment are common, particularly for those who’ve been treated with breast surgery and radiotherapy, pelvic surgery or radiotherapy, or hormone (androgen deprivation or anti-oestrogen) therapy. Sexual inactivity is not in itself problematic, so long as the person is not dissatisfied, distressed or avoiding sex because of sexual difficulties. Sexual consequences are caused by a variety of physical, psychological and relationship factors and include loss of sexual interest/desire, arousal and sexual pain difficulties, orgasmic or ejaculatory difficulties and reduced sexual satisfaction/confidence.

In women, sexual consequences may be a result of breast or gynaecological cancer treatment that affect oestrogen levels resulting in reduced vaginal lubrication, which can cause dyspareunia (sexual pain), reduced enjoyment and orgasmic difficulties. Pelvic radiotherapy may cause vaginal dryness, adhesions and fibrosis, stenosis and vaginal shortening, again resulting in pain and an inability to have penetrative sex. Surgery may cause altered breast appearance and sensation, while pelvic and vulval surgery can lead to vaginal shortening or stenosis, altered vascular supply and nerve damage, reduced clitoral sensitivity resulting in sexual pain or orgasmic changes.

In men, erectile dysfunction (ED) may result from hormonal changes secondary to treatment for prostate cancer, as a result of nerve damage following pelvic surgery or radiotherapy, or as a result of changed body image due to weight change associated with treatment. Reduced orgasmic intensity, dry or retrograde ejaculation and climacturia are also reported as having a negative impact on men’s sexual expression following cancer treatment.

Mapping surveys of sexual consequences management within the LCA during late 2015 and early 2016 showed that sexual consequences of cancer and its treatment are often raised during oncology consultations. However, most oncology healthcare professionals have not received additional training to help them discuss and manage sexual changes. Over 90% of respondents reported wanting additional training and education to help them best meet the needs of their patients, and many specifically asked for guidance on what was reasonable for them to manage, and when they should make referrals to experts in the field such as andrologists, menopause clinics, ED services, sexual medicine or sexual counsellors.

As a result of this mapping, clear pathways for the assessment, management and onward referral of sexual consequences have been developed to support people affected by cancer to achieve the level of sexual activity that they would like or that is possible.
2 Overview

This document outlines both the evidence base for developed pathways and the management pathways themselves. For guidance on how to manage initial discussions about sexual consequences and information and management strategies, please see the relevant LCA published HNA prompt sheets. These can be found in Appendix 1 and Appendix 2, as well as at: www.londoncanceralliance.nhs.uk/information-for-healthcare-professionals/forms-and-guidelines/lca-patient-experience-programme/holistic-needs-assessment/

As sexual consequences are so diverse, management pathways and these guidelines address the following common treatment-induced sexual difficulties:

- Erectile Dysfunction following Radical Prostatectomy (Appendix 3)
- Erectile Dysfunction following Radical Pelvic Surgery (Appendix 4)
- Erectile Dysfunction following Pelvic Radiotherapy (Appendix 5)
- Male Sexual Dysfunction as a result of Androgen Deprivation Therapy (Appendix 6)
- Male Non-Erectile Dysfunction Sexual Difficulties (desire, sexual pain, orgasmic/ejaculatory disorders) (Appendix 7)
- Female Sexual Difficulties after Pelvic Surgery (Appendix 8)
- Female Sexual Difficulties after Pelvic Radiotherapy (Appendix 9)
- Female Sexual Difficulties after Breast Cancer (Non-Endocrine) (Appendix 10)
- Female Sexual Difficulties after Endocrine Therapy for Breast Cancer (Appendix 11)
- Female Sexual Difficulties: Desire and Orgasmic Difficulties (Appendix 12)

While not primarily sexual consequences themselves, anxiety and depression, body image adjustment, altered femininity/masculinity, treatment-induced menopause or low testosterone (hypogonadism) and infertility concerns are common precipitating and maintaining factors for sexual difficulties associated with cancer and its treatment. Oncology professionals are asked to identify these important contributory factors and refer as appropriate to specialist nurses (CNSs/nurse consultants or advanced nurse practitioners) psychological services, endocrine, andrology, menopause or infertility services and online resources as appropriate for information, support and formal counselling that can assist people to address these difficulties.

It is not possible within this guidance document to offer specific management strategies for all types of cancer or treatments that may impact on sexual expression and intimacy. For example, treatment-induced sexual difficulties may be experienced by people treated for head and neck cancer, cerebral tumours, haematological malignancies (intensive chemotherapy/stem cell transplantation including genital graft vs. host disease) or in teenagers and young adults (TYA) affected by cancer.

These guidelines and management pathways are intended to address the sexual consequences associated with treatment for the more common adult malignancies. However, the types of sexual difficulties addressed, their assessment and proposed management include principles that are appropriate for health professionals also caring for these other patient groups.

These guidelines are also expected to embrace the clinical assessment, management and sexual rehabilitation needs of people who self-identify as lesbian, gay, bisexual or as a trans man or trans woman.
There may be occasions when oncology clinicians identify the need for additional expertise/consultation (e.g. endocrinology, psychosexual services or gender identity clinics) beyond cancer services to support optimal sexual rehabilitation for LGBT individuals or couples. Some helpful organisations and service addresses for further advice regarding LGBT people affected by cancer are included in Appendix 15.

Health professionals within LCA cancer centres or units are most likely to initiate or recommend biomedical treatments or referral to specialist services including psychological, couple or psychosexual therapy, andrology or specialist menopause clinics via primary care (GP) colleagues for on-going management. However, direct referral for ED management, psychological or psychosexual counselling/therapy is available in some LCA cancer centres or units and oncology professionals are encouraged to refer/seek access to local services within and beyond LCA Trusts as appropriate. Psychosexual counselling services within the LCA are listed in Appendix 16.
3 Method

The Sexual Consequences working group, under the remit of the LCA Survivorship Pathway Group, completed two concurrent mapping exercises in early 2016 to identify:

- current sexual consequences management within oncology services
- sexual consequences-related learning needs of oncology healthcare professionals
- prevalence of sexual consequences identified within different primary diagnostic groups
- capacity within specialist sexual counselling services to provide intervention for people living with sexual consequences of cancer and its treatment

These mapping surveys provided further evidence to the expert consensus within the working group that clear, evidence-based guidance was needed to support healthcare professionals to offer the most appropriate interventions to people living with and beyond cancer.

The working group met from June 2015 to March 2016, with interdisciplinary core working group representation from urology, gynaecology, breast cancer and psychological support services from three LCA cancer centres. The group sought further clinical guidance regarding the scope of these guidelines from lower GI, urology and psychological support service colleagues beyond these centres via email, phone and direct contact. Enquiries regarding availability of sexual consequences guidelines at two cancer centres beyond the LCA were also made with colleagues at The Christie NHS Foundation Trust (Manchester) and Castle Hill Hospital NHS Trust (Hull).

Development of these guidelines and associated management pathways was taken forward through separate male (led by Mr Tet Yap, Consultant Urologist/Andrologist) and female (led by Dr Isabel White, Clinical Research Fellow, Psychosexual Practice) sexual consequences sub-groups. Working group meetings were used to discuss and reach consensus on the scope, evidence base and operational detail of the guidelines and management pathways prior to wider consultation through LCA survivorship and tumour-specific working groups, final approval and LCA dissemination (website placement).
4 Evidence for Interventions

Please see Further Reading.

4.1 Assessment

Sexual consequences of treatment are seen by patients, partners and by some professionals as a challenging aspect of aftercare or recovery after cancer. Oncology professionals can find discussions about sexual impact of treatment challenging to have within busy inpatient and follow-up settings.

It can be helpful for patients/couples and health professionals alike to use screening or assessment methods (checklists/questionnaires) as a way of systematically assessing common sexual difficulties and as a vehicle for further discussion.

There are a variety of patient reported outcome measures (PROMS) available to assess the type and severity of male and female sexual difficulties. However, many of these are more suitable for use in services seeing the largest volume of people affected or for use in services where specialist management is undertaken.

Within daily oncology practice health professionals may find it helpful to use a brief screener or assessment format such as Brief Sexual Concerns Screener; Female Sexual Function Index-6; or Sexual Health Inventory for Men SHIM or IIEF-5, all in Appendix 15.

In addition to the assessment of specific sexual impact of cancer and its treatment it is also important to assess other contributory physical, mental health and relationship factors that may be relevant and that pre-date the cancer diagnosis/treatment. This is relevant for both male and female patients in terms of general health status and the provision of post-treatment lifestyle advice.

Pre-treatment factors are particularly important in the management and outcomes of treatment induced erectile dysfunction (ED). Men undergoing cancer treatment that is likely to affect erectile function should have pre-treatment assessment regarding the following:

- relevant co-morbidities such as diabetes and cardiovascular disease (these are risk factors for non-cancer related ED as a result of generalised arteriopathy)
- current medications, such as nitrates, anti-hypertensives, antidepressants
- lifestyle factors, such as smoking, obesity and current physical activity status

4.2 Interventions for men

Health professionals are encouraged to access more detailed information in support of these management pathways and clinical guidelines through the Further Reading section of this document. Publications most relevant to the management of ED after cancer treatment are marked with an asterisk (*).

4.2.1 PDE-5 inhibitors (sildenafil, tadalafil, vardenafil, avanafil)

As can be seen from the male sexual dysfunction pathways in section 5.0 of this document, the first line management strategy usually offered to men with treatment-induced ED (the most common sexual consequence of treatment for which men seek professional help) is the use of oral pde-5 inhibitor medication.

This medication (usually tadalafil 5mg) may be offered on a daily basis, usually at a lower dose, or more commonly prescribed as an on-demand dose as per drug specific prescribing guidance.
Tadalafil 5mg is the only pde5-I drug currently licensed for use in the UK on a daily regular dose schedule, while other drugs, such as sildenafil, may be prescribed off-licence for daily administration by medical staff with specific expertise in the management of ED after prostatectomy.

**NHS Prescribing Guidance for ED medication**

Generic sildenafil is now no longer in the Selective List Scheme (SLS) list (Part XVIIIb of the drug tariff) meaning that restrictions on its use are lifted. It no longer needs to be annotated ‘SLS’ and can be prescribed by GPs on FP10 for any indication for ED including severe distress. NHS guidance on suggested quantities to prescribe (i.e. 1 dose per week) has not changed. The most cost effective treatment for ED at present is therefore generic sildenafil. Viagra remains significantly more expensive than generic sildenafil (average cost £20 per 4 tablets compared to £1.10 for 4 generic sildenafil tablets).

**Criteria for prescribing under Selective List Scheme (SLS) requirements**

The criteria for prescribing treatment for ED on the NHS under SLS are laid down in HSC 1999/1158 and are also available in the British National Formulary. Broadly they include the following:

- men who have had radical pelvic surgery; men who have had their prostate removed and/or have been treated for prostate cancer (surgery and other treatment); treated for renal failure (transplant and dialysis); spinal cord and severe pelvic injury; diabetes; multiple sclerosis; single gene neurological disease, poliomyelitis, spina bifida and Parkinson’s disease
- men not included in the above categories but who were receiving treatment for ED on 14 September 1998
- men diagnosed to be suffering from severe distress on account of their ED should be referred to specialist services who will prescribe treatment if it is considered appropriate

Oral drugs for ED that are prescribed on the NHS under the SLS are avanafil (Stendra), tadalafil (Cialis), vardenafil (Levitra) and Viagra.

Figure 1 offers a summary of the most common pde-5i drugs in use together with their onset and duration of action, dose range, absorption and contraindications.

**Figure 1**

<table>
<thead>
<tr>
<th></th>
<th>Sildenafil</th>
<th>Tadalafil</th>
<th>Vardenafil</th>
<th>Avanafil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effective from/for</strong></td>
<td>30-60min/12h</td>
<td>30min/36h</td>
<td>30min/12h</td>
<td>15min/&gt;6h</td>
</tr>
<tr>
<td><strong>Fatty meal effect</strong></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Not significant</td>
</tr>
<tr>
<td><strong>Dosage (mg)</strong></td>
<td>25, 50, 100</td>
<td>5, 10, 20</td>
<td>5, 10, 20</td>
<td>50, 100, 200</td>
</tr>
<tr>
<td><strong>Contraindications</strong></td>
<td>Nitrates</td>
<td>Nitrates</td>
<td>Nitrates, antiarrhythmics</td>
<td>Nitrates</td>
</tr>
</tbody>
</table>
Given generic sildenafil is the most cost effective oral drug for the management of ED after cancer treatment it is likely that most hospital and GP prescribers will opt to use sildenafil as the drug of first choice. However, if after patient trial of this medication on at least 6–8 occasions under optimal conditions for use the patient does not achieve a satisfactory erectile response or experiences side effects, then other oral or injectable pharmacological agents may be considered.

Figure 2 offers a summary of side effect prevalence associated with the oral drugs most commonly used.

### Table: Side Effects

<table>
<thead>
<tr>
<th>Adverse event</th>
<th>Sildenafil</th>
<th>Tadalafil</th>
<th>Vardenafil</th>
<th>Avanafil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>12.8%</td>
<td>14.5%</td>
<td>16%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Flushing</td>
<td>10.4%</td>
<td>4.1%</td>
<td>12%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Dyspepsia</td>
<td>4.6%</td>
<td>12.3%</td>
<td>4%</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Nasal congestion</td>
<td>1.1%</td>
<td>4.3%</td>
<td>10%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Dizziness</td>
<td>1.2%</td>
<td>2.3%</td>
<td>2%</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Abnormal vision</td>
<td>1.9%</td>
<td></td>
<td></td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Back pain</td>
<td></td>
<td>6.5%</td>
<td></td>
<td>1.9%</td>
</tr>
<tr>
<td>Myalgia</td>
<td></td>
<td>5.7%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Key points

In using oral medication for post-prostatectomy ED it should be noted that:
- efficacy is dependent on degree of cavernous nerve damage (nerve-sparing vs non-nerve sparing procedures), the man’s age, pre-operative sexual function and oral drug dose used
- after a 12-week trial post-prostatectomy improved assisted erectile function was seen in up to 65% of men dependent on the dose used
- there was a significant difference between sildenafil and no treatment after a trial of medication at 24 weeks, when initiated 14 days post-radical prostatectomy
- on-demand medication use can improve intercourse satisfaction, orgasmic function and overall sexual satisfaction following radical prostatectomy

In using oral medication after pelvic RT/ADT it should be noted that:
- medication can be effective following RT, both on-demand and with daily doses
- efficacy is dependent on the man’s age, the presence/absence of co-morbidities/concomitant medication and pre-treatment erectile function
- oral medication alone in men receiving ADT is generally less/not effective
4.2.2 Vacuum erection devices

Vacuum erection devices (VEDs) are often used in combination with oral pde5-I medication, particularly after radical prostatectomy to assist in the maintenance of penile length through the stretching and oxygenation of penile tissues while nerve recovery takes place. VEDs may also be selected as the main/sole type of erectile aid by some men.

Key points
In using a VED for the management of ED, these devices:
- avoid the use of medication and may be more acceptable to some men
- are cost effective and relatively simple to use
- are not dependent on normal testosterone levels or sexual desire to be effective (may be important in men receiving ADT)
- can assist in the prevention and correction of mild post-prostatectomy penile curvature
- are contraindicated in cases of severe penile curvature, bleeding disorders and sickle cell disease
- require patient teaching (by HCP/CD-ROM or DVD), dexterity and advance planning for effective use

4.2.3 Alprostadil

Topical use of alprostadil is most commonly used after failure of oral medication to create a satisfactory assisted erection. This is most likely to occur after non-nerve sparing pelvic surgery, after external beam RT with ADT, where testosterone recovery is inadequate or where pre-treatment erectile function was already significantly impaired. Alprostadil is currently available in 3 forms: intra-cavernosal injection (Caverject, Viridal), intra-urethral pellet (MUSE) and topical cream (Vitaros).

Key points
- Intra-cavernosal injection therapy is generally more effective in creating an assisted erection than the other alprostadil preparations, particularly in more severe ED
- In men who didn’t respond to oral sildenafil after RP, intra-cavernosal injections significantly improved assisted erectile response (64% vs. 24%)
- Starting intraurethral alprostadil at least three months post RP enabled 70% of men to achieve an assisted erection sufficient for intercourse
- Alprostadil delivered by injection or intra-urethral pellet (MUSE) requires dexterity, patient training to self-administer, advance planning for effective use and compliance is variable
- Alprostadil is not dependent on normal testosterone levels or sexual desire to be effective (may be important in men receiving ADT)
- Alprostadil by injection is contraindicated in cases of bleeding disorders and sickle cell disease

4.2.4 Penile implants

Surgically implanted devices are normally discussed with the patient as a treatment option to consider after other management options have been deemed ineffective or unacceptable to the patient. There are two types of device: malleable rods and two or three piece inflatable devices.
Key points

- Insertion of a penile implant is irreversible in that erectile tissues in the penis are removed/obliterated as part of the insertion process thus making a return to other forms of ED management impossible
- The use of a penile implant is likely to be considered as a management option earlier in the patient management pathway for men after non-nerve-sparing radical pelvic surgery or those who had severe ED prior to cancer treatment

4.2.5 Testosterone

Patients with ED should be screened for symptoms of possible hypogonadism, including decreased energy, libido, fatigue, and cognitive impairment. Hormonal tests for this group of patients will include a morning sample of total testosterone. If indicated bioavailable or calculated-free testosterone may be needed to corroborate total testosterone measurements.

The advice of an endocrinologist may be beneficial for managing patients with hypogonadism. Testosterone deficiency is either a result of primary testicular failure or secondary to pituitary/hypothalamic causes, including a functional pituitary tumour resulting in hyperprolactinaemia.

Key points

- Testosterone replacement therapy (intramuscular, oral, or transdermal) is effective, but should only be used after other endocrinological causes for testicular failure have been excluded
- Before initiating testosterone replacement, digital rectal examination, serum PSA test, haematorcrit, liver function tests and lipid profile should be performed
- Patients given androgen therapy should be monitored for clinical response, elevated haematocrit and development of hepatic or prostatic disease
- Testosterone therapy is contraindicated in patients with untreated prostate cancer or unstable cardiac disease

4.3 Interventions for women

Health professionals are encouraged to access more detailed information in support of these management pathways and clinical guidelines through the Further Reading section of this document. Publications most relevant to the management of female sexual difficulties after cancer treatment are marked with a double asterisk (**).

4.3.1 Vaginal dilators

Typically vaginal dilators are offered to women routinely after radical pelvic radiotherapy (gynaecological, ano-rectal and other pelvic malignancies). However, vaginal dilators may also be useful to prevent or assist in the management of surgically induced vaginal changes such as introital narrowing or after vaginal reconstruction procedures.
Key points

- Women at risk of developing vaginal adhesions and fibrosis, vaginal or introital stenosis and shortening should be offered vaginal dilators to help prevent and manage these changes.
- Professionals are encouraged to read the International Guidelines on Vaginal Dilation after Pelvic Radiotherapy (see Further Reading). It is noted that the evidence base for dilator efficacy is relatively weak, and patient compliance not always satisfactory.
- Digital exploration (use of lubricated fingers) or a suitable vibrator (independently or with a partner) may be helpful in addition or as an alternative to use of standard dilator sets.
- Dilator use after radiotherapy is generally most useful over the first 12 months post-completion of radiotherapy as that is when fibrotic changes in the tissues are most likely to develop resulting in narrowing/shortening of the vaginal vault.
- Compliance with vaginal dilation advice should be ascertained and documented at regular intervals as part of post-treatment review pathways and appropriate patient education/support offered.

4.3.2 Vaginal lubricants and moisturisers

Advice on vaginal lubricants and vaginal moisturisers are important for all women with a treatment-induced menopause and for those women experiencing vaginal dryness and/or sexual pain.

Key points

- Where HRT is not clinically appropriate, or for women who are already post-menopausal, vaginal moisturisers can improve pH and moisture content of the vagina.
- Vaginal moisturisers should be used (2–3 x) weekly regardless of sexual activity levels and regularly over two to three months to see improvement in vaginal dryness/pain.
- Vaginal lubricants should be used on demand to reduce friction during penetrative sexual intercourse or vulval contact.
- Vaginal lubricants are available as water, oil or silicone based products. Choice of lubricant should be based on patient preference, optimal pH and osmolality of product and clinical indication (see Further Reading).
- Many women find it necessary to use these products (moisturisers and lubricants) in combination to achieve adequate reduction in sexual pain.

4.3.3 Hormone replacement therapy

Where appropriate and oncologically safe to do so, hormone replacement therapy (HRT) remains the most effective management option for vaginal/sexual pain associated with oestrogen deprivation. Systemic HRT can also be helpful in restoring sexual desire and can improve orgasmic difficulties in women. The use of HRT (oestrogen) and testosterone for pre-menopausal women with treatment-induced ovarian failure is normally contraindicated for women with oestrogen receptor positive malignancies (breast, endometrial, ovarian).

In women who do not have any cancer-related contraindications to HRT, there may be other relative contraindications to HRT that will require review by a member of the medical team or the patient’s GP e.g. history of thromboembolic disease, obesity, smoking, family history of oestrogen dependent malignancies.
Key points

- HRT counters the reduced oestrogen levels as a result of chemotherapy, radiotherapy and surgery
- Systemic or topical oestrogen can minimise uro-genital atrophy, help maintain vaginal secretions, and elasticity and improve vaginal pH
- Vaginal suppositories can improve urogenital atrophy, vaginal pain symptoms and changed pH
- Testosterone supplementation can be considered for women where improvement in sexual difficulties (desire/arousal) has been inadequate after HRT alone

4.4 Role of healthy lifestyle advice

As many of the risk factors for non-cancer related ED are synonymous with coronary artery disease, maintaining a healthy weight, reducing or stopping smoking, maintaining a healthy diet and being physically active may improve sexual well-being and contribute to improved sexual recovery as part of an overall management strategy. Obesity and type 2 diabetes can have adverse effects on both male and female sexual recovery where again healthy lifestyle advice may contribute to improved sexual well-being.

4.4.1 Diet

Patients should be given dietary advice, based on the WCRF recommendations at the end of treatment, with referral to specialist dieticians as required.


- Be as lean as possible within the normal body weight range
- Be physically active as part of everyday life
- Avoid sugary drinks and limit the consumption of energy dense foods
- Eat mostly foods of plant origin
- Limit intake of red meat and avoid processed meat
- Limit alcoholic drinks
- Limit consumption of salt. Avoid mouldy cereals or pulses
- Aim to meet nutritional needs by diet alone

Tumour-specific updates made within the WCRF’s programme of continuous update can be found here: [www.wcrf.org/int/research-we-fund/continuous-update-project-findings-reports](http://www.wcrf.org/int/research-we-fund/continuous-update-project-findings-reports)

4.4.2 Physical activity

- Physical activity programmes have been shown to contribute to improvements in sexual function and libido
- There is international consensus that people living with and beyond cancer should exercise to the same level as the general population for health benefits. Research suggests that a combination of cardiovascular and muscular strength training has an important additional benefit over only undertaking either alone
• People should be encouraged to maintain or increase their level of physical activity both during and after treatment in line with national guidance
• Their need for support to increase or maintain their activity should be assessed, with referral to local exercise opportunities, such as exercise on prescription, considered

4.4.3 Smoking cessation
Reducing or stopping smoking can contribute to improved cardiovascular function that contributes to improved erectile function and general health. See local smoking cessation services for further guidance.

4.5 Psychosexual counselling
Psychological, psychosexual and couple counselling (or therapy) may be useful to individuals or couples where sexual difficulties are a source of individual or couple distress or where the difficulties are being maintained by unhelpful emotional issues or couple communication patterns.

Psychological counselling can be particularly helpful where altered body image or infertility concerns, anxiety or low mood are contributing to the sexual and relationship difficulties and preventing adjustment and adaptation.

Psychosexual therapy can be helpful as a primary intervention when it is identified that there are multiple physical co-morbidities, sexual difficulties are affecting both partners and/or there are sexual concerns/difficulties exacerbated by cancer treatment that were present prior to the cancer diagnosis e.g. sexual abuse/violence, sexual fear/aversion or sexual pain.

As identified in the pathways outlined in Section 5, psychosexual counselling can be usefully employed as an adjunct to biomedical treatments for sexual difficulties, particularly where response to biomedical management has been limited or compliance poor due to couple or individual factors amenable to therapy. See Appendix 16 for a list of psychosexual counselling services within the LCA locality.

Key points
• Psychosexual therapy alongside biomedical treatments in men has been shown to reduce ED medication discontinuation rates, improve patient acceptance and gain better couple satisfaction compared with those who did not receive counselling
• Counselling and therapy improve sexual recovery outcomes for men and women with and without partners
• For women with dyspareunia, counselling to address behavioural avoidance e.g. anticipatory fear and sexual avoidance can be effective
• Psychosexual therapy can be helpful in the management of low desire, inadequate arousal, sexual pain, orgasmic and ejaculatory disorders
• Psychosexual therapy may be particularly useful for sexual difficulties where a biomedical treatment does not exist or is only partly effective
5 Management Pathways

Appendices 3 to 12 lay out the evidence-based clinical management pathways developed by the LCA Sexual Consequences Working Group.

- Appendix 3: Erectile Dysfunction following Radical Prostatectomy
- Appendix 4: Erectile Dysfunction following Radical Pelvic Surgery
- Appendix 5: Erectile Dysfunction following Pelvic Radiotherapy
- Appendix 6: Androgen Deprivation Therapy Pathway
- Appendix 7: Male Non-Erectile Dysfunction Sexual Difficulties
- Appendix 8: Female Sexual Difficulties after Pelvic Surgery
- Appendix 9: Female Sexual Difficulties after Pelvic Radiotherapy
- Appendix 10: Female Sexual Difficulties after Breast Cancer (Non-Endocrine)
- Appendix 11: Female Sexual Difficulties after Endocrine Therapy for Breast Cancer
- Appendix 12: Female Sexual Difficulties: Desire and Orgasmic Difficulties

General principles:

- Early assessment and intervention leads to improved outcomes in sexual adjustment
- First stage assessment i.e. identification of a problem, can be undertaken by any healthcare professional, with signposting and/or onward referral if necessary
- If level one interventions are not effective, try the next level, including onward referral if necessary

See Figure 3 for levels of intervention for common sexual difficulties encountered in oncology settings.
Figure 3: Service Provision Model

Level 3: High Complexity Case Management
- Multiple co-morbidities
- Couple problems
- Psychological vulnerability
  - Intensive therapy

Level 2: High Risk Case Management
- HRT
- PDE5 inhibitors/other treatment for ED
- Sexual positions advice
- Specialist assessment
  - Specific suggestions
- Advanced practice cancer nurses/AHPs/medical specialists

Level 1: Self-care Support/Management
- Use of vaginal dilators and intimate lubricants
- Psycho-educational approaches
  - Limited information and permission giving
  - All health professionals in cancer care
Further Reading


White I D. (2015) Sexual difficulties after radiotherapy: Improving clinical management, Clinical Oncology [http://dx.doi.org/10.1016/j.clon.2015.06.018](http://dx.doi.org/10.1016/j.clon.2015.06.018)


[www.nice.org.uk/guidance/ph2](http://www.nice.org.uk/guidance/ph2)
Appendix 1: HNA Prompt Sheet: Sexual Consequences for Men

Sexual consequences following cancer treatment are common, particularly for those who’ve been treated with pelvic surgery and radiotherapy, or hormonal treatments. These can include loss of sexual interest/desire, arousal and sexual pain difficulties, orgasmic difficulties and reduced sexual satisfaction/confidence.

In men, these are caused by a variety of physical and psychological factors. For example, erectile dysfunction may result from hormonal changes secondary to treatment, as a result of nerve damage following surgery or radiotherapy, or as a result of changed body image due to weight change associated with treatment. Reduced orgasmic intensity, loss of ejaculation, dry ejaculation and haematospermia are frequently reported as having a negative impact on men’s sexual expression following cancer treatment.

Sexual inactivity is not in itself problematic, so long as the person is not dissatisfied, distressed or avoiding sex because of sexual difficulties. If they are, early identification of problems and simple strategies, such as those listed below, may be effective. Onward referral to experts should be utilised when necessary.

Have you considered?

- Providing information (booklets from Macmillan Cancer Support/Prostate Cancer UK) on treatments available for erectile dysfunction (ED) and other sexual difficulties
- Whether other treatment effects (urinary or bowel control difficulties, pain) contributing
- Whether other health conditions (e.g. diabetes, hypertension, cardiovascular disease) contributing
- Whether depression, anxiety self-confidence or body image concerns contributing
- Whether prescribed medications (e.g. antidepressants) contributing
- Referral to urology, erectile dysfunction, andrology, or fertility service(s) for detailed management
- The role of exercise and lifestyle changes in assisting recovery of sexual function (weight reduction, smoking cessation, alcohol intake reduction)
- Asking whether the man has talked/would like to talk to their treatment team or their GP
- Pelvic floor exercise prescription
- Asking whether the man’s partner is affected and signposting to their GP for support

Services which may be able to help

- General practitioner
- Erectile dysfunction clinics (ED clinics)
- Urology/andrology services
- Psychosexual therapist/counsellor
- Psychological support services
- Pharmacy
- Physiotherapy
- Macmillan information centre
• Prostate Cancer UK (PCUK) telephone helpline service 0800 074 8383
• Sexual Advice Association: www.sda.uk.net/
• College of Sexual and Relationship Therapists (COSRT): www.cosrt.org.uk/
• RELATE: www.relate.org.uk/
• Exercise and lifestyle programmes via the GP, e.g. exercise on referral

Patient information

Macmillan Cancer Support:
www.macmillan.org.uk/GetInvolved/Campaigns/Successstories/SexualRelationships/SexAndCancer.aspx
www.macmillan.org.uk/Cancerinformation/Livingwithandaftercancer/Relationshipscommunication/Sexuality/Sexuality.aspx


Prostate Cancer UK: http://prostatecanceruk.org/search-results?q=Sexual+Dysfunction

Shine Cancer Support: www.shinecancersupport.org/get-support/podcast

American Cancer Society:

Want to know more?

Prostate Cancer UK: http://prostatecanceruk.org/for-health-professionals/online-learning/courses-and-modules?q=Sexual+Difficulties&category=&type

National Cancer Survivorship Initiative: www.ncsi.org.uk/what-we-are-doing/consequences-of-cancer-treatment-2/cot-resources/
Appendix 2: HNA Prompt Sheet: Sexual Consequences for Women

Sexual consequences following cancer treatment are common, particularly for those who’ve been treated with pelvic surgery and radiotherapy, or hormonal treatments. These include loss of sexual interest/desire, arousal and sexual pain difficulties, orgasmic difficulties and reduced sexual satisfaction/confidence, and can be caused by a variety of physical and psychological factors. For example, hormonal changes as a result of breast or gynaecological cancer treatments result in reduced vaginal lubrication, which can cause dyspareunia (sexual pain), reduced enjoyment and orgasmic difficulties. Radiotherapy may cause vaginal adhesions and fibrosis, stenosis and vaginal shortening, again resulting in pain, while surgery may cause nerve damage and reduced clitoral sensitivity, resulting in anorgasmia.

Sexual inactivity is not in itself problematic, so long as the person is not dissatisfied, distressed or avoiding sex because of sexual difficulties. If so, early identification of problems and simple strategies, such as those listed below, may be effective. Onward referral to experts should be utilised when necessary.

Have you considered?

- Providing information on types of sexual difficulties and their management
- Providing information on intimate lubricants, vaginal moisturisers and vaginal dilators
- Whether other treatment effects are contributing (menopause or vaginal symptoms, urinary or bowel control difficulties, pain)
- Whether other health conditions, e.g. diabetes, arthritis, cardiovascular disease contributing
- Whether depression, anxiety or concern about body image contributing
- Whether any prescribed medications contributing, e.g. antidepressants
- Referral to gynaecology, women’s health or menopause clinics for treatment-induced menopause and vaginal health management
- The role of physical activity and lifestyle changes in assisting sexual recovery (weight reduction, smoking cessation, reduce alcohol intake)
- Pelvic floor exercise prescription
- Asking the woman if she has talked/would like to talk to her treatment team or her GP about these concerns
- Asking whether these are new problems, or whether they preceded the cancer and its treatments
- Asking whether the woman’s partner is affected by these problems and signposting to their GP if so
- Whether referral to a fertility clinic is needed

Services which may be able to help

- General practitioner
- Gynaecology/women’s health services
- (Women’s health) physiotherapist
- Menopause clinics
- Psychological support services
• Psychosexual therapist/counsellor
• Macmillan information centre
• Sexual Advice Association: www.sda.uk.net/
• College of Sexual and Relationship Therapists (COSRT): www.cosrt.org.uk/
• RELATE: www.relate.org.uk/
• Pharmacist
• Exercise and lifestyle programmes via the GP, e.g. exercise on referral

Patient information

Macmillan Cancer support: www.macmillan.org.uk/Cancerinformation/Livingwithandaftercancer/Relationshipscommunication/Sexuality/Sexuality.aspx


Jo’s Trust: www.jostrust.org.uk/about-cervical-cancer/cervical-cancer/moving-forward-from-a-cancer-diagnosis/sex-and-intimacy?gclid=CLP_nvK2v8gCFU1_GwodUg0Aog

Shine Cancer Support: www.shinecancersupport.org/get-support/podcast


Want to know more?

National Cancer Survivorship Initiative: www.ncsi.org.uk/what-we-are-doing/consequences-of-cancer-treatment-2/cot-resources/

Appendix 3: Erectile Dysfunction following Radical Prostatectomy

**Male Sexual Dysfunction Post Radical Prostatectomy Surgery Treatment Pathway**

**Radical Prostatectomy Surgery**

- **Nerve Sparing TWOC**
  - PDE-5 inhibitor OD (tadalafil 5mg) / once week/PRN
  - ?? Include 3/12 PDE-5 in treatment until

- **6-8 Weeks Post-op**
  - Attend post-op ED/Continence seminar
  - Commence vacuum therapy 10 minutes daily, Continue PDE-5 inhibitor

- **3 Months Post-op follow-up**
  - If no response after 3-4 months change to different PDE-5 inhibitor at maximum dose for 6-8 doses. Highlight and arrange start of Alprostadil if required. Continue with vacuum device.

- **6 Months follow-up**
  - Ensure tried all PDE-5 inhibitors and Alprostadil if PDE-5 inhibitors are not effective. If no response consider combination therapy under guidance of andrology team.

- **Non-nerve Sparing TWOC**

- **6-8 Weeks Post-op**
  - Attend post-op ED/Continence seminar
  - Commence vacuum therapy 10 minutes daily
  - May start alprostadil if appropriate

- **3 Months Post-op follow-up**
  - 3-6 months
  - Psychological / Couple difficulties
  - Psychological, couple Psychosexual counseling

- **6 Months Post-op follow-up**
  - 6 months – discuss option of penile implant if not happy with above treatment

**Post treatment review**

For patients who feel they have any unmet needs

- **3-6 months**
  - Psychological, couple Psychosexual counseling

- **12 – 24 Months**
  - If no return of erectile function discuss penile implant.

*Hospital prescription only for once daily dosing*
Patient Information Sheet: Sexual dysfunction after radical prostatectomy (RP)

After a radical prostatectomy (RP), you will develop changes to your sexual function. Some of these are permanent while others may recover with time and additional treatment. If you have any questions regarding the impact of surgery on your sexual function, or if you have developed any changes after surgery and would like to discuss how they can be improved, please ask your key worker to refer you to your local urology, andrology or erectile dysfunction (ED) service.

1. Erectile dysfunction

All patients will develop a degree of ED after any RP. Your risk of ED is dependent on how good your erections were pre-op, other medical problems you may have (like diabetes and heart disease), and how well your nerves can be preserved during your operation. If both your nerves can be preserved, then you have the best chance of regaining erectile function. Your local team will start you on a combination of tablets and a vacuum pump to help speed up your recovery initially. The sooner you start these treatments the better your outcome will be. Even if your nerves are preserved it may still take up to 2 years to fully recover. If you don’t respond to these initial treatments, or if both nerves have to be removed due to the extent of the cancer, you can still achieve assisted erections using different strategies. These can range from injections to devices to help regain sexual function. Ask to see your local urology, andrology or ED service who can guide you through the various options.

2. Changes to penile size/shape

Your penis may become shorter after the operation. This may in part be due to changes in your erectile function, which can result in fibrosis (reduced stretchability) in the penis due to loss of your nocturnal (subconscious) erections. Early and regular use of treatments for ED will help to limit and prevent this. In addition, there is a higher risk of developing a plaque in your penis called a Peyronie’s plaque. This can lead to a permanent change in the shape/curvature of the penis. If you develop this, see your local urologist or andrologist who can advise you on how to manage this further.

3. Loss of ejaculation

All patients will lose the ability to ejaculate after any RP. This is a permanent feature. Your ability to enjoy sex and have the ‘sense of release’ (orgasm) often remains the same, but no semen will come out. Occasionally some patients may also develop pain with orgasm after surgery. Your natural fertility will be impaired as a consequence of surgery. If you have concerns about preserving your fertility post-op, see your local urologist or andrologist who can advise you further.

4. Climacturia

Some patients may produce a small amount of fluid when they orgasm. This is not semen, but a small amount of urine that is released at the time of orgasm (climacturia). You may develop this even if you are continent (dry) after your operation. This is not an issue for many patients, but may be a permanent feature. If you have any concerns ask to see your local urologist or andrologist.
Appendix 4: Erectile Dysfunction following Radical Pelvic Surgery

Male Sexual Dysfunction Post Radical Pelvic Surgery Treatment Pathway

Radical Pelvic Surgery

Nerve Sparing
TWOC
PDE-5 inhibitor OD (tadalafil 5mg) / once week/PRN ?? Include 3/12 PDE-5 in treatment tariff

6-8 Weeks Post-op
Attend post-op ED/ Continence seminar
Commence vacuum therapy 10 minutes daily. Continue PDE-5 inhibitor

3 Months Post-op follow-up
If no response after 3-4 months change to different PDE-5 inhibitor at maximum dose for 6-8 doses. Highlight and arrange start of Alprostadil if required. Continue with vacuum device.

6 Months follow-up
Ensure tried all PDE-5 inhibitors and Alprostadil if PDE-5 inhibitors are not effective. If no response consider combination therapy under guidance of andrology team.

Non-nerve Sparing
TWOC

6-8 Weeks Post-op
Attend post-op ED/ Continence seminar
Commence vacuum therapy 10 minutes daily. May start alprostadil if appropriate

3 Months Post-op follow-up
Continue with vacuum device and alprostadil. If not responding dose escalation up to maximum dosage. 6 months – discuss option of penile implant if not happy with above treatment

3-6 months
Psychological / Couple difficulties
Psychological, couple Psychosexual counseling

6 Months Post-op follow-up
6 months – discuss option of penile implant if not responding to above treatment

Post treatment review
For patients who feel they have any unmet needs

12 – 24 Months
If no return of erectile function discuss penile implant.

*Hospital prescription only for once daily dosing
Appendix 5: Erectile Dysfunction followingPelvic Radiotherapy

Male Sexual Dysfunction Treatment Pathway post Radiotherapy

Radiotherapy

External beam radiotherapy
Once Radiotherapy complete
Commence vacuum therapy 10 minutes daily. Commence PDE-5 inhibitor

3-6 Months
If no response after 8 doses change to different PDE-5 inhibitor at maximum dose for further 6-8 doses.
Start Alprostadil if required. Continue with vacuum device.

6 Months
Continue with vacuum device and alprostadil. If not responding dose escalation up to maximum dosage.

6-12 Months
Ensure tried all PDE-5 inhibitors and Alprostadil if PDE-5 inhibitors are not effective. If no response consider combination therapy under guidance of andrology team.

Post Treatment review
To address any patients unmet needs

24 Months
If no return of erectile function discuss penile implant.

If patient is on concurrent ADT please refer to the ADT pathway which supersedes this pathway.
Appendix 6: Male Sexual Dysfunction as a result of Androgen Deprivation Therapy

Male Sexual Dysfunction Treatment Pathway for men on Androgen deprivation therapy (ADT)

**Commence ADT**
Base line testosterone level prior to treatment
If testosterone level below 10-12 do free testosterone

**Long term At start of treatment**
Commence vacuum therapy 10 minutes daily, Commence PDE-5 inhibitor

**3 Months**
If no response after 8 doses of PDE5i Consider Starting Alprostadil if required
Continue with vacuum device.

**6 Months**
Continue with vacuum device and alprostadil. If not responding dose escalation up to maximum dosage.

**Post Treatment review**
If patient is experiencing any unmet needs.

**6-12 months If on long term ADT**
Minimal response to above treatment options discuss penile implants within the context of the patient and their disease.

**Short term At start of treatment**
Base line testosterone level
Commence vacuum therapy 10 minutes daily, Commence PDE-5 inhibitor

**3 Months**
If no response after 8 doses of PDE5i Consider Starting Alprostadil if required
Continue with vacuum device.

**6 Months**
Continue with vacuum device and alprostadil. If not responding dose escalation up to maximum dosage.

**Post Treatment review**
If patient is experiencing any unmet needs.

**12 – 24 Months post end of treatment depending on length of treatment with ADT**
Monitor testosterone level 3-6 monthly
If no return of erectile function discuss penile implant.

**3-6 months**
Psychological /Couple difficulties
Psychological, couple Psychosexual counseling

**Post Treatment review**
If patient is experiencing any unmet needs.

**6-12 months If on long term ADT**
Minimal response to above treatment options discuss penile implants within the context of the patient and their disease.

**12 – 24 Months post end of treatment depending on length of treatment with ADT**
Monitor testosterone level 3-6 monthly
If no return of erectile function discuss penile implant.
Patient Information Sheet: Radiotherapy/androgen deprivation therapy

**Sexual dysfunction after radiotherapy/ADT for prostate cancer**

After radiotherapy or brachytherapy, you will develop changes to your sexual function. While you may not have issues straight away, changes may develop during the first 2–3 years after treatment. Those taking additional hormone therapies (ADT) will notice a greater change in their sexual function, although the additional changes due to the hormones normally recover once this treatment is stopped.

If you have any questions regarding the impact of radiotherapy or hormones on your sexual function, or if you have developed any changes and would like to discuss how they can be improved, please ask your Key Contact to refer you to your local urology, andrology or ED service.

1. **Erectile dysfunction**

Not all patients will develop erectile dysfunction (ED) after radiotherapy straight away. While surgery causes immediate ED, which can recover with time if the nerves are spared, ED due to radiotherapy may develop and progress in the first 2–3 years after treatment. Your risk of ED is dependent on the type of radiotherapy you had (more ED reported with external beam radiotherapy than brachytherapy), how good your erections were pre-treatment, and other medical problems you may have (like diabetes and heart disease). Your local team may start you onto a combination of tablets and a vacuum pump if you develop difficulties with your erections. The sooner you start these treatments the better your outcome will usually be. If you don’t respond to these initial treatments, you can still achieve assisted erections using different strategies. These can range from injections to devices to help regain sexual function. Ask to see your local urologist, andrologist or ED service who can guide you through the various options.

2. **Changes to penile size/shape**

Your penis may become shorter if you develop ED. Reduced erectile function can result in fibrosis (reduced stretchability) in the penis due to loss of your nocturnal (subconscious) erections. Early and regular use of treatments for ED will help to limit and prevent this. There may also be a risk of developing a plaque in your penis called a Peyronie’s plaque. This can lead to a permanent change in the shape/curvature of the penis. If you develop this, see your local urologist/andrologist who can advise you on how to manage this further.

3. **Loss of ejaculation/impaired fertility**

After radiotherapy you may note a reduction in the amount of semen you produce when you ejaculate. In some cases it may disappear altogether. Your ability to enjoy sex and have the ‘sense of release’ (orgasm) usually remains the same, although some describe a reduced desire for sex and reduced intensity of orgasm. Some patients may also develop pain with ejaculation/orgasm after radiotherapy.

Your fertility may be impaired after radiotherapy. If you have concerns about preserving your fertility, see your local andrologist/urologist who can advise you further.

4. **Effect of hormone therapy**

Some patients may require additional hormonal therapy with radiotherapy (androgen deprivation therapy or ADT). This can lead to a marked loss of libido (desire for sex), a greater degree of ED, a more pronounced reduced sensation during orgasm, and more impaired ejaculation and fertility. These normally reverse some months after the ADT is stopped. Your local urologist, andrologist or ED service can advise you on different strategies that can be used to improve sexual function while on ADT.
Appendix 7: Male Non-Erectile Dysfunction Sexual Difficulties

Ejaculatory disorders

a) Retrograde ejaculation/anejaculation (dry orgasm)

**History and examination**

- ? Retrograde ejaculation ? ‘True’ anejaculation
- Surgery – (RRP inevitably no ejaculation)
- Risk factors: retrograde ejaculation = diabetes/trauma/infection (see table 1); anejaculation = neurogenic/drug-related (see table 2)
- Fertility/psychosexual issues
- Check neurology

**Table 1: Aetiology of retrograde ejaculation (EAUG 2014)**

<table>
<thead>
<tr>
<th>Neurogenic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spinal cord injury</td>
</tr>
<tr>
<td>Cauda equina lesions</td>
</tr>
<tr>
<td>Multiple sclerosis</td>
</tr>
<tr>
<td>Autonomic neuropathy (juvenile diabetes)</td>
</tr>
<tr>
<td><strong>Retropertoneal lymphadenectomy</strong></td>
</tr>
<tr>
<td>Sympathectomy</td>
</tr>
<tr>
<td><strong>Colorectal and anal surgery</strong></td>
</tr>
<tr>
<td>Pharmacological</td>
</tr>
<tr>
<td>Antihypertensives</td>
</tr>
<tr>
<td>Alpha1-adrenocepter antagonists</td>
</tr>
<tr>
<td>Antipsychotics</td>
</tr>
<tr>
<td>Antidepressants</td>
</tr>
<tr>
<td><strong>Urinary tract problems</strong></td>
</tr>
<tr>
<td>Bladder neck incompetence</td>
</tr>
<tr>
<td>Congenital defects of hemitrigone</td>
</tr>
<tr>
<td>Bladder extrophy</td>
</tr>
<tr>
<td>Bladder neck resection</td>
</tr>
<tr>
<td><strong>Prostatectomy</strong></td>
</tr>
<tr>
<td>Congenital dopamine beta-hydroxilase deficiency</td>
</tr>
<tr>
<td>Urethral obstruction</td>
</tr>
<tr>
<td>Ectopic ureterocele</td>
</tr>
<tr>
<td>Urethral stricture</td>
</tr>
<tr>
<td>Urethral valves or veru montanum hyperplasia</td>
</tr>
</tbody>
</table>
Table 2: Aetiology of anejaculation (EAUG 2014)

<table>
<thead>
<tr>
<th>Neurogenic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spinal cord injury</td>
</tr>
<tr>
<td>Cauda equina lesion</td>
</tr>
<tr>
<td>Retroperitoneal lymphadenectomy</td>
</tr>
<tr>
<td>Aortoiliac or horseshoe-kidney surgery</td>
</tr>
<tr>
<td>Colorectal surgery</td>
</tr>
<tr>
<td>Multiple sclerosis</td>
</tr>
<tr>
<td>Parkinson’s disease</td>
</tr>
<tr>
<td>Autonomic neuropathy (diabetes mellitus)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pharmacological</th>
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</thead>
<tbody>
<tr>
<td>Antihypertensives</td>
</tr>
<tr>
<td>Antipsychotics</td>
</tr>
<tr>
<td>Antidepressants</td>
</tr>
<tr>
<td>Alcohol</td>
</tr>
</tbody>
</table>

**Additional investigations**

- Post ejaculation urinalysis for retrograde
- If LUTS – FR + PVR initially, potentially cystoscopy

Further management – usually initiated by urology team

Retrograde ejaculation:
- Therapy (In the absence of spinal cord injury, anatomic anomalies of the urethra, or pharmacological treatments): imipramine 25–75mg TDS (2)/ephedrine 10–15 mg QDS
- Ejaculate on full bladder (EAUG 2014)
- Fertility: post orgasmic urine sperm harvest (fertility)

Anejaculation:
- Drug treatment ineffective
- Fertility: vibrostimulation (needs intact LS cord)/electro-ejaculation under GA/PESA/mTESE

Refer psychosexual services if required.

**b) Ejaculatory urinary incontinence/climacturia**

- Up to 60% post prostatectomy
- Check continence status (over 80% usually continent)
- Conservative management: pelvic floor rehabilitation, empty bladder prior to sex, using condoms
- If linked with incontinence may require more urological investigations and possible urological intervention
c) Ejaculatory pain

History and examination
- Linked with dysorgasmia especially in radical prostatectomy patients
- Associated with LUTS and infection
- Consider ejaculatory duct obstruction, chronic prostatitis/chronic pelvic pain syndrome/urethritis, urethrocele, antidepressants/psychosexual
- See dysorgasmia notes below

d) Premature ejaculation
- Organic (e.g. prostatitis-related) or psychogenic
- Primary or acquired ED
- Treatment guidelines – treat potential organic cause, psychosexual referral for support and counselling on behavioural techniques, topical anaesthesia, drug therapy (dapoxetine, SSRI)

e) Delayed ejaculation
- May be considered a slight form of anorgasmia
- Psychological or organic (incomplete spinal cord lesion, iatrogenic penile nerve damage, pharmacological (antidepressants, antihypertensives, antipsychotics), PDE5 inhibitors may be a cause

Orgasmic disorders

a) Anorgasmia (37% in RP)
- Complex condition with no strong evidence-based recommendations for treatment
- Consider referral to psychosexual services and urology

b) Dysorgasmia/orgasmic pain (14% in RP)
- Every orgasm (30% in RP)
- Duration (usually < 1 min)
- Usually decreases with time (70% at 12 months to 7% at 24 months in RP)
- Surgery: mechanism? retained seminal vesicles in RP, lower incidence in nerve sparing RP and age < 60 years
- Exclude infection: MSU/EPS/semen

Management
- Consider alpha-adrenoreceptor blockers or PDE5 inhibitors
- Psychosexual counselling
- Further management may require neurology/chronic pain team referral or excision of seminal vesicle remnants
Chronic pain/dyaesthesia – penile/testicular
- Rule out infection/dysorgasmia/organic causes
- Imaging: MRI pelvis and lumbosacral spine/USS testis/MRI penis if indicated
- Involve chronic pain team and psychosexual counselling if no organic cause
- If sensory changes related to specific distribution: neurology referral for neurophysiological assessment

Penile length loss and curvature
- Penile shortening in post prostatectomy/pelvic surgery patients may be reduced with early vacuum device therapy and PDE5i initiation (see ED pathways)
- Incidence of penile curvature due to Peyronie’s disease is increased post RP and radical pelvic surgery
- For both issues: treat ED, refer for psychosexual counselling and urology input if desired by patient

Loss of desire/libido
- Mainly due to persistent ED but check fasting testosterone
- For RP, 73% return to baseline at 4–6 months
- Improves with ED treatment
- Psychosexual counselling before and after surgery and early penile rehabilitation are important

Genital lymphoedema
In cancer patients, causes include treatment effects from lymph node excision; radiotherapy as well as the effects of malignant disease such as lymphoma or lymph node metastasis.
- Medical assessment to exclude other causes of genital swelling including infection, recurrent disease, congestive heart failure, renal or hepatic dysfunction, pharmacological, low protein state
- Lymphoedema assessment should be carried out by a specialist trained practitioner, preferably in a joint lymphoedema/urology clinic
- Pain, nutrition, mobility, functional and psychosocial assessment is also important in determining further management
- Management strategies are multidisciplinary and include monitoring for infection, lymphatic massage, support garments and surgical approaches
Appendix 8: Female Sexual Difficulties after Pelvic Surgery (1)

**Pre-habilitation** (pre-surgery/informed consent)
Discuss common sexual consequences of pelvic surgery (2) & self-management recommendations re vasomotor symptoms & vaginal changes (3)

**Primary/Interval surgery**

**On Treatment Completion** (2-3 weeks post – surgical review)
[Service delivery formats: end of treatment review consultations, post-Tx seminars, women’s health clinics, web-based]
Provision of intimate lubricants, Initiation of systemic HRT (via GP) for treatment-induced menopause
AND/OR non-hormonal vaginal moisturizers for post-menopausal/oestrogen-receptor +ve women
Pelvic floor exercises
Patient education re timing of resumption of sexual relations (4)

**3-6 months**
PV examination & review of vaginal health, resumption of sexual relations, sexual positions advice (5), HRT/menopause management & urinary/bowel function

**6-9 months**
PV examination & review of vaginal health (3 & 6), sexual rehabilitation, sexual positions advice (5), Initiate HRT/menopause management plus/minus addition of vaginal oestrogen (via GP),

12 months
PV examination, vaginal health advice re maintenance of vaginal health & pelvic floor exercises
HRT/menopause management plus/minus addition of vaginal oestrogen (via GP)

12-24 months (7)

**Disruptive menopause symptoms:**
GP, menopause clinic, uro-gynaecology, complementary therapies
**Persistent sexual pain:**
GP, menopause clinic, uro-gynaecology review, psychosexual counselling
**Psychological/couple difficulties:**
psychological, couple or psychosexual counselling

**Persistent menopause symptoms:**
GP, menopause clinic, uro-gynaecology, complementary therapies
**Persistent sexual pain:**
GP, menopause clinic, uro-gynaecology review, psychosexual counselling, pain clinic
**Psychological/couple difficulties:**
psychological, couple or psychosexual counselling
**Non-resumption of sexual relations** (with distress): psychosexual counselling

**Persistent menopause symptoms:**
GP, menopause clinic, uro-gynaecology, complementary therapies
**Persistent sexual pain:**
GP, menopause clinic, uro-gynaecology review, psychosexual counselling, pain clinic
**Psychological/couple difficulties:**
psychological, couple or psychosexual counselling
Notes:

(1) Includes all pelvic surgery except pelvic exenteration and vulval excision plus reconstruction. Sexual consequences in these women requires individual assessment/management based on extent of surgery/reconstructive approach, individual disease characteristics and patient goals.

(2) Loss of sexual interest accompanied by distress, dyspareunia (sexual pain) associated with reduced vaginal lubrication, reduced vaginal length, awareness of cerclage (post-radical trachelectomy), fear of sexual pain/resumption of intercourse, concerns about urinary or bowel control during sexual expression, orgasmic changes.

(3) **Self-management advice for vasomotor symptoms** (hot flushes/night sweats): Layered clothing; cotton clothing and bedding; regular exercise; reduction in caffeine, spicy foods, alcohol & smoking; use of practical aids such as “Chillows”.

**Self-management advice for vulvo-vaginal dryness/pruritis**: use of non-hormonal vaginal moisturizer x 2-3 per week regardless of whether sexually active or otherwise; use of water, silicone or oil-based vaginal lubricants when penetrative intercourse attempted; avoid heavily perfumed/astringent soaps/shower, bathing or feminine hygiene products; avoid vaginal douching; consider use of emollients to wash vulva/perineum.

(4) Generally women are advised it is safe to resume penetrative intercourse around 6-8 weeks following uncomplicated recovery from radical pelvic/vulval surgery.

(5) Female superior/side-lying positions advised to accommodate reduced vaginal length/deep dyspareunia.

(6) If post-coital bleeding present secondary to the presence of granulation tissue consider use of silver nitrate. If sexual pain associated with introital tightness/vaginal shortening consider advice on use of vaginal dilators and sexual positions advice as in (5).

(7) Identification and management of sexual consequences arising from surgery should ideally be addressed in the first 12 months post-surgery. Hence subsequent reviews after 12 months post-op repeat review recommendations at 6–9 and 12-month stages.
Appendix 9: Female Sexual Difficulties after Pelvic Radiotherapy (1)

**Pre-Habilitation** (pre-RT/informed consent)
Common sexual consequences of pelvic RT (2 & 3) & self-management recommendations

**Primary/Adjuvant Pelvic Radiotherapy**

**On Treatment Completion** (4-6 weeks post-RT review)
*Service delivery formats: end of treatment reviews, post-Tx seminars, women’s health clinics, web-based*
PV examination, commence vaginal dilation x 3 per week & intimate lubricant provision (4), Initiation of systemic HRT (via GP) for treatment-induced menopause OR non-hormonal vaginal moisturizers for post-menopausal/oestrogen-receptor +ve women, Pelvic floor exercises, Patient education re timing of resumption of sexual relations (4)

**3-6 months**
PV examination, review of vaginal health strategies, dilator compliance (x 3 per week) HRT-menopause management review (4)
Sexual rehabilitation: identify sexual recovery goals for woman/couple, sexual positions advice (5)

**6-12 months**
PV examination, review of vaginal health/dilator compliance (6 & 7) HRT-menopause management (4)
Sexual rehabilitation: enquire about resumption of sexual relations, persistent loss of desire/arousal with distress,

**12-24 months**
PV examination: vaginal health advice re maintenance of vaginal dimensions, sexual positions advice (5) Digital vaginal/introital stretching & pelvic floor exercises for introital narrowing (6 & 7) HRT-menopause management Sexual rehabilitation: enquire about persistent sexual difficulties/no resumption of sexual relations (accompanied by distress)

**24 months** (8)
For vaginal changes preventing resumption of sexual relations accompanied by distress: consider surgical gynaecological opinion

Persistent menopause symptoms:
GP, menopause clinic, uro-gynaecology, complementary therapies
Persistent sexual pain &/or psychological/couple difficulties:
psychological, couple or psychosexual counselling

Persistent menopause symptoms:
GP, menopause clinic, uro-gynaecology, complementary therapies
Psychological/couple difficulties:
psychological or couple counselling
Persistent sexual pain/loss of desire accompanied by distress:
psychosexual counselling

Persistent menopause symptoms:
GP, menopause clinic, uro-gynaecology, complementary therapies
Psychological/couple difficulties:
psychological, couple or psychosexual counselling
Persistent loss of desire (with distress), Severe vaginal changes/Non-resumption of sexual relations (with distress):
psychosexual counselling

For vaginal changes preventing resumption of sexual relations accompanied by distress: consider surgical gynaecological opinion
Notes:

(1) This pathway includes women receiving combined EBRT/Vaginal Brachytherapy and EBRT alone for pelvic malignancy (includes cervical, endometrial, vulval, anal, rectal, pelvic sarcomas). Also included are women receiving brachytherapy alone (early stage endometrium).

Particular attention should be paid to the extent of the vagina included in the radiation field.

Cervical/Endometrial carcinoma: top third irradiated unless vaginal involvement necessitating extended vaginal field.

Vulval, rectal and anal carcinomas often include the whole vaginal length in the radiation field.

Vulval and anal carcinomas often receive a larger superficial tissue dose to the vulva/peri-anal/perineum areas and thus may result in severe acute and chronic vulval/perineal skin changes and introital/anal fibrosis/stenosis.

NB: This pathway excludes women post total body irradiation/stem cell transplantation for haematological malignancy and/or vulvo-vaginal graft versus host disease. These women should be assessed/managed on a case by case basis in conjunction with specialist services.

(2) Women receiving brachytherapy may find the insertion of the treatment applicators and delivery of this form of RT uncomfortable and emotionally distressing. This is particularly likely to be the case where there is a previous history of childhood sexual abuse or sexual violence/sexual abuse as an adult.

Clinical staff caring for these women should be alerted to patient distress/behaviours (avoidance/fear) that may be indicative of prior experience of this nature. Health professionals can sensitively enquire regarding any past negative experiences of intimate/sexual contact that may make tolerance of this procedure more challenging for the women so that appropriate support/management may be offered.

(3) Loss of sexual interest accompanied by distress, superficial or deep dyspareunia (sexual pain) associated with reduced vaginal lubrication, reduced vaginal width and/or length, reduced vaginal elasticity (fibrosis), vaginal bleeding, introital stenosis, fear of sexual pain/resumption of intercourse, concerns about urinary or bowel control during sexual expression, orgasmic changes.

(4) Women are normally advised to commence vaginal dilator use x 3/week once signs of acute radiation inflammation have subsided. This is normally advised at the 4-6 week post-RT review. Dilator use is advocated prior to resumption of intercourse as this assists in breaking down vaginal adhesions as well as promoting confidence regarding resumption of sexual relations. Women should also have discussion of alternatives to dilator use discussed with them including digital dilation (fingers) and vibrator use.

Water-based vaginal lubricants should be used for dilator use/intercourse particularly in presence of acute radiation inflammation. Oil or silicone based lubricants can then be used to further reduce friction/vaginal discomfort. (See RMHNHSFT vaginal health strategy for further detail).

(5) Consider vaginal oestrogen if vaginal pain/bleeding/vulvo-vaginal atrophy evident despite adequate systemic HRT.

(6) Female superior/side-lying positions advised to accommodate reduced vaginal length/deep dyspareunia.

(7) Increase frequency of vaginal dilator use to x 5 per week if evidence of vaginal adhesions, shortening/introital narrowing is present despite regular / infrequent use of vaginal dilator.

In cases of poor dilator compliance consider alternatives to dilator use that may include use of digital dilation (fingers) and vibrator use. Review use of water based lubricants and consider oil or silicone based lubricant to reduce friction/pain associated with dilator use/intercourse.
(8) Post-Radiotherapy follow-up of sexual consequences may continue up to and in some cases beyond 24 months after RT completion as radiation induced fibrosis and associated pelvic late effects (vaginal changes/bladder/bowel function) can take up to 24 months to develop.

Hence a surgical opinion on vaginal reconstruction or conservative vaginal strategies (division of adhesions/vaginal dilator and topical oestrogen use) are more likely to be made at this time point in the management pathway.
Appendix 10: Female Sexual Difficulties after Breast Cancer (Non-Endocrine)

Breast cancer (non-endocrine) female sexual dysfunction management pathway

Chemotherapy is more commonly associated with short-term effects on sexual functioning, longer-term effects are generally related to premature ovarian failure as a consequence of the gonadotoxic effect of chemotherapy agents. For some patients this will be reversible. The most significant sexual disturbances are often the consequence of altered body image related to alopecia, fatigue and the physical effects of surgery and radiotherapy.

Pre-habilitation
Pre-surgery, chemotherapy, adjuvant radiotherapy
Informed consent. Education regarding contraception as appropriate.
Discuss common sexual consequences of treatment, self-management recommendations
Vasomotor symptoms: hot flushes and night sweats (1)
Vulvo-vaginal symptoms: vaginal dryness, discomfort (2)
Reduction in desire/libido: encourage ongoing intimacy and support as a couple, regular sexual relations as appropriate

MULTI MODALITY MANAGEMENT PATHWAYS FOR BREAST CANCER
Service delivery formats: HNA questionnaires – care plan, end of treatment review consultations, Health & Wellbeing events, open-access follow-up, GP

SURGERY
+/− Adjuvant radiotherapy

ALTERED BODY IMAGE
Liaison with surgical/plastic surgical team as appropriate for discussion/management
Psychological support referral as appropriate
REDUCTION IN RANGE OF MOVEMENT post treatment
Physiotherapy referral
LYMPHOEDEMA
Lymphoedema referral

ALTERED SENSATION
Review by surgical team/plastic surgical team
Consider referral to pain service

PSYCHOLOGICAL/PSYCHOSEXUAL CONCERNS
Assess presence of individual/couple distress
Enquire re resumption of sexual relations, persistent loss of desire (5), treatment induced orgasmic changes (6)
Refer for psychological, couple or psychosexual counselling

NEO-ADJUVANT, ADJUVANT CHEMOTHERAPY +/- OVARIAN SUPPRESSION

ALTERED BODY IMAGE
ALOPECIA CONCERNS: cold caps as appropriate, Offer wig information/referral, Offer ‘Look Good Feel Better’ workshop
Offer information regarding headwear workshops/suppliers
BREAST COSMESIS CONCERNS ARISING FROM SURGICAL/RADIOLOGY INTERVENTION
Refer to SURGERY +/- adjuvant radiotherapy intervention pathway

ALTERED SENSATION associated with peripheral neuropathy, assess presence/grade
Consultant review of chemotherapy regimen

MENOPAUSAL SYMPTOMS
Enquire re menstrual cycle if pre-/peri-menopausal
VASOMOTOR SYMPTOMS
Enquire: disruptive symptoms, hot flushes and night sweats causing distress to patient (3)

VULVO-VAGINAL SYMPTOMS
Enquire if vaginal dryness, discomfort, dyspareunia (4)

FATIGUE
Consider evidence-based complementary therapies, relaxation techniques, regular physical activity

PSYCHOLOGICAL/PSYCHOSEXUAL CONCERNS
Assess presence of individual/couple distress
Enquire re resumption of sexual relations, persistent loss of desire (5), treatment induced orgasmic changes (6)
Refer for psychological, couple or psychosexual counselling
Notes:

(1) Self-management advice for vasomotor symptoms (hot flushes/night sweats): layered clothing; cotton clothing and bedding; regular exercise; reduction in caffeine; spicy foods, alcohol and smoking. Use of practical aids such as ‘Chillows’.

(2) Self-management advice for vulvo-vaginal dryness discomfort: use of non-hormonal vaginal moisturiser 2–3x per week regardless of whether sexually active or otherwise; use of water, silicone or oil-based vaginal lubricants when penetrative intercourse attempted; avoid heavily perfumed/astringent soaps/shower, bathing or feminine hygiene products; avoid vaginal douching; consider use of emollients to wash vulva/perineum.

(3) Disruptive vasomotor symptoms (hot flushes/night sweats): reinforce pre-habilitation recommendations; consider evidence-based complementary therapies, relaxation techniques, regular physical activity.

(4) Vulvo-vaginal symptoms: reinforce pre-habilitation recommendations; prescribe non-hormonal vaginal moisturisers 2–3x per week; recommend vaginal lubricant on-demand use for intercourse.

(5) LCA Sexual Consequences of Cancer Treatment: Proposed management of treatment-induced loss of desire.

(6) LCA Sexual Consequences of Cancer Treatment: Proposed management of treatment-induced orgasmic changes.

(7) Persistent vasomotor symptoms: consideration of pharmacological interventions (refer to LCA Breast Cancer Clinical Guidelines 2013 (updated April 2015), section 6.1.9 Management of side effects of endocrine therapy). Hot flushes: consider evidence-based complementary therapies such as acupuncture, cognitive behavioural therapy, yoga, relaxation therapies.

(8) Persistent vulvo-vaginal symptoms: vaginal dryness, discomfort, dyspareunia not relieved by vaginal moisturisers; recurrent episodes of uro-genital symptoms UTIs and candida infections; treatment-induced loss of desire (5); treatment-induced orgasmic changes (6). Consider referral to menopause services for assessment. Psychosexual referral. Consider discussion with oncologist regarding topical (vaginal) endocrine therapy if appropriate.
(9) **Persistent vulvo-vaginal symptoms**: gynaecological assessment = genitourinary syndrome of menopause. Treatment-induced loss of desire (5). Treatment-induced orgasmic changes (6). Consideration of use of low-dose vaginal oestrogen therapy following discussion with oncologist. Consideration of referral to menopause clinic +/- psychosexual referral.

**Oestrogen deprivation as consequence of treatment considerations:**

**Joint pain**: non-steroidal anti-inflammatory medication prn, regular exercise, weight management.

**Osteoporosis**: Refer to *LCA Breast Cancer Clinical Guidelines October 2013 (updated 2015)*, section 6.4.1 Osteoporosis and adjuvant therapies. Advice offered on bone health including adequate calcium intake. At-risk women to have baseline bone density scan.
Appendix 11: Female Sexual Difficulties after Endocrine Therapy for Breast Cancer

Breast cancer (endocrine therapy) female sexual dysfunction management pathway

The addition of endocrine therapy as a treatment modality may lead to higher levels of psychological and functional sexual difficulties. These difficulties may present at various points along the pathway and will be influenced by the choice of endocrine therapy, combination of therapies and duration of treatment.

(Neo adjuvant/Adjuvant) ENDOCRINE THERAPY (SERM /AI)
+/ - OVARIAN SUPPRESSION
(Surgery +/- adjuvant radiotherapy +/- chemotherapy)

Pre-habilitation
Discontinuation of HRT, neo-adjuvant/adjuvant endocrine therapy +/- ovarian suppression: informed consent
Assessment of menopausal status, fertility status. Contraception (review/educate)
Discuss common sexual consequences of treatment self-management recommendations
Vasomotor symptoms: hot flushes and night sweats (1)
Vulvo-vaginal symptoms: vaginal dryness, discomfort (2)
Reduction in desire/libido: encourage ongoing intimacy and support as a couple, regular sexual relations as appropriate

3 months: *Service delivery formats
Review:
Enquire if vasomotor symptoms (hot flushes and night sweats) causing distress to patient, review vaginal health, assess the presence of individual/couple distress (3)

Vasomotor symptoms causing distress:
Reinforce pre-habilitation/self-management advice for vasomotor symptoms (hot flushes/night sweats) (1); consider relaxation therapies (4)
Review in 3 months
Vulvo-vaginal symptoms:
Reinforce self-management advice for vaginal dryness/discomfort (2); assess compliance; review vaginal moisturisers/lubricants (5)
Review in 3 months
Psychological/couple difficulties:
Psychological, couple or psychosexual counselling
Non-resumption of sexual relations (with distress): consider psychosexual counselling
**APPENDIX 11: FEMALE SEXUAL DIFFICULTIES AFTER ENDOCRINE THERAPY FOR BREAST CANCER**

**6–12 months:** *Service delivery formats*
- Review as at 3 months
- Assessment of intervention response/symptoms improvement

**Persistent vasomotor symptoms:**
- Causing distress/not responsive to self-management advice (1): relaxation therapies (4)
- Consider evidence-based complementary therapies, e.g. cognitive behavioural therapy, acupuncture
- Consider pharmacological interventions (8)
- Review 3–6 months

**Persistent vulvo-vaginal symptoms:**
- Vaginal dryness, discomfort, dyspareunia not relieved by vaginal moisturisers and intimate lubricants (2). Review compliance. Review vaginal moisturisers/lubricants (5). Assess presence of vaginal infection. Review in 3 months.

**Psychological/couple difficulties:**
- Psychological, couple or psychosexual counselling

**Non-resumption of sexual relations (with distress):**
- Persistent sexual pain, persistent loss of desire (6), treatment-induced orgasmic changes (7). Consider referral to psychosexual counselling

**12–24 months:** *Service delivery formats*
- Review as at 3 months
- Assessment of intervention response/symptoms improvement

**Persistent vasomotor symptoms:**
- Not relieved by course of pharmacological interventions (8) (or not tolerated or declined)
- Consider evidence-based complementary therapies: cognitive behavioural therapy, acupuncture
- Consider review of endocrine therapy with oncological input

**Persistent vulvo-vaginal symptoms:**
- Not relieved by vaginal moisturisers/lubricants.
- Recurrent episodes of uro-genital symptoms, UTIs and candida infections: Consider menopause clinic referral. Consider gynaecological assessment.
- Consider discussion with oncologist regarding low-dose vaginal oestrogen therapy and review of endocrine therapy (14).
- Consider psychosexual referral

**Psychological/couple difficulties:**
- Psychological, couple or psychosexual counselling.
- Persistent loss of desire (6), treatment-induced orgasmic changes (7). Referral for psychosexual counselling

**2 years:** Service delivery formats via GP, open-access follow-up, virtual MDT endocrinology review

**Endocrine therapy management review:**
- Consideration of endocrine therapy ‘switch’ from SERM to AI. Review of menopausal status (9) (10).
- Continue to encourage self-management for vasomotor symptoms (1) and vaginal health (2).
- Should higher level of intervention be required for menopausal symptoms/individual couple distress, refer to earlier intervention pathway

**NB Fertility issues:** women may wish at this time to discuss interruption of endocrine therapy in pursuit of establishing a pregnancy (11)

**5 years:** Service delivery formats via GP, open-access follow-up, virtual MDT endocrinology review

**Endocrine therapy management review of extended endocrine therapy to 10 years (12) (13)**
- Review vaginal health, assess presence of individual/couple distress
Oestrogen deprivation as consequence of treatment considerations:

**Joint pain**: Non-steroidal anti-inflammatory medication prn, regular exercise, weight management.

**Osteoporosis**: Refer to LCA Breast Cancer Clinical Guidelines October 2013 (updated April 2015), section 6.4.1 Osteoporosis and adjuvant therapies.

**NOTES:**

* Service delivery formats, HNA questionnaires – care plan, end of treatment review consultation, Health & Wellbeing event, GP, telephone conversation, open-access follow-up, virtual MDT endocrinology review.

(1) Self-management advice for vasomotor symptoms (hot flushes/night sweats): layered clothing; cotton clothing and bedding; regular exercise; reduction in caffeine; spicy foods, alcohol and smoking cessation. Use of practical aids such as ‘Chillows’.

(2) Self-management advice for vulvo-vaginal dryness discomfort: use OTC or prescribed non-hormonal vaginal moisturiser 2–3x per week regardless of whether sexually active or otherwise; use of water, silicone or oil-based vaginal lubricants when penetrative intercourse attempted; avoid heavily perfumed/astringent soaps/shower, bathing or feminine hygiene products; avoid vaginal douching; consider use of emollients to wash vulva/perineum. Encourage smoking cessation.

(3) Loss of sexual interest accompanied by distress, dyspareunia (sexual pain), orgasmic changes.

(4) Disruptive vasomotor symptoms (hot flushes/night sweats): reinforce pre-habilitation recommendations, relaxation techniques, yoga, regular physical activity.

(5) Vulvo-vaginal symptoms: reinforce pre-habilitation self-management recommendations; check compliance; Review non-hormonal vaginal moisturisers – consider product switch, consider switch from water-based lubricants to oil or silicone-based lubricant.

(6) LCA Sexual Consequences of Cancer Treatment: Proposed management of treatment-induced loss of desire.

(7) LCA Sexual Consequences of Cancer Treatment: Proposed management of treatment-induced orgasmic changes.


(13) Refer to LCA Breast Cancer Clinical Guidelines 2013 (updated April 2015), section 6.1.6 Systemic Therapy for Breast Cancer – Endocrine therapy beyond five years in pre-/peri-menopausal women.

Appendix 12: Female Sexual Difficulties: Desire and Orgasmic Difficulties

**Proposed management of treatment-induced loss of desire**

For loss of desire to warrant further assessment and clinical intervention it should normally be persistent or recurrently deficient and be accompanied by distress to the patient/couple (DSM-V, 2013).

<table>
<thead>
<tr>
<th>Dominant aetiology* (determine dominant cause)</th>
<th>Proposed management /referral strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical/physiological</strong></td>
<td></td>
</tr>
<tr>
<td>• Treatment induced menopause; endocrine therapy; co-morbidities (e.g. diabetes); medication (e.g. antidepressants); drug misuse</td>
<td>• Initiation of HRT</td>
</tr>
<tr>
<td>• Secondary to sexual pain/vulvo-vaginal atrophy</td>
<td>• Consider testosterone replacement via GP/menopause clinic if oncologically safe</td>
</tr>
<tr>
<td></td>
<td>• Psycho-education</td>
</tr>
<tr>
<td></td>
<td>• Review of medication</td>
</tr>
<tr>
<td></td>
<td>• Psychosexual counseling</td>
</tr>
<tr>
<td></td>
<td>• Advice on vaginal moisturisers/lubricants</td>
</tr>
<tr>
<td></td>
<td>• Vaginal oestrogen</td>
</tr>
<tr>
<td><strong>Psychological/interpersonal</strong> (depression/anxiety, body image, insomnia/fatigue)</td>
<td>Self-management strategies:</td>
</tr>
<tr>
<td></td>
<td>• Promote relaxation techniques</td>
</tr>
<tr>
<td></td>
<td>• Referral to OT for fatigue or stress management</td>
</tr>
<tr>
<td></td>
<td>• Psychological counseling for altered body image</td>
</tr>
<tr>
<td>Relationship difficulties as a consequence of cancer treatment</td>
<td>• Couple therapy or psychosexual therapy</td>
</tr>
</tbody>
</table>

* More than one cause may be present
Proposed management of treatment-induced orgasmic changes

<table>
<thead>
<tr>
<th>Dominant aetiology* (determine dominant cause)</th>
<th>Proposed management strategy</th>
</tr>
</thead>
</table>
| **Physical/physiological** (treatment induced menopause, endocrine therapy, neuropathy, reduced/altered genital sensation, sexual pain, genital surgery) | • Initiation of HRT +/- testosterone replacement via GP or menopause clinic if oncologically safe to do so  
• Vaginal health strategies: vaginal moisturisers/lubricants, vaginal oestrogen  
• Pain clinic: neuroleptic medication etc.  
• Psycho-education  
• Psychosexual therapy: sensate focus/vibrator therapy |
| **Medication** (e.g. anti-depressants, anxiolytics, psychotropics, strong opioids) | • Review medication choice/dosage and liaise with prescriber regarding alternative medication (where possible) with lower sexual side effect profile |
| **Psychological/interpersonal** (depression/anxiety, fear of pain, fatigue relationship difficulties, inadequate/inappropriate sexual stimulation) | • Self-management advice/referral to OT for fatigue management  
• Promote relaxation techniques  
• Psychological counseling to reduce anxiety/depression  
• Psycho-education  
• Psychosexual therapy for individual/couple sexual strategies: sensate focus/vibrator therapy |

* More than one cause may be present
Appendix 13: Brief Sexual Health Screening and Assessment Instrument Examples

The following examples are screening or brief patient self-report clinical assessment instruments that may be helpful to consider how to start and structure a discussion about treatment-induced sexual difficulties. They are also helpful for patients and staff to begin to assess the nature and severity of sexual difficulties in order to identify appropriate management and referral options.

These screening and assessment examples may be particularly useful to health professionals who work in services where higher numbers of people experiencing sexual difficulties associated with their illness or treatment are encountered, such as breast, gynaecological, urological and colorectal services/units.

The first example is a clinical screener for sexual concerns or problems (see Further Reading Flynn et al 2015 and Table 6 in the following article: http://link.springer.com/article/10.1007%2Fs11606-015-3333-3). While it was not developed specifically for use in people with sexual difficulties arising after cancer treatment, this screening checklist includes all core sexual difficulties experienced by adults, all of which are also encountered in people with sexual consequences of cancer treatment.

The second screening tool is a six item version of the Female Sexual Function Index questionnaire, measuring sexual function in women. The questionnaire is included in the full article, the abstract of which is available via the following link: http://www.jsm.jsexmed.org/article/S1743-6095(15)32925-8/abstract.

The final example is the Sexual Health Inventory for Men (SHIM) or International Index for Erectile Function short version-5 items): SHIM/IIEF-5, first published in the International Journal for Impotence Research. It is designed to diagnose the presence and severity of erectile dysfunction. It has been reproduced below with the permission of the Nature Publishing Group.
Assessment Instrument Examples

Sexual Health Inventory for Men (SHIM) or International Index for Erectile Function short version-5 items: SHIM/IIEF-5

Please encircle the response that best describes you for the following five questions:

<table>
<thead>
<tr>
<th>Over the past 6 months:</th>
<th>Very low 1</th>
<th>Low 2</th>
<th>Moderate 3</th>
<th>High 4</th>
<th>Very high 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How do you rate your confidence that you could get and keep an erection?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. When you had erections with sexual stimulation, how often were your erections hard enough for penetration?</td>
<td>Almost never/never 1</td>
<td>A few times (much less than half the time) 2</td>
<td>Sometimes (about half the time) 3</td>
<td>Most times (much more than half the time) 4</td>
<td>Almost always/always 5</td>
</tr>
<tr>
<td>3. During sexual intercourse, how often were you able to maintain your erection after you had penetrated?</td>
<td>Almost never/never 1</td>
<td>A few times (much less than half the time) 2</td>
<td>Sometimes (about half the time) 3</td>
<td>Most times (much more than half the time) 4</td>
<td>Almost always/always 5</td>
</tr>
<tr>
<td>4. During sexual intercourse, how difficult was it to maintain your erection to completion of intercourse?</td>
<td>Extremely difficult 1</td>
<td>Very difficult 2</td>
<td>Difficult 3</td>
<td>Slightly difficult 4</td>
<td>Not difficult 5</td>
</tr>
<tr>
<td>5. When you attempted sexual intercourse, how often was it satisfactory for you?</td>
<td>Almost never/never 1</td>
<td>A few times (much less than half the time) 2</td>
<td>Sometimes (about half the time) 3</td>
<td>Most times (much more than half the time) 4</td>
<td>Almost always/always 5</td>
</tr>
</tbody>
</table>

Total Score: ___________________

1–7: severe ED
8–11: moderate ED
12–16: mild–moderate ED
17–21: mild ED
22–25: no ED
### Appendix 14: Psychosexual Counselling Services within the LCA

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chelsea and Westminster Healthcare NHS Foundation Trust</td>
<td>56 Dean Street, London, W1D 6AQ</td>
</tr>
<tr>
<td>Psychosexual Service (SLAM)</td>
<td>1st Floor, Mapother House, De Crespigny Park, London, SE5 8AZ</td>
</tr>
<tr>
<td>The Royal Marsden NHS Foundation Trust</td>
<td>Psychological &amp; Pastoral Care Services, Fulham Road, London, SW3 6JJ</td>
</tr>
<tr>
<td>Sutton &amp; Merton Community Services</td>
<td>Sexual &amp; Reproductive Health Services, Green Wrythe Surgery, Green Wrythe Lane, Carshalton, Surrey, SM5 1JF</td>
</tr>
<tr>
<td>Kings College Hospital NHS Foundation Trust</td>
<td>Camberwell Sexual Health Clinic, Ground Floor, Caldecot Centre, 15–22 Caldecot Road, Camberwell, London, SE5 9RS</td>
</tr>
<tr>
<td>Guy’s and St Thomas’ NHS Foundation Trust</td>
<td>Dimbleby Cancer Care Service, Ground Floor, Guy’s Hospital, Great Maze Pond, London, SE1 9RT</td>
</tr>
<tr>
<td>Lewisham Community Sexual &amp; Reproductive Health Services</td>
<td>Waldron Health Centre, Amersham Vale, SE14 6LD</td>
</tr>
<tr>
<td>Organization</td>
<td>Address</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Greenwich Community Sexual & Reproductive Health Services | Memorial Hospital  
Memorial Hospital  
Shooters Hill  
London  
E18 3RZ |
| Croydon Community Sexual & Reproductive Health Services | Croydon University Hospital  
Croydon University Hospital  
London Road  
Croydon  
London  
CR7 7YE |
| Epsom and St Helier NHS Trust                          | Ground Floor, D Block  
Wrythe Lane  
Carshalton  
Surrey  
SM5 1AA |
| St George’s Hospital NHS Foundation Trust             | The Courtyard Clinic  
Blackshaw Road  
Tooting  
London  
SW17 0QT |
| Imperial College Healthcare NHS Trust                  | Jane Wadsworth Clinic  
Jefferiss Wing  
St Mary’s Hospital  
Paddington  
London  
W2 1NY |
| Kingston Hospital NHS Foundation Trust                | The Wolverton Centre  
Galsworthy Road  
Kingston upon Thames  
Surrey  
KT2 7QB |
| Tavistock Centre for Couple Relationships               | 70 Warren St  
London  
W1T 5PB |
| COSRT (College of Sexual and Relationship Therapists)  | www.cosrt.org.uk/information-for-members-of-the-public/sex-and-cancer/ |
Appendix 15: Helpful Addresses for Lesbian, Gay, Bisexual or Transgender People Affected by Cancer

The LGBT Foundation
5 Richmond Street, Manchester M1 3HF
Tel: 0345 3 30 30 30
Email: info@lgbt.foundation
www.lgbt.foundation

The LGBT Cancer Support Alliance

Men 4 Men. Sexual health outreach project
www.gay-bedfordshire.co.uk/what-is-the-specialist-psychosexual-therapy-service.htm

Booklets:
Macmillan Publication: The Emerging Picture on LGBT People With Cancer

Supporting Lesbian, Gay, Bisexual and Trans people with cancer: A practical guide for cancer and other health professionals, published by DeMontfort University, Leicester.

Gender Identity Services (London)

Gender Identity Clinic (GIC)
Charing Cross Hospital
West London Mental Health NHS Trust
179–183 Fulham Palace Road
London W6 8QZ
Tel: 020 8483 2801

Gender Identity Development Service (GIDS) (for young people up to age 18 years)
The Tavistock Centre
120 Belsize Lane
London NW3 5BA
### Appendix 16: LCA Sexual Consequences Core Group Membership

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karen Briggs</td>
<td>Clinical Nurse Specialist – Andrology</td>
<td>Guy’s and St Thomas’ NHS Foundation Trust</td>
</tr>
<tr>
<td>Simon Evans</td>
<td>Project Administrator</td>
<td>London Cancer Alliance</td>
</tr>
<tr>
<td>Andreia Fernandes</td>
<td>Gynae-oncology Clinical Nurse Specialist</td>
<td>The Royal Marsden NHS Foundation Trust</td>
</tr>
<tr>
<td>Denise Flett</td>
<td>Advanced Nurse Practitioner Breast Cancer</td>
<td>The Royal Marsden NHS Foundation Trust</td>
</tr>
<tr>
<td>Nicola Glover</td>
<td>Senior Project Manager</td>
<td>London Cancer Alliance</td>
</tr>
<tr>
<td>Jean Meadows</td>
<td>Psychosexual Therapist/Psychologist</td>
<td>Guy’s and St Thomas’ NHS Foundation Trust</td>
</tr>
<tr>
<td>Majed Shabbir</td>
<td>Consultant Urological Surgeon</td>
<td>Guy’s and St Thomas’ NHS Foundation Trust</td>
</tr>
<tr>
<td>Isabel White</td>
<td>Clinical Nursing Research Fellow in Psychosexual Practice</td>
<td>The Royal Marsden NHS Foundation Trust</td>
</tr>
<tr>
<td>Tet Yap</td>
<td>Consultant Urological Surgeon</td>
<td>St George’s University Hospitals, Croydon Health Services NHS Trust &amp; The Royal Marsden NHS Foundation Trust</td>
</tr>
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### Appendix 17: LCA Sexual Consequences Clinical Reference Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Organisation</th>
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</thead>
<tbody>
<tr>
<td>William Conant</td>
<td>Counsellor</td>
<td>Guy’s and St Thomas’ NHS Foundation Trust</td>
</tr>
<tr>
<td>Nichola Kane</td>
<td>Associate Director of Nursing for Cancer &amp; Clinical Support Services</td>
<td>Kingston Hospital NHS Foundation Trust</td>
</tr>
<tr>
<td>Netty Kinsella</td>
<td>Uro-oncology Nurse Consultant</td>
<td>The Royal Marsden NHS Foundation Trust</td>
</tr>
<tr>
<td>Marina Parton</td>
<td>Consultant Medical Oncologist</td>
<td>The Royal Marsden NHS Foundation Trust</td>
</tr>
<tr>
<td>Suzie Stanway</td>
<td>Consultant Medical Oncology Breast Unit</td>
<td>The Royal Marsden NHS Foundation Trust</td>
</tr>
<tr>
<td>Claire Taylor</td>
<td>Macmillan Nurse Consultant in Colorectal Cancer &amp; Visiting Lecturer in Gastrointestinal Nursing</td>
<td>London North West Healthcare NHS Trust</td>
</tr>
</tbody>
</table>