



Cancer and Menopause

Dr. Fionán Donohoe
Clinical Fellow



Overview

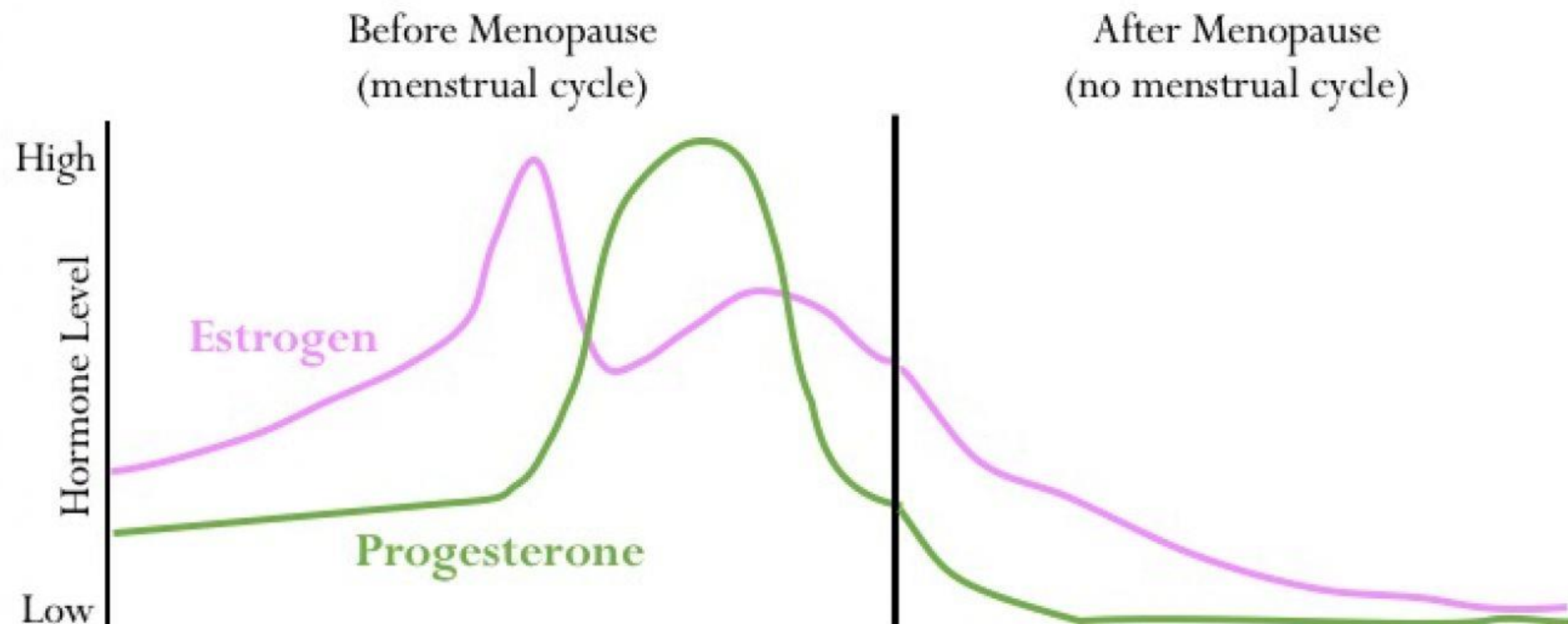
- What is menopause?
- The link between cancer and menopause
- What are the symptoms of menopause?
- What treatments are available?
- Q&A



What is menopause?

- The final period
- In modern language the word menopause has come to represent the syndrome of symptoms and signs associated with menopause
- Perimenopause is the time from the onset of menopause symptoms until cessation of menstruation
- NOT usually relevant in menopause symptoms induced by cancer treatment
- Postmenopause is when there has been no period for 12 months or more





Where does cancer come in to it?

- Surgical removal of ovaries
- Pelvic radiotherapy
- Chemotherapy
- Endocrine therapy
- Withdrawal of HRT
- Physiological menopause



Surgical menopause

- Ovaries are removed at surgery meaning estrogen is no longer produced
 - Relevant in GYN cancers – ovarian/uterine
 - Sometimes in advanced colorectal cancer
 - Risk reduction in setting of BRCA/Lynch/Other genetic alterations which increase predisposition to cancer
 - Ovarian suppression in setting of breast cancer
-
- Can be very accurately timed
 - Is permanent and irreversible



Pelvic radiotherapy

- RT effectively kills cancer cells but if given in the pelvis the ovaries are often also affected, causing them to lose their function
- GYN cancers – cervical mostly
- Rectal cancer – on the rise in women under 50 so becoming more relevant
- Is permanent and irreversible
- Other short term and longer term effects also associated



Chemotherapy

- Chemotherapy is designed to kill cancer cells but can also be toxic to the ovaries and lead to menopause symptoms
- In some cases this will be reversible and ovarian function may return once the course of chemotherapy is completed
- In some cases it will be permanent
- It is more likely to become permanent the closer you are to the natural age of menopause when chemotherapy is given but it is not accurately predictable



Endocrine therapy

- Zoladex injections/Tamoxifen/aromatase inhibitors such as letrozole, exemestane etc are very commonly given after completion of treatment for ER+ breast cancer to reduce the risk of recurrence
- Zoladex injections 'trick' the body into thinking it has gone through menopause
- Tamoxifen and aromatase inhibitors work by lowering estrogen which can induce vasomotor symptoms even in postmenopausal women or make them worse if you already have these symptoms



Menopause Symptoms

- Long potential list of menopause symptoms
- Significant overlap between symptoms considered menopause symptoms and the symptoms of normal aging
- In cancer associated menopause there can be significant overlap between side effects of cancer treatment e.g. fatigue
- Loss of fertility and coping with that can make coping with menopause symptoms more challenging



Symptoms that we definitely know are due to menopause

- No or irregular periods
- Vasomotor symptoms – hot flushes/flushes, night sweats, heat intolerance – can be associated with skin flushing, sensation of heat
- Genitourinary symptoms – dryness which can cause pain with sex, discomfort with exercise or activities of daily living, recurrent UTIs, urinary problems
- Mood symptoms
- Sleep disturbance





Symptoms which are commonly reported as due to menopause but are poorly understood

- Brain fog/cognitive issues – overlap
- Aches and pains - overlap
- Dry eyes, skin and hair
- Weight gain and change in fat distribution



How is menopause diagnosed?

- Often with difficulty!
- If you have gone into menopause because of surgical removal of ovaries or pelvic radiotherapy – no tests are needed as menopause is inevitable after these treatments
- Blood tests can be helpful if <45 but levels can fluctuate making the diagnosis difficult
- Best to go by symptoms



Treatment

- Every single woman's experience of menopause is unique to her
 - Many women have no symptoms
 - Most have mild symptoms
 - Some have severe
-
- Everyone's experience is their own and there is no point in comparing someone else's experience to yours



Key messages

- Menopausal symptoms happening at the normal age (>45) that are mild do not require treatment
- Treatments can be hormonal, non-hormonal or non-pharmacological
- For a solid foundation in menopause
 - Exercise
 - Eating well



Exercise

- Helps with
 - Mood/anxiety
 - Sleep/insomnia
 - Fatigue
- May help with
 - Aches and pains
 - Weight gain
 - Brain fog
- Probably doesn't help with
 - Hot flushes



CBT for menopause symptoms

- Looks at thoughts, feelings and behaviours and symptoms
- Very good data that it helps
- There are therapists trained to delivery CBT for menopause symptoms in Ireland

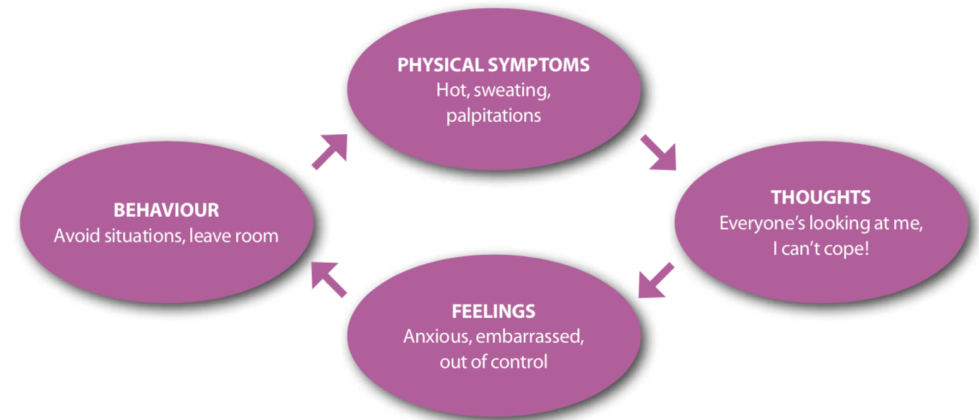
WOMEN'S HEALTH CONCERN FACT SHEET

Information for women

Cognitive Behaviour Therapy (CBT) for Menopausal Symptoms



CBT for hot flushes focuses on the links between:



Supplements

- Black cohosh
 - Soy phytoestrogens
 - Magnesium
 - Vitamin E
-
- **No randomised data showing benefit for VMS**



HRT

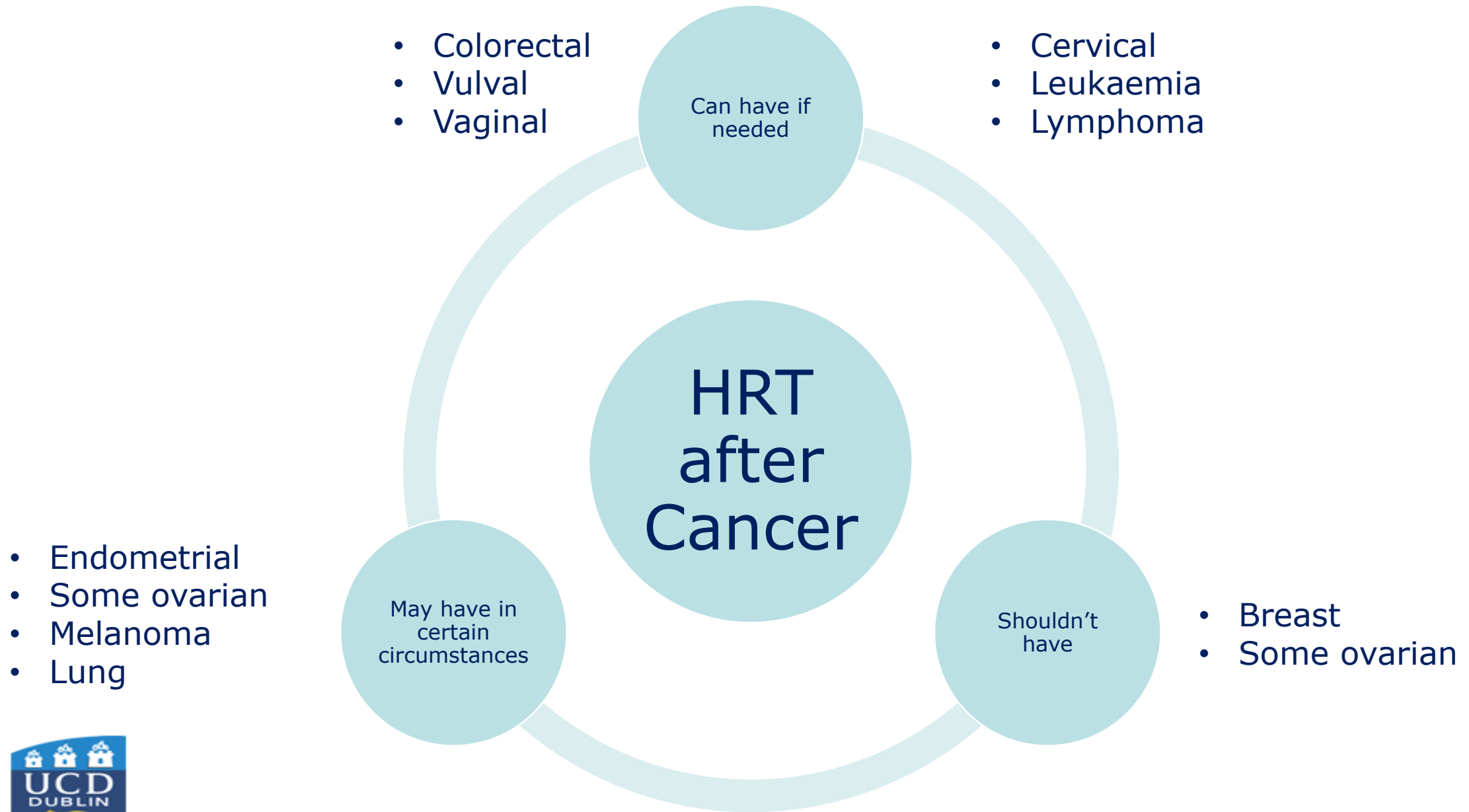
- Most effective treatment BUT does not eliminate all symptoms in many cases
- Indicated for vasomotor symptoms although there are other benefits e.g. sleep, mood, bone health
- Systemic – patch/tablet/gels
- Estrogen only vs. combination
- HRT does not seem to help with brain fog or aches/pains



HRT

- If menopause early (<45) or premature (<40) and no contraindication to HRT continue until natural age of menopause (51)
- Then weigh up pros and cons on individualised basis
- For most women
 - HRT does not eliminate all symptoms
 - Maximum effect of treatment is seen at 3 months of use





Donohoe (2022), Szabo (2019), Marino (2018)

Risks if personal history of breast cancer

	Intervention	Control group	Study outcome	Results
HABITS ²⁰ (2004), n=434	Oestrogen-progesterone combination	No hormone therapy	Risk of breast cancer recurrence	HR 3.50 (95% CI 1.50–8.10); p value not provided; trial stopped early due to increased risk of recurrence
Stockholm ²⁰ (2005), n=378	Oestrogen-progesterone combination	No hormone therapy	Risk of breast cancer recurrence	HR 1.80 (95% CI 1.03–3.10); p value not provided; trial stopped after combined analysis with the HABITS trial
LIBERATE ²¹ (2009), n=3148	Tibolone	Placebo	Risk of breast cancer recurrence	HR 1.40 (95% CI 1.14–1.70); p=0.0009 for all patients; 1.25 (0.98–1.59); p=0.076 for patients taking tamoxifen; 2.40 (1.01–5.00); p=0.047 for patients taking aromatase inhibitors; trial stopped early due to increased risk of recurrence

HR=hazard ratio.

Table: Randomised controlled trials evaluating hormone-replacement therapy in patients with early breast cancer

Understanding the risks of breast cancer



Difference in breast cancer incidence per 1,000 women aged 50-59.

Approximate number of women developing breast cancer over the next five years.

23 cases of breast cancer diagnosed in the UK general population



An additional four cases in women on combined hormone replacement therapy (HRT)



Four fewer cases in women on oestrogen only Hormone Replacement Therapy (HRT)



An additional five cases in women who drink 2 or more units of alcohol per day



Difference in breast cancer incidence per 1,000 women aged 50-59.

Approximate number of women developing breast cancer over the next five years.

23 cases of breast cancer diagnosed in the UK general population



Three additional cases in women who are current smokers



An additional 24 cases in women who are overweight or obese (BMI equal or greater than 30)



Seven fewer cases in women who take at least 2½ hours moderate exercise per week



Local Symptoms

- Can have significant impact on quality of life
 - Sexual problems
 - Discomfort with day to day living
 - Recurrent UTI
- Non-hormonal options include lubricants and moisturisers or topical anaesthetic
- Vaginal estrogen is very effective and safe
- Often required in addition to systemic HRT





Welcome to thisisGO.ie

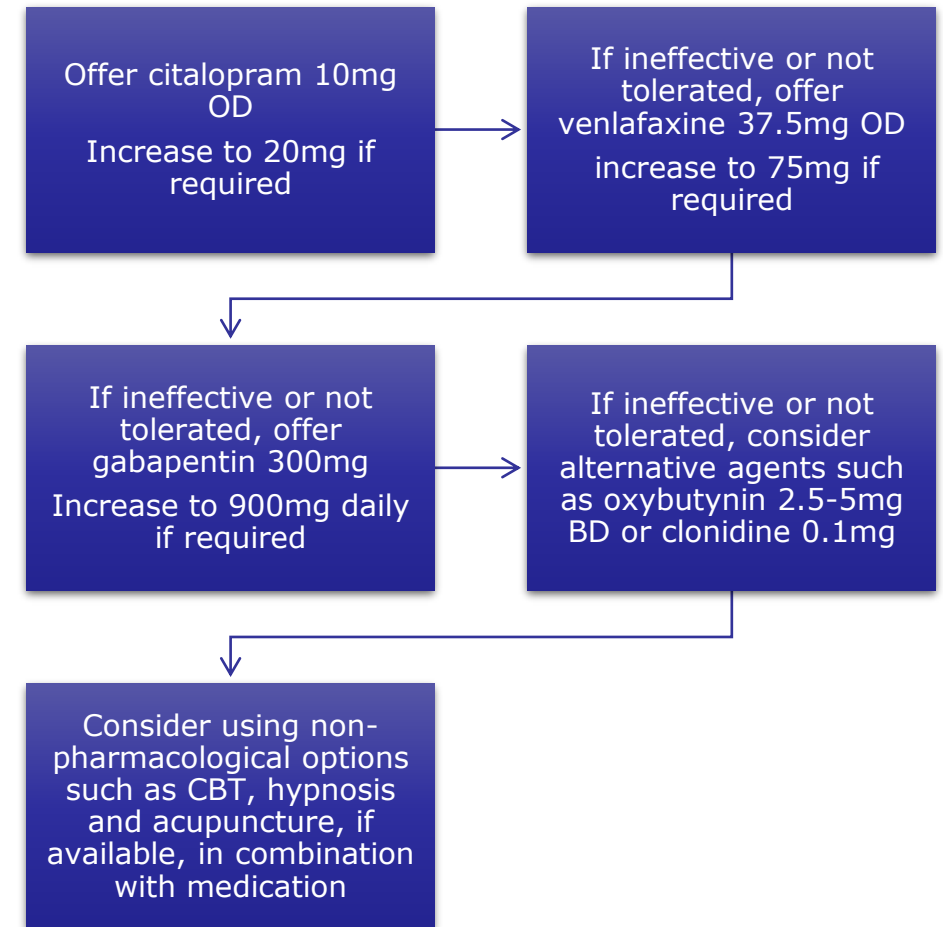


Information on How to Improve your Vulvovaginal Health.

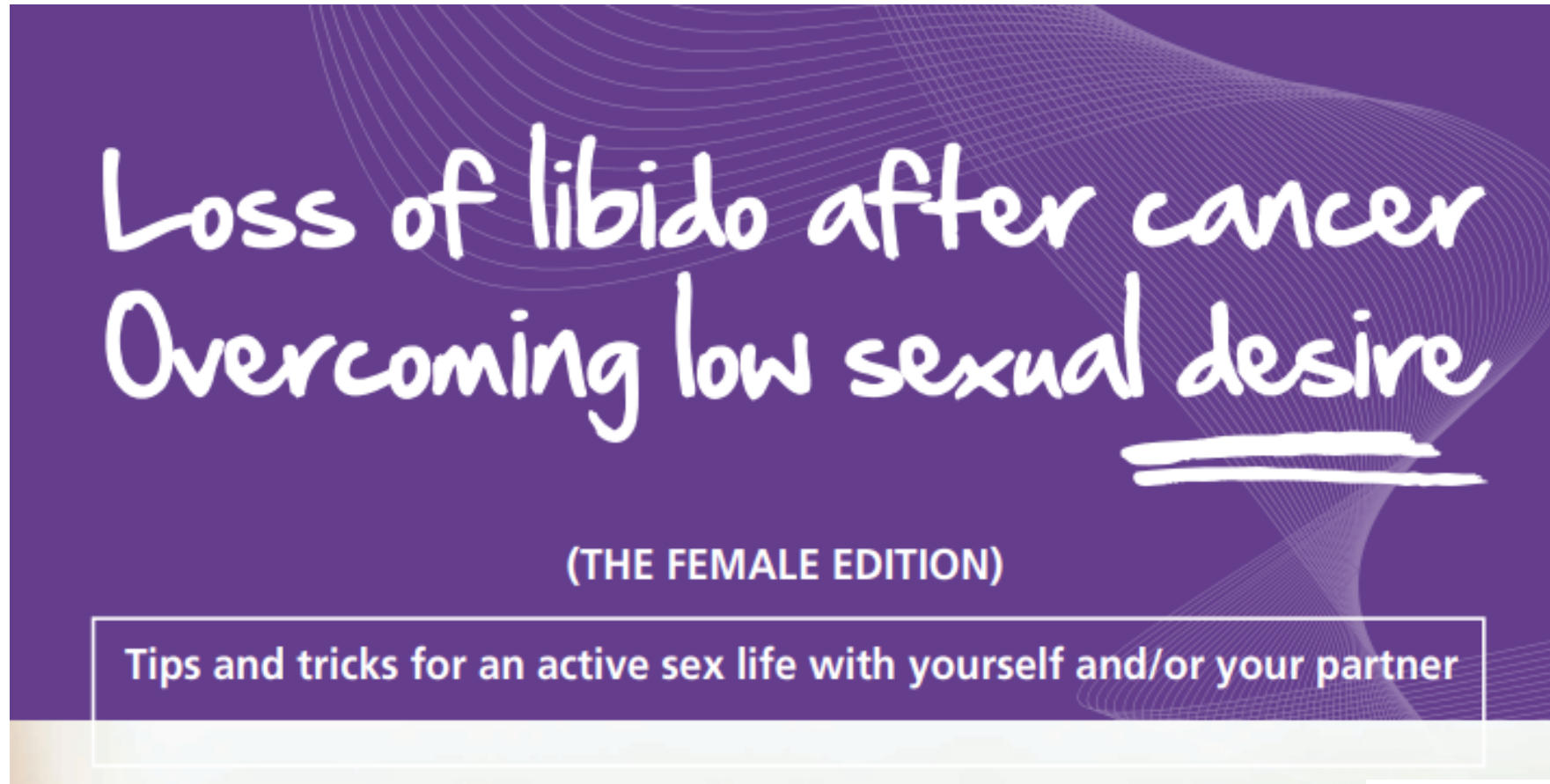
What is Vulvovaginal Health?

Non-hormonal options

- SSRIs – citalopram 10-30mg
 - SNRIs – venlafaxine 37.5mg – 150mg
 - Gabapentin – 900-1200mg
 - Oxybutynin – 2.5-5mg BD
-
- Not as effective as HRT
 - But an option to reduce intensity and frequency



Low libido



Testosterone

- No licensed products for women
- Studies do show modest improvement in libido in postmenopausal women already on estrogen +/- progesterone
- Very little long term safety data
- No RCT data re: MSK, CV or other reported benefits
- Research needed after hormone sensitive cancers



Testosterone replacement in menopause

When should testosterone be avoided or used with caution?

- During pregnancy or breastfeeding
- Active liver disease
- History of hormone sensitive breast cancer – off label exceptions to this may be agreed in fully informed women with intractable symptoms not responding to alternatives
- Competitive athletes – care must be taken to maintain levels well within the female physiological range
- Women with upper normal or high baseline testosterone levels / FAI

What about other issues with menopause?

- Bone health
 - HRT can be helpful
 - If can't have HRT – calcium and vitamin D
 - Don't smoke
 - Take regular weight bearing exercise
- CV health
 - HRT is not licensed for prevention of heart disease although it may be beneficial
 - Maintain a healthy diet
 - Don't smoke
 - Attend your GP for advice



Looking to the future.....



Emerging treatments

- Neurokinin receptor antagonists are a new and exciting treatment for vasomotor symptoms
- Trials are beginning in people with cancer induced menopausal symptoms
- Initial results seem very promising with high response rates (>70%) and rapid onset of action (within a few days – quicker than estrogen!)



Where can I go to get help?

- Online:
 - <https://thisisgo.ie/>
 - <https://www.womens-health-concern.org/>
 - <https://www.menopausematters.co.uk/>
 - <http://mymenoplan.org/>
- Your GP
 - The vast majority of menopause experts in Ireland are GPs
- Complex menopause service
 - Currently open in NMH to referrals from Dublin, Wicklow and Kildare
 - Plans for more clinics to open over the next year in other parts of the country



Where can I go to get help?

- Talk to your oncology team – medical or surgical doctor or CNS team
- Arm yourself with knowledge so you can self manage certain symptoms
- Online or in person support groups can be helpful
- Local cancer support centres
- Irish Cancer Society





PODCAST

IANO Podcast

Irish Association of Nurses in Oncology



Demystifying The Myths: HRT & Cancer

In Episode 1 of our podcast we have an informational discussion surrounding menopause after cancer, HRT and some myths regarding this topic. We are...



Irish Journal of Medical Science (1971 -)

<https://doi.org/10.1007/s11845-022-02947-6>

REVIEW ARTICLE



Using menopausal hormone therapy after a cancer diagnosis in Ireland

Fionán Donohoe¹ · Yvonne O'Meara¹ · Aidin Roberts¹ · Louise Comerford¹ · Catherine M. Kelly² · Janice M. Walshe³ · Deirdre Lundy⁴ · Martha Hickey⁵ · Donal J. Brennan^{1,6}



Thank you

