

Menopause and HRT

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Specialty Doctor

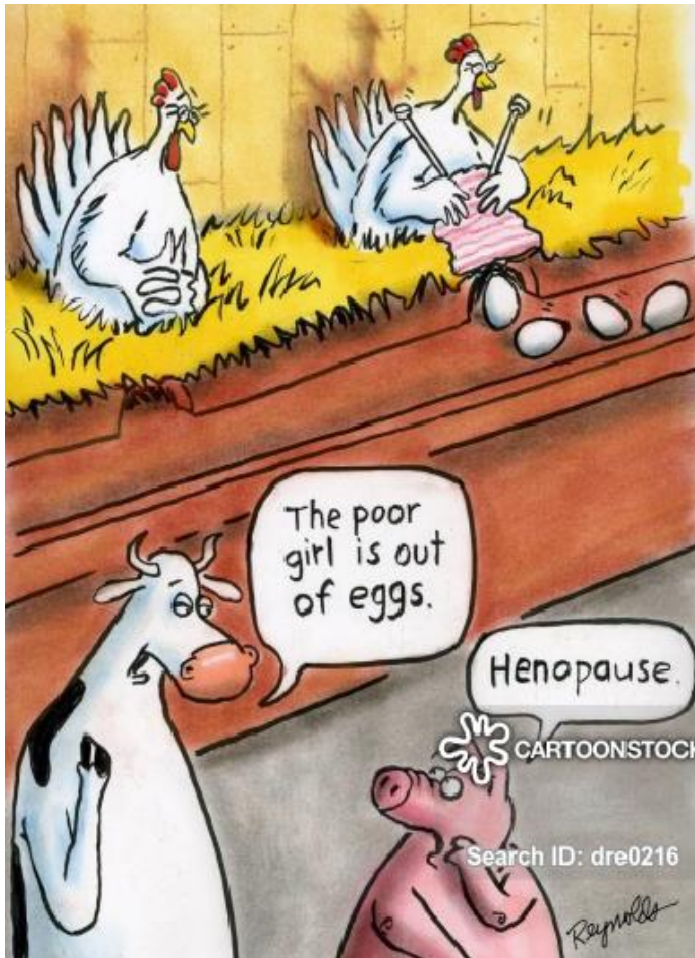
in Obstetrics and Gynaecology
at Sherwood Forest Hospitals

World Menopause Day

18th October 2024

Let's talk about the Menopause

Literally :
End of Periods



Definitions

- Menopause
 - Final Menstrual Period
 - Time of symptoms caused by lack of ovarian hormones, starting up to 5 years before and up to 15 years after last period
- Peri-menopause
“The Change”
- Postmenopause
 - 12 months after last period

Menopause

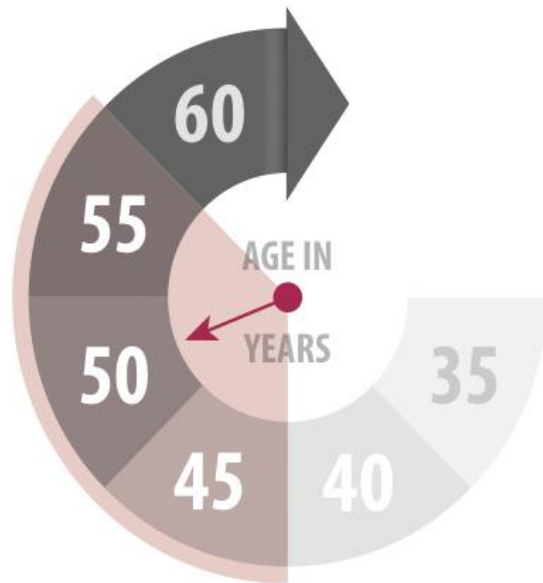
“End of Menstruation”

Average age 51 years

1 in 100 women age of
40-45

1 in 100 women under
age 40

(premature ovarian
insufficiency)



Surgical or Induced Menopause

- Oophorectomy (ovaries removed)
- Certain types of chemotherapy drugs
- Radiotherapy to pelvic area as a treatment for cancer
- Hysterectomy (womb removed) even if ovaries are conserved, it is common to have an earlier menopause

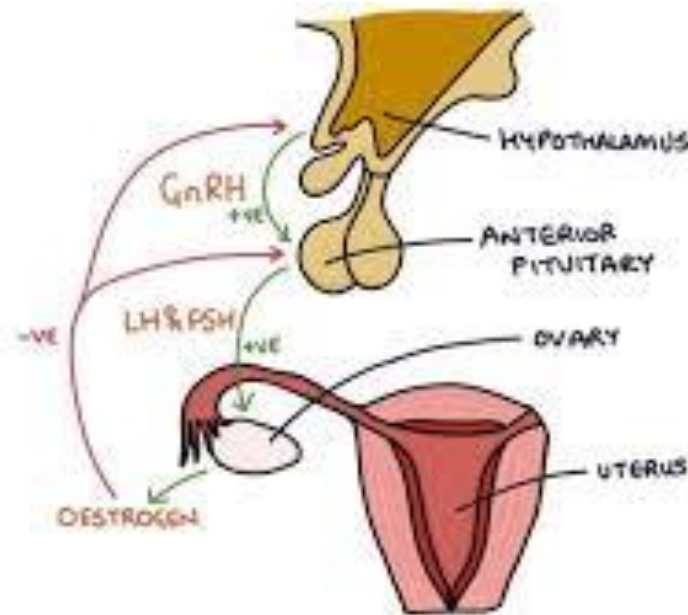
Premature Ovarian Insufficiency (Premature Menopause)

- Premature Ovarian Insufficiency (POI) affects about:
 - One in every 100 women under the age of 40
 - One in 1,000 women under 30
 - One in 10,000 under 20



Hormones!...

- Main female affected by menopause:
 - Oestrogen
 - Progesterone

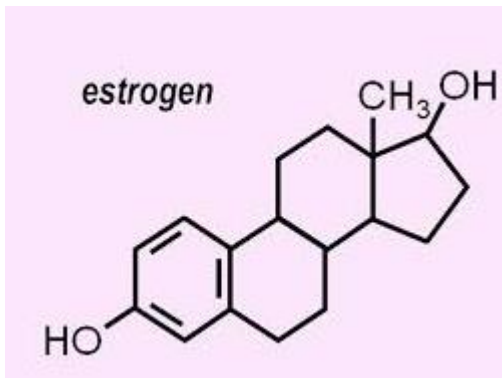


What do these hormones do?

- Oestrogen

- Progesterone

- Keeps tissues of the body elastic
- Regulates new bone turnover and reduces Osteoporosis
- Keeps heart healthy
- Maintains brainpower
- Stimulates lining of the womb to grow



What do these hormones do?

- Oestrogen

- Progesterone

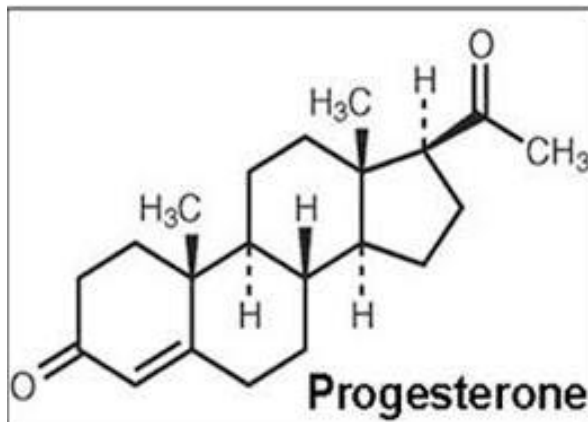
- Protects womb lining

- Tiredness

- Mood swings

- Increased appetite

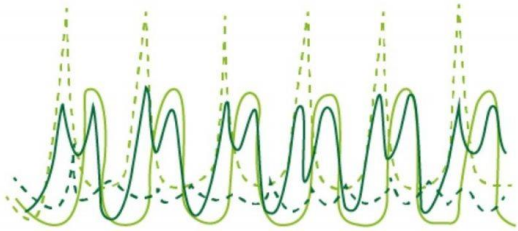
- Similar to PMT



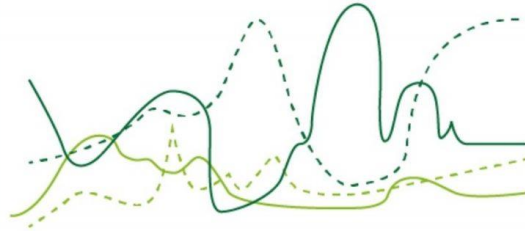
What's happening to a woman's hormones...

HORMONE FLUCTUATIONS DURING MENOPAUSE

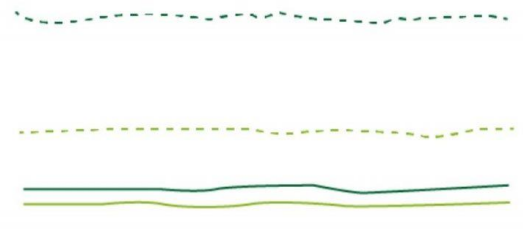
Premenopause (180 days)



Perimenopause (180 days)



Postmenopause (180 days)



— estrogen — progesterone - - - FSH - - - LH

Changes in Hormone Level patterns over Six Months - Graph based on data from Dr. Nanette Santoro -> Harvard Women's Health Watch, 1999

Symptoms (average duration 7 years)

3 out of 4 women

have symptoms

1 out of 4 women

have severe debilitating symptoms

Menopause Symptoms...

- Many symptoms – both physical and emotional



Physical

- Hot flushes, night sweats
- Changes in periods
- Muscle and joint pains
- Headaches
- Dry skin/hair
- Dry vagina and urinary problems (later)



"Listen Buddy! After the hot flushes I've been having this is like a resort!"

Emotional

- Anxiety
- Sleep disturbance
- “brainfog”
- Depressed mood
Tearfulness
- Irritability
- Lack of energy
- Inability to concentrate
- Memory loss



What happens to our bodies ?



Heart and circulation



CARTOONSTOCK

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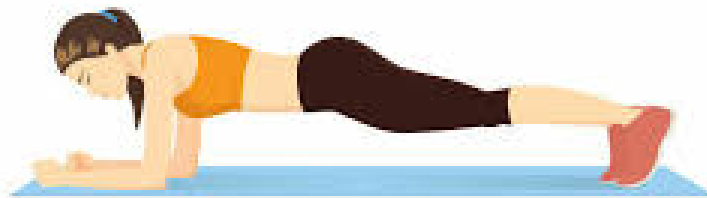
**"Thank you for not giving up your seat to me.
Standing is good for the cardiovascular system,
which is why women outlive men."**

The heart and circulation...

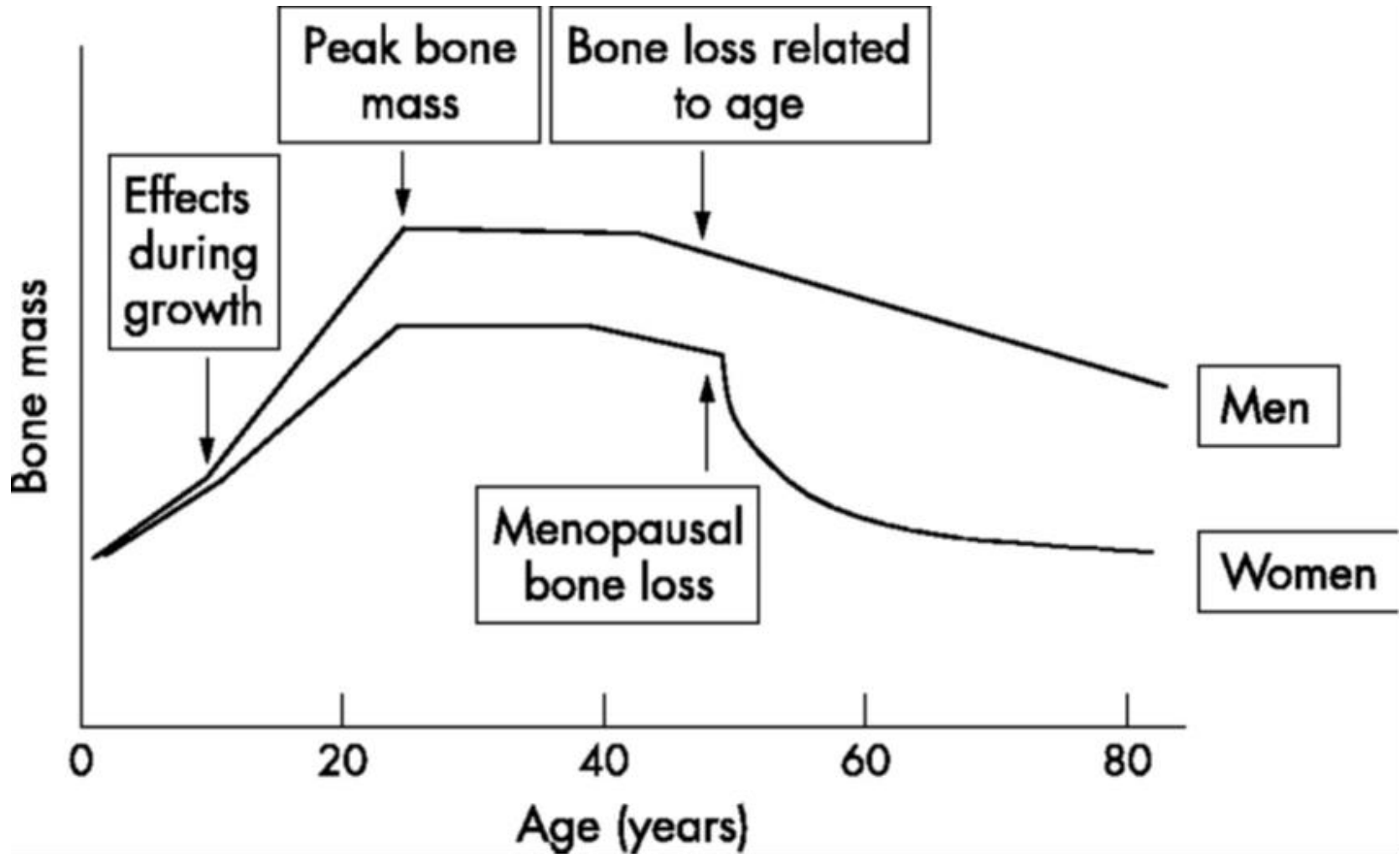
After menopause women catching up with men's risk of heart disease, largest cause of death

How to reduce the risk...

- Aerobic exercise
- Reduce salt intake
- **Keep weight in normal range (BMI 18.5 - 24.9)**
- Stop smoking
- Yoga/Meditation to reduce stress hormones



Osteoporosis

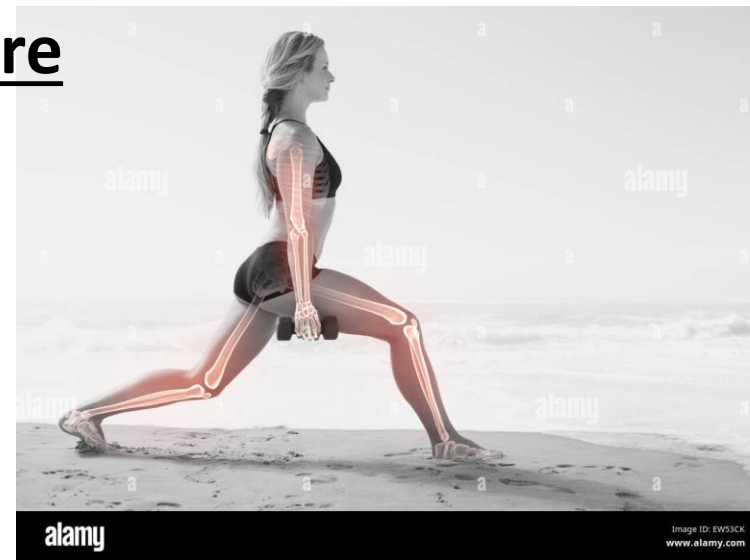


The musculoskeletal system – Bones and Muscles

1 in 3 will have fragility fracture,
1 in 6 hip fracture

How to reduce the risk...

- Weight-bearing exercises
- Vitamin D supplements
- Dietary calcium
- Pilates for core strength and flexibility
- Stop smoking



Ageing and frailty

At any age after the menopause, women have fewer healthy years ahead than men, despite longer life expectancy



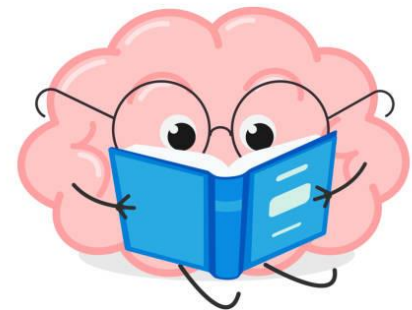
Brain Function...

Good news!!!

The reduction in mental capability appears to be temporary

Things you can try to help...

- Learn and use foreign language
- Use memory aids – lists, apps, stickers
- Don't panic!



HRT

Hormone
Replacement
Therapy

(also known as
MHT, Menopausal
Hormone Therapy)



"You need strong medicine to relieve your symptoms. I'm prescribing chocolate."

HRT Principles...

- Replaces hormones no longer produced by ovaries
- Partially reverses menopausal changes
- “Postponing” rather than avoiding menopause
- It is safe to **start** HRT for the majority of women under 60 years,
- The right HRT preparation, in the right woman, has very low overall risks and has significant benefits
- Women under 45 years **MUST** take hormones to protect their hearts, bones and brains

Oestrogen replacement

Most effective way to treat
flushes/night sweats
(vasomotor symptoms)

The Heart and Circulation

- Continued protection if HRT started early in the menopause, reduction in heart attacks (50%) and reduced risk of death
- Possibly evidence of “early harm” if started more than 10 years after final menstrual period



The Bones and Muscles

- HRT = most effective intervention to prevent osteoporosis
- Preserves collagen (cartilage)
- Partially reverses muscle loss



Emotional Symptoms

- HRT = Most effective treatment
- NICE guidelines state...



“Offer HRT first line for vasomotor symptoms and low mood”

Remember, if not caused by lack of oestrogen,
HRT will not improve mood

Known Risks...



- **DVT/PE (Blood clot):**

Slight increased risk with tablets, no evidence for increased risk with gel/patches/spray

- **Angina/Heart attack:**

Increased when combined HRT started in older women(>60), or with pre-existing heart disease.

‘window of opportunity’ within 10 years of menopause

- **Stroke:**

Increased when HRT started in older women (> 60 years)
Less with patch/gel/spray

Breast cancer



**"I suppose I'll be the one
to mention the elephant in the room."**

Understanding the risks of breast cancer



A comparison of lifestyle risk factors versus Hormone Replacement Therapy (HRT) treatment.

Difference in breast cancer incidence per 1,000 women aged 50-59.
Approximate number of women developing breast cancer over the next five years.

NICE Guideline, Menopause: Diagnosis and management
November 2015

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 four cases in women on combined hormonal contraceptives (the pill)



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



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



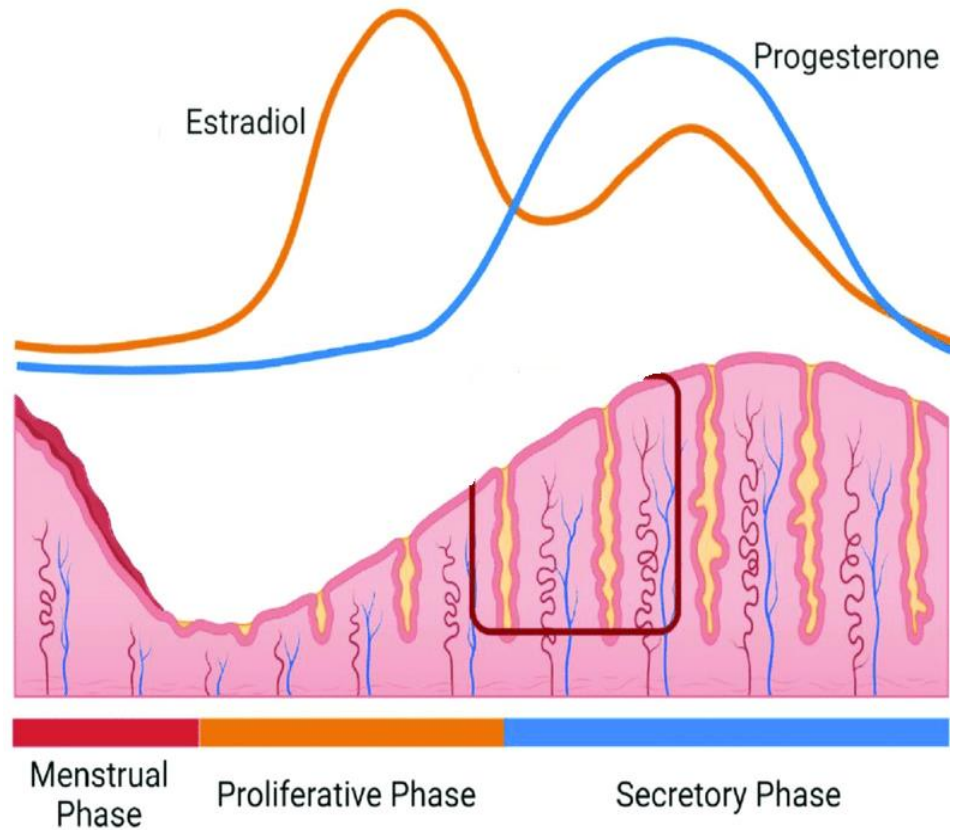
HRT – The Hormones...

- **Oestrogen** for all the benefits
- **Progesterone** to protect womb lining from overgrowth/cancer



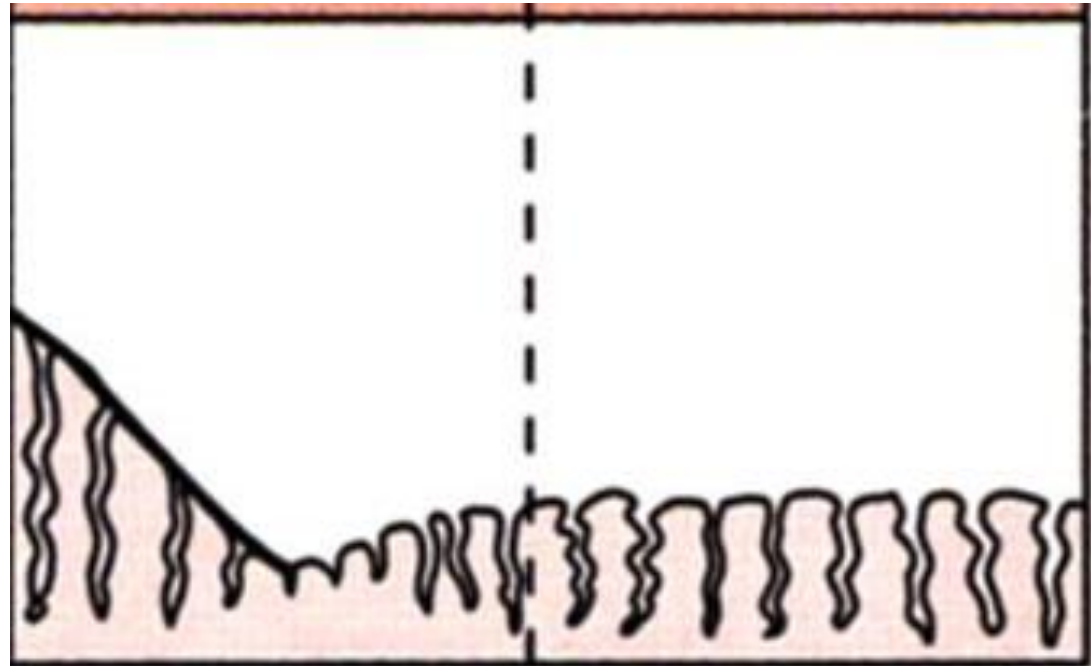
Womb Lining (endometrium) and bleeding

- Oestrogen stimulates growth/overgrowth/cancer
- Natural Progesterone changes tissue



Womb Lining (endometrium) and bleeding

- High dose Progesterone or Synthetic Progestogens cause flattening



Vaginal Bleeding Risk assessment

- Overall Oestrogen “Burden”
 - Natural (un-ovulatory cycles)
 - Fat tissue
 - External sources (HRT, “herbal HRT”)
- Protective Progestogens
 - Combined HRT
 - Mirena
 - Progestogen contraceptives



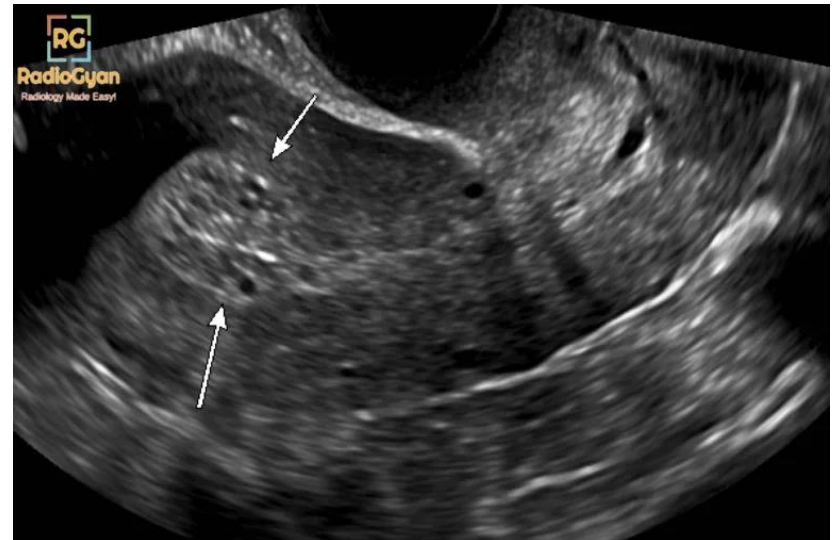
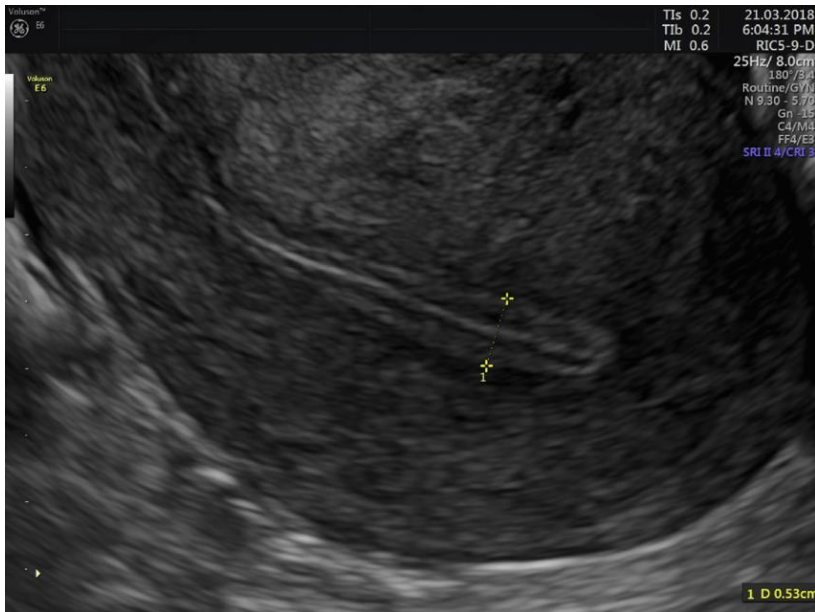
Understanding USS

- Shadow image
- Not a diagnosis, just tool for risk assessment

Science:

Postmenopausal bleeding,

Very low risk if 4mm or less



Hysteroscopy (Telescope)



Types of HRT



For Women with a womb

Oestrogen and Progestogen

Less than 12 months from last period

Sequential HRT

- Mimicking menstrual cycle
- Patches
- Tablets
- “Tailor made” combinations

More than 12 month from last period or Minipill

Continuous combined HRT

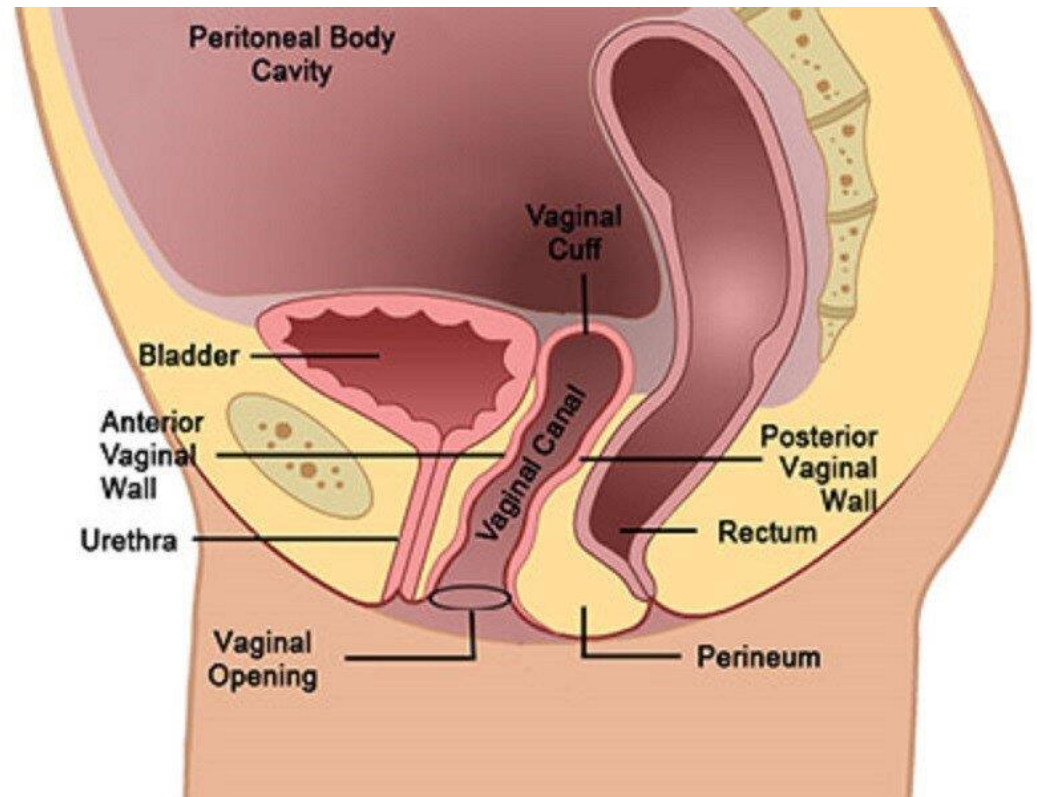
- “No period”
- Patches
- Tablets
- “Taylor made” combinations



For Women without a womb or with a valid Mirena coil

Oestrogen only replacement

- Patches
- Gel
- Spray
- Tablets



Actual size of Mirena



Side effects

- Unscheduled bleeding,
common in first 6 months
no need to investigate unless heavy or
increasing
- Unspecific side effects, generally progestogen
related
breast tenderness, fluid retention, effects on
mood, headaches and many more

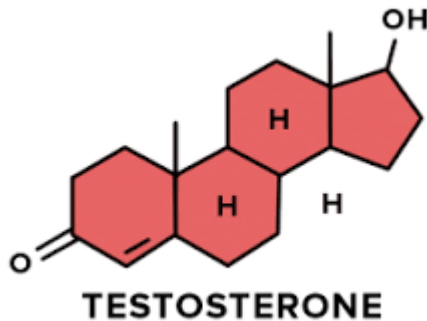


Principles of Use...

- Lowest dose of Oestrogen to control symptoms
- Transdermal (patches/gel/spray) if any additional risk for stroke or blood clot
- Regular review by GP
- **No arbitrary time limit**
- Risk/benefit assessment
- Wean off rather than stop

Testosterone

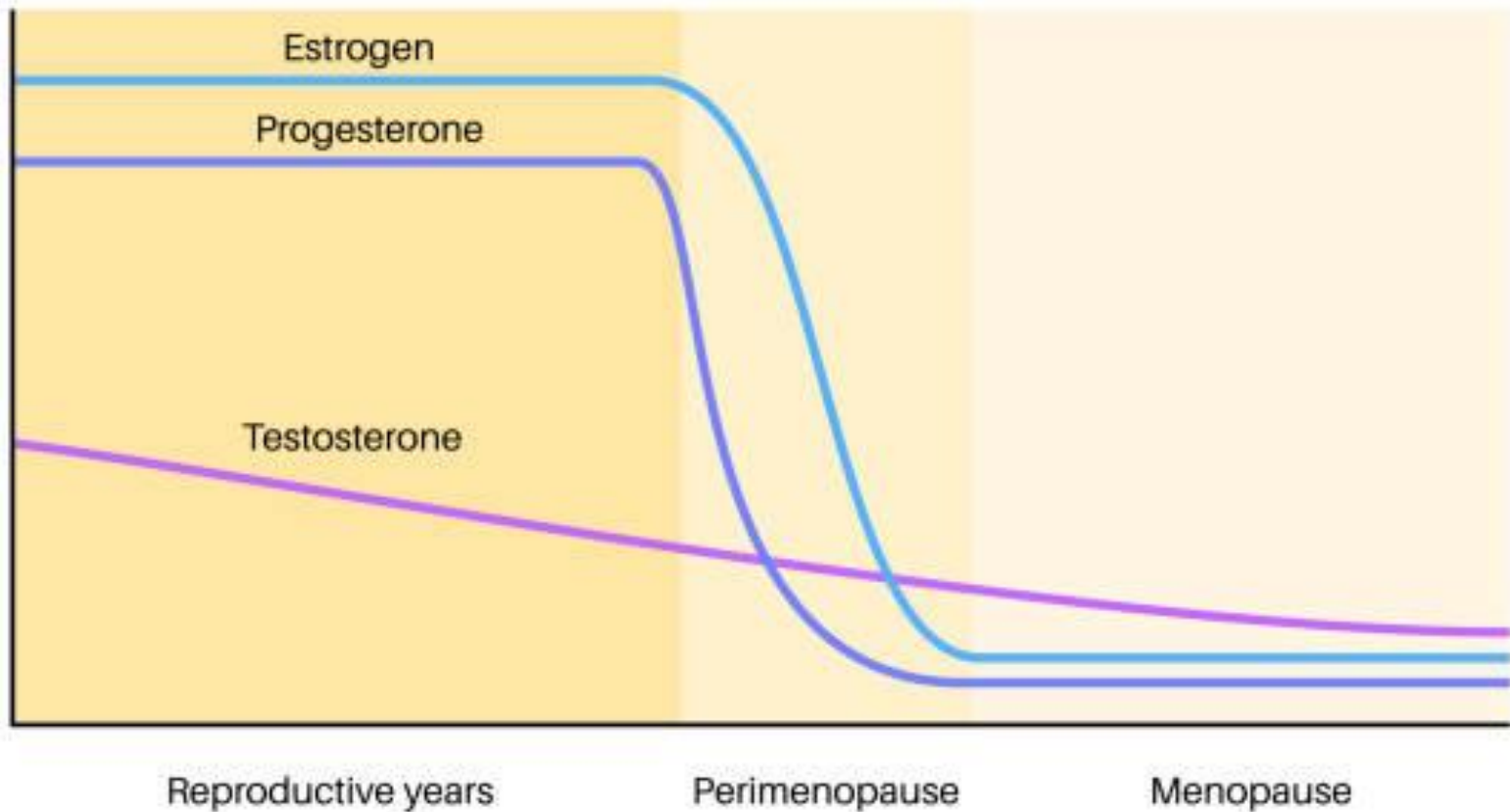
- Testosterone



- Helps sex drive
- Helps motivation and optimism, feel brighter and more assertive
- Supports and increases bone density
- Turns fat into muscle
- Helps improve cognitive function

Testosterone

Female Hormone Lifecycle



Testosterone supplementation

- Indication: persistent low sex drive (Hypoactive sexual desire disorder, HSDD)
- Insufficient evidence for: low energy, low mood, fatigue or brain fog
- Risks: Skin changes, facial hair growth, deepening of voice, male type baldness, enlargement of clitoris, increase risk of heart disease



Testosterone supplementation

- No “female preparation” licensed in UK
- Unlicensed use of “male” products
 - 1/8 sachet every day
 - One pump every other day
- Blood test monitoring



Testosterone

Indication and limitations

- Considered for women with low sex drive, after exclusion of other causes
 - Medical (dry vagina, pelvic or joint pain amongst many other
 - Relationship problems
 - Medication induced (Fluoxetine and similar)
- Randomised clinical trials of testosterone to date have **not** demonstrated the beneficial effects of testosterone therapy for brain function, mood, energy and musculoskeletal health

Testosterone unwanted effects

- Common:

- Acne
- Excess hair growth
- Weight gain

- Rare:

- Male pattern baldness
- Deepening voice
- Enlargement of clitoris

“Herbal” HRT

- Plant based oestrogens
- Effective for symptoms
- Unknown safety
- No protection of womb lining



Genitourinary Syndrome of Menopause (late symptoms)

- Vaginal dryness
- Vulval irritation
- Painful intercourse
- Prolapse

- Overactive Bladder
- incontinence
- Recurrent bladder infection



Local Oestrogen for dry vagina and urinary symptoms

- Start at any age
- Use long-term
- No concern about Cancer
- Cream with applicator (Ovestin)
- Oestradiol 10mcg pessarie
- Estring vaginal delivery ring. (for women who cannot insert pessary or applicator)



Prescribable alternatives to HRT generally more side effects

- Clonidine – Blood pressure drug
- Gabapentin / Pregabalin
- SSRI (Antidepressants)
(Fluoxetine, Citalopram, Sertraline, Paroxetine)
adverse effect on sexual function
not use with Tamoxifen
- Venlafaxine safest with Tamoxifen

do

Can all cause dependence

CBT better than any of the above

Fezolinetant

- New Drug for **Hot Flashes** only
- Statistically significant improvement
- Clinically not significant improvement
 - not meeting minimum clinically important difference (MCID)
- Small improvement only, but large number of patients
- Not yet endorsed by NICE/available on NHS

Summary

- Menopause – overrated
- HRT optional – exercise mandatory
- HRT generally suitable and safe to start in women < 60 years
- HRT first line for flushes and low mood
- HRT best for prevention of osteoporosis
- Preferred route for Oestrogen patch/gel/spray
- No arbitrary time limits
- Local oestrogen for (almost) any woman, any age
- Testosterone not quite living up to expectations

Any Questions?



Further Information...

- www.womens-health-concern.org
- www.menopausematters.co.uk
- www.managemymenopause.co.uk



HRT and Medical conditions

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Specialty Doctor

in Obstetrics and Gynaecology

at Sherwood Forest Hospitals

World Menopause Day

18th October 2024

HRT and Medical conditions

- MS (multiple sclerosis)
- Migraine
- Endometriosis
- Breast cancer
- Genetic predisposition to cancer
- HRT after cancer treatment



MS

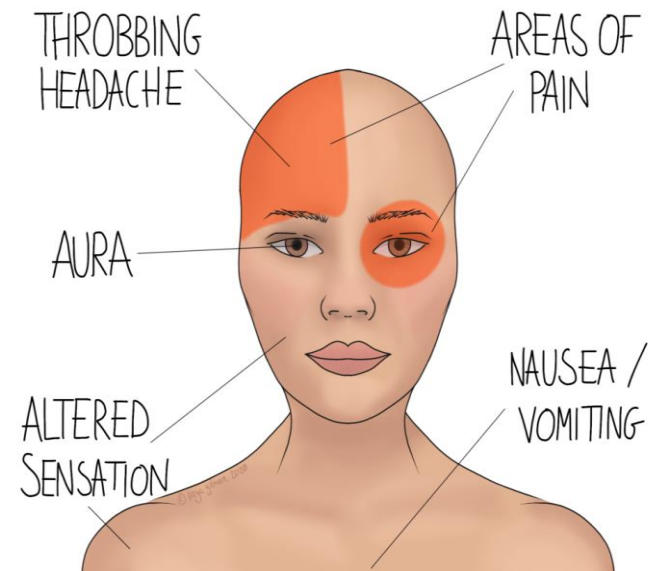
- More common in women
- Disability worse in men
- Postmenopausal women tend to develop disease pattern
- HRT will improve menopausal symptoms
- HRT may improve MS (Neuro-protective effect), evidence lacking

“male type”

but

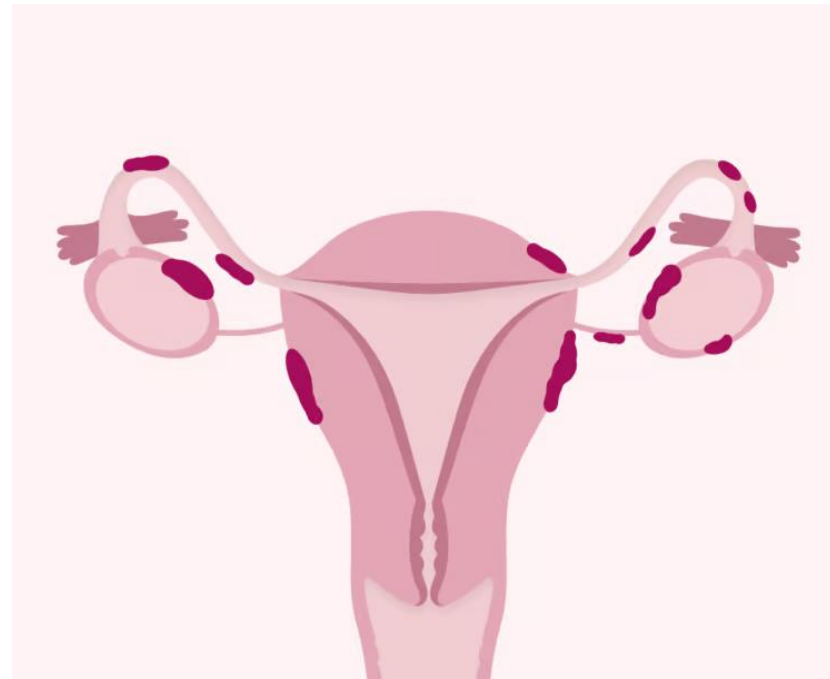
Migraine with Aura

- Often related to menstrual cycle, hence improvement with declining ovarian function
- COCP (combined pill) contra-indicated because of risk of stroke
- HRT not contraindicated
- Preferred route gel/patches/spray
- May need to avoid sequential (period inducing) HRT



Endometriosis

- Womb lining (Endometrium) outside the womb
- Responding to hormones in the same way as inside the womb
- “Cured” by Menopause
- Potentially re-activated by HRT



HRT choices - Endometriosis

- Tibolone
 - Highest risk of bloodclot
- Desogestrel and Oestrogen
 - Not licensed, but works well
- Mirena and Oestrogen
- Continuous combined, even after Hysterectomy

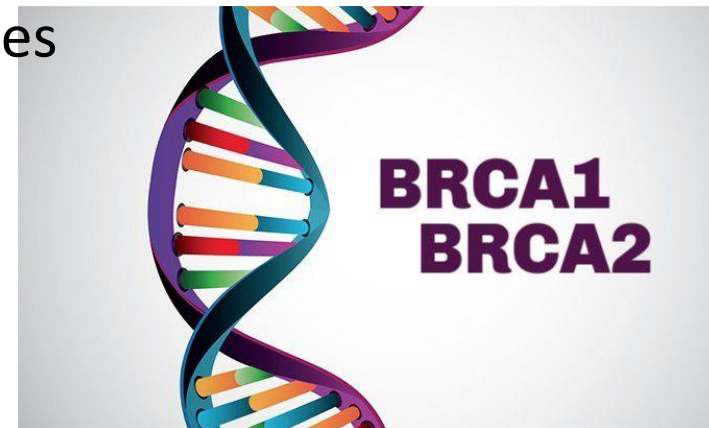
HRT after breast cancer

- Generally contra-indicated with triple negative cancer even
- Exceptions to be discussed with Oncologist rather than Gynaecologist
- Tamoxifen protects bones
- Vaginal Oestrogen does not increase risk
 - Exception: Women on Aromatase inhibitor



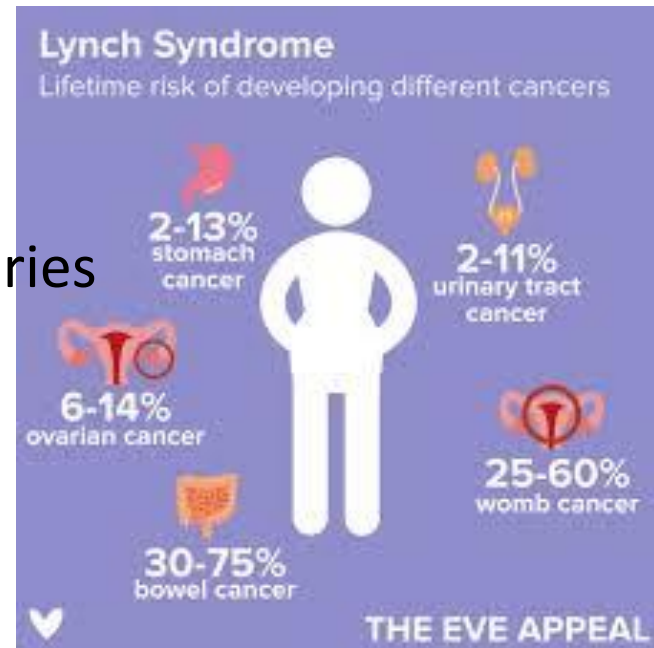
BRCA 1/2 gene and HRT

- Increased risk of breast and ovarian cancer
- Risk-reducing surgery (removal of ovaries +/- hysterectomy/mastectomy)
- HRT recommended until natural age of menopause
- No restrictions on vaginal Oestrogen



Lynch syndrome and HRT

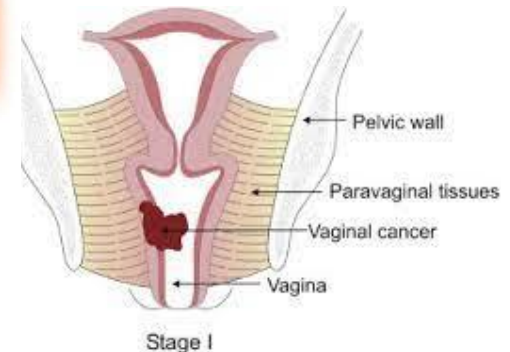
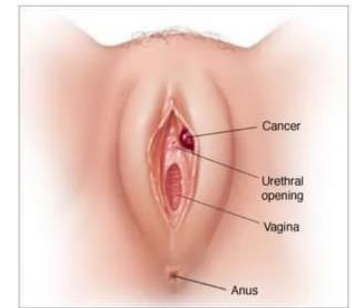
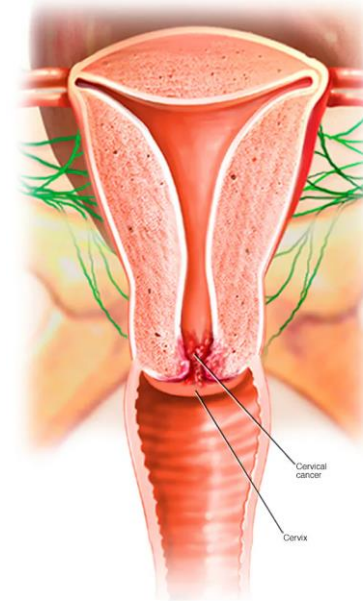
- Increased risk of cancers
- Risk reducing surgery
Hysterectomy with removal of tubes and ovaries
once family complete
- HRT recommended until age 50,
optional thereafter



HRT after Gynaecological cancer

Cervix, Vagina, Vulva

- HPV related – **not** hormone
- No restrictions on HRT use
- HRT recommended until at least age 50 if removal/destruction of ovaries

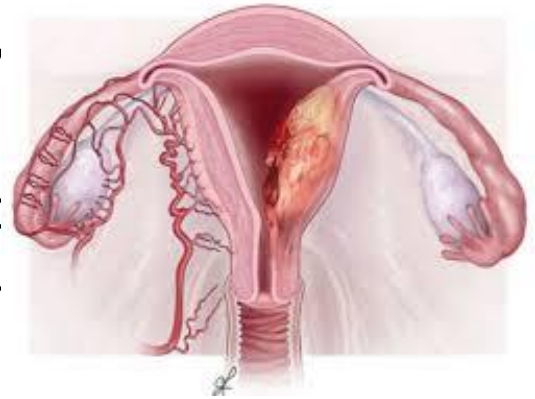


HRT after Gynaecological cancer

Uterine (Lining of womb)

Oestrogen dependent cancer

- Low/Intermediate risk cancer after surgery
Limited evidence, appears safe
- High risk/Advanced cancer: Contra-indicated
- Tamoxifen induced cancer: Switch medication
- Vaginal Oestrogen generally regarded as safe



HRT after Gynaecological cancer

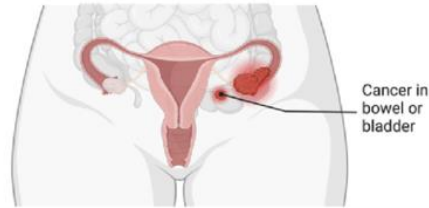
Depends on
 - type of cancer
 - stage of cancer

Ovary

Stage 1 | Cancer is confined to one or both ovaries.



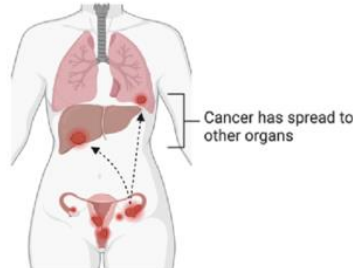
Stage 2 | Cancer spread within the pelvic region.



Stage 3 | Cancer spread to other parts of the abdomen.



Stage 4 | Cancer is growing beyond the abdomen in other parts of the body.



Primary Cancer	Subtype or Risk Group	Systemic HRT
Ovarian Fallopian tube Primary peritoneal	High grade serous	Yellow
	Low grade serous stage 1	Yellow
	Low grade serous stage 2+	Red
	Endometrioid stage 1	Green
	Endometrioid stage 2+	Yellow
	Clear cell	Green
	Mucinous	Green
	Granulosa cell stage 1	Yellow
	Granulosa cell stage 2+	Red
	Germ Cell	Green
	Borderline tumour: No residual disease	Green
Borderline tumour: Peritoneal implants, microinvasive disease, residual disease, recurrence	Yellow	



MAY I ASK
A QUESTION?



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