



# Hormone Replacement Therapy

Tuesday 21<sup>st</sup> September 2021

Dr Sophie Newton

# The influence of estrogen



balance

## Brain

Body temperature control  
Memory  
Libido

## Heart

Heart rate  
Healthy lining of blood vessels  
Lower cholesterol

## Liver

Cholesterol regulation

## Bones

Bone strength

## Skin

Collagen production  
Reduce moisture loss

## Joints and muscles

Anti-inflammatory  
Muscle strength  
Flexibility  
Joint lubrication

## Bowel

Maintains function  
Helps with gut microbiome

## Nerves

Nerve transmission

## Bladder

Reduces risk of infection  
Controls bladder function

## Vagina

Lubrication  
Reduces bacterial overgrowth

# Menopause – the basics

---

Average age 51, life expectancy 82 therefore 30% of life postmenopausal

---

80% of women suffer with sx: 25% of whom severe

---

Half of women do not see their GP

---

77% of women did not realise their sx were menopausal

---

# Symptoms

- Debilitating!

MSK sx

GSM

Low mood / anxiety

Sexual difficulties

Worsening migraines

Palpitations

Brain fog / memory probs

# Diagnosis

- CLINICAL!
- Do not order blood tests if >45 with sx of menopause
- Only if <45, or on POP / Mirena
- Confirm with 2 x FSH >6wks apart

# Misdiagnosis

---

Fibromyalgia / palpitations / recurrent UTI / severe migraine / depression anxiety / memory problems

---

Wrong diagnosis → wrong treatment → significant side effects with lack of relief of sx + unnecce referrals & further tests

---

Economic consequences with time off work / early retirement

# Mgt: lifestyle

Ca / vit D

Reduce alcohol

Healthy diet

Exercise

Stop smoking

Sleep / relaxation



Or consider  
HRT...what are the  
benefits?

- Improves sx
- 1<sup>st</sup> line Rx and prevention of OP in women <60
- Lower incidence of CVD in women starting within 10 yrs of menopause / younger than 60
- Improves skin turgor / collagen / thickness
- Reduces risk of: DMT2, dementia, obesity, depression, bowel ca
- And death! Reduces all cause mortality





Sounds good! Why are we so  
worried?





# HRT concerns

- Womens Health Initiative: was women on high dose HRT, many co-morbidities, preliminary data linked to press
- After 18 yrs f/up, using combined or oest only HRT was no asso with increased risk of all cause-mortality / CVD / cancer
- But what about breast cancer?
  - Risks mostly from synthetic progesterone, with no risk if on only oestrogen HRT or younger age & lower risk with micronised progesterone
  - Risks stop when HRT stops
  - No increased death from breast ca



# 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.

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



## Alternatives to HRT

---

Not great evidence

---

Fallacy of natural being safer ('appeal to nature fallacy')

---

SSRIs may help hot flushes if HRT CI, no evidence help low mood asso with meno.

---

70% had been offered anti-dep's!

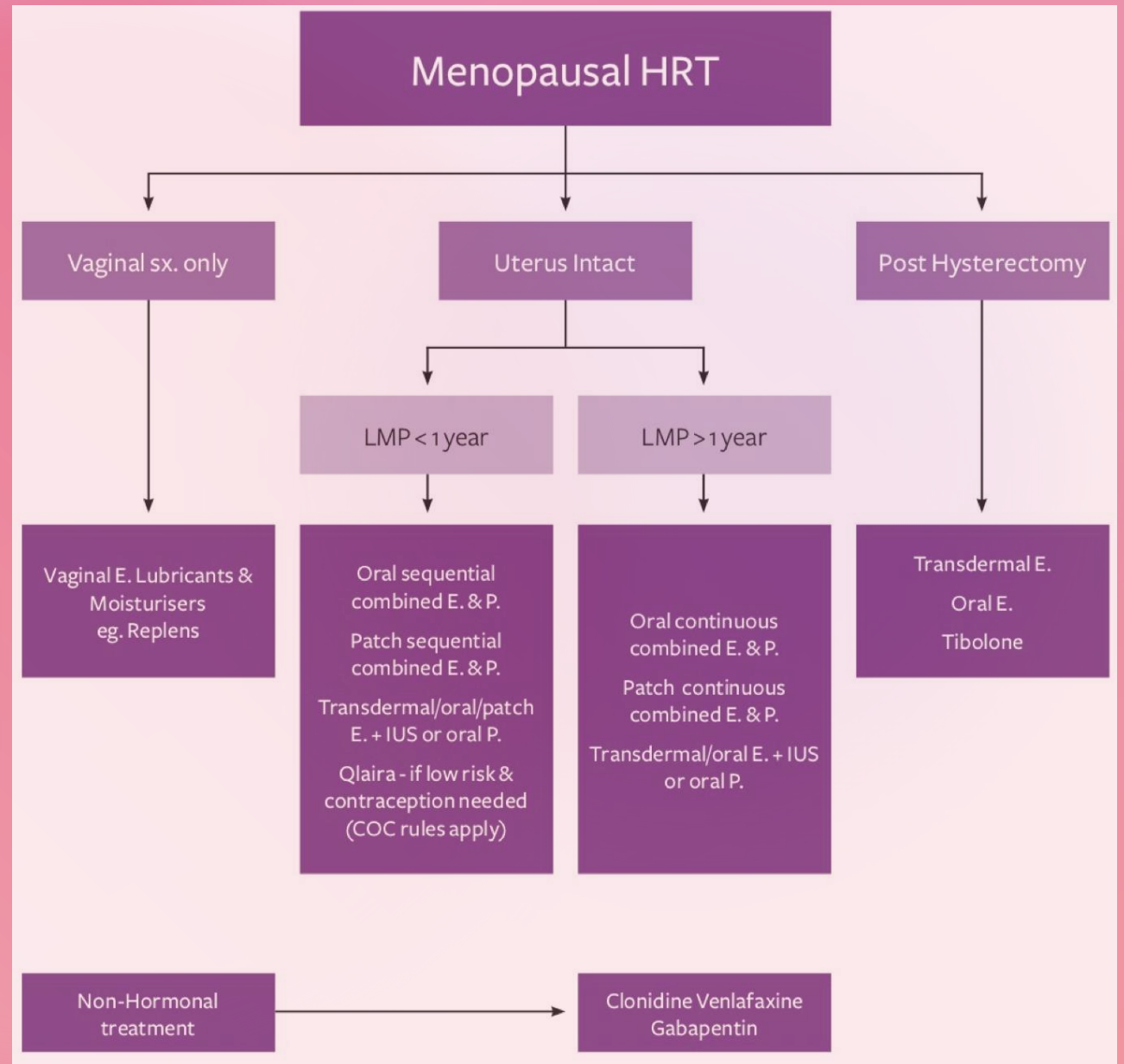
---

Bio-identical HRT is not regulated nor recommended

# Primary ovarian failure

- Needs HRT, but can still get preg, can continue if so
- Needs to cont until 51
- Higher dose oestrogen
- Testosterone often beneficial

# HRT prescribing





# Vaginal oestrogen

---

Maintain normal flora, lubrication, blood flow - can take months to provide relief

---

Safe to use as long as needed

---

Can give with HRT

---

May need lubricants too

---

Safe if non-active breast ca

---

Review after 3m

## Transdermal HRT

---

No VTE risk

---

17 beta oestradiol – body identical, derived from yams

---

Patch, e.g., elleste, evorel, estradot – apply below waist

---

Gel, e.g., Oestrogel, Sandrena – upper outer arm or inner thigh

---

Lenzetto spray – inner forearm or inner thigh

---

Preferred over oral due to VTE risk and oral can lower libido

Micronised  
progesterone  
(utrogestan)

---

Can improve CV / lipids / BP

---

No VTE risk

---

No breast ca risk for up to 5 yrs Rx

---

Can be px either 100mg ON each night (continuous) or 200mg for 14/28 (sequential)

---

Sedative, take on empty stomach

---

Mirena alternative if contraception needed

# Equivalent doses of oestrogen

<b>Patch</b>	Half a 25 microgram patch	25 micrograms	50 micrograms	75 - 100 micrograms
<b>Gel - pump</b>	½ pump	1 pump	2 pumps	3-4 pumps
<b>Gel - sachet</b>	½ of a 0.5mg sachet	0.5mg sachet	1 mg	1-2 mg
<b>Spray</b>		1 spray	2 sprays	3 sprays

## HRT side effects

Bloating (less likely MP)

Low mood

Breast tenderness

Unscheduled vaginal bleeding - usually settles 3-6m.

# When to stop?

- No maximum
- Can just abruptly stop
- Consider lower dose for older women

# Testosterone

---

Women produce x3 amount pre-menopause → female androgen insufficiency

---

In NICE guidelines for use in menopause off-licence if low libido and HRT not enough

---

Lots of health benefits to sex!

---

Using testosterone often also leads to improvement in mood, energy, concentration and stamina

---

Side effects from testosterone are very uncommon



# Bleeding on HRT

- Endometrial cancer is uncommon in women on HRT
- Consider first managing abnormal bleeding in sequential HRT with Tx acid or changing HRT, but lx if persistently heavy / prolonged or persistent BTB >6m
- In CCHRT lx if >6m – be sensible to see if manage risk factors as risk of ca low.

## HRT reviews

---

Use the Greene Climacteric Score to assess symptoms prior to consultation

---

Annual review, can be remote, but BP within a year req. (although HTN not CI for HRT; MI can lower BP)

---

Check smear and breast screening

---

Px 1 yr of HRT

# Take home messages

Stop ordering blood tests!

Consider menopause as a cause for any women 45-55 with new onset depression / anxiety

Women should be signposted to evidence-based and unbiased information about their menopause and its management [e.g., www.menopausedoctor.co.uk](http://www.menopausedoctor.co.uk) and [British Menopause Society](http://www.britishtime.com) website

Transdermal oestrogen and micronised progesterone is the safest method of HRT

Women can stay on HRT as long as they need

Consider testosterone at review

Menopause. Hmmm.  
So, what you are  
saying is that I'm to look  
forward to -  
ten years of hell...  
followed by death.  
Am I missing anything?

