

Menopause and HRT

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Specialty Doctor

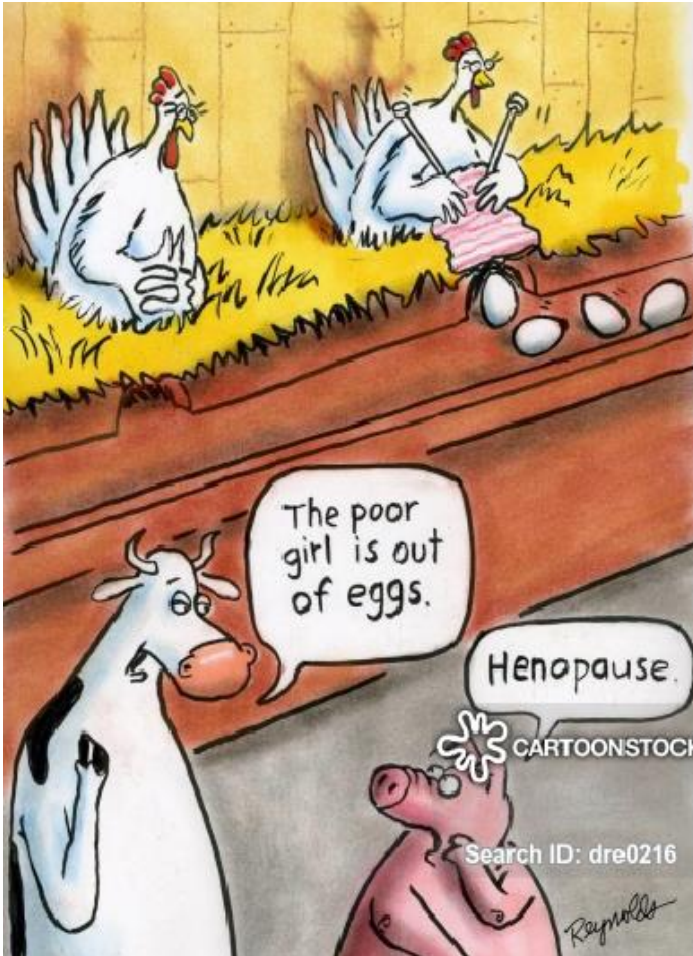
in Obstetrics and Gynaecology
at Sherwood Forest Hospitals

World Menopause Day

18th October 2023

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

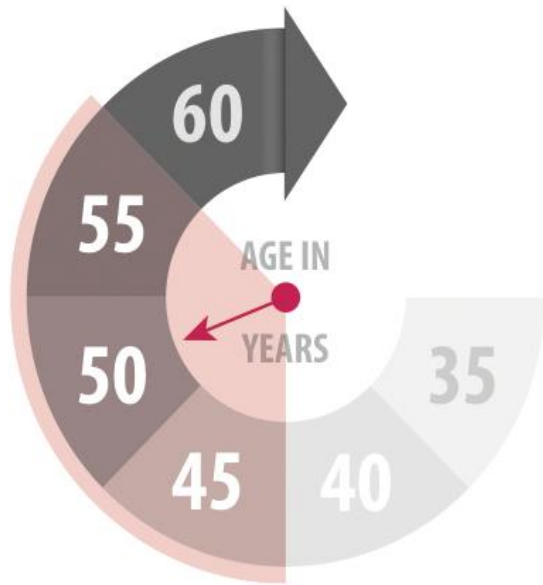
“End of Menstruation”

Average age 51 years

5 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
 - And Testosterone (not just for men!)

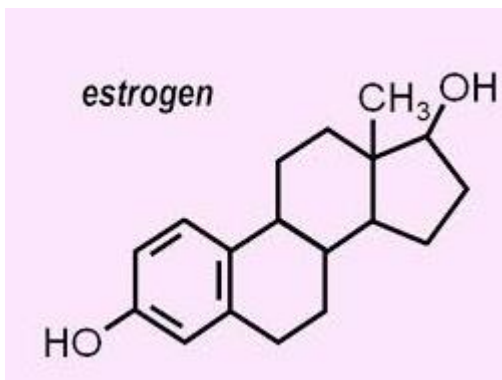
What do these hormones do?

- Oestrogen

- Progesterone

- Testosterone

- 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?

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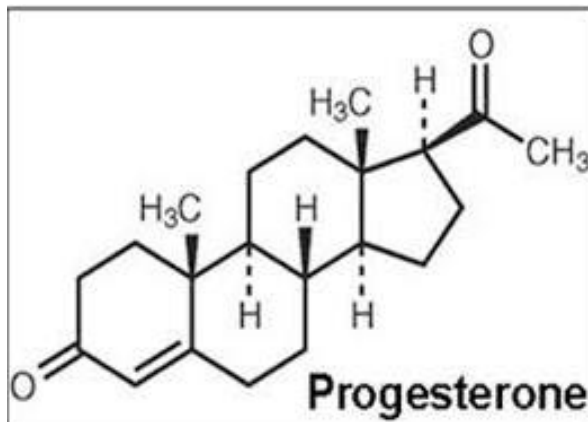
- Protects womb lining

- Tiredness

- Mood swings

- Increased appetite

- Similar to PMT

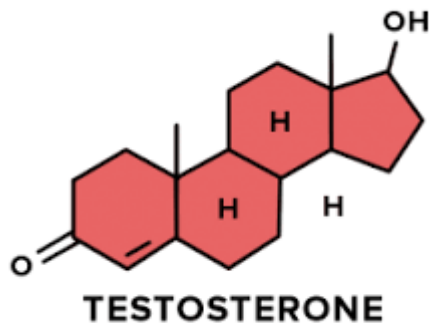


What do these hormones do?

- Oestrogen

- Progesterone

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- Helps sex drive

- Helps motivation and optimism, feel brighter and more assertive

- Supports and increases bone density

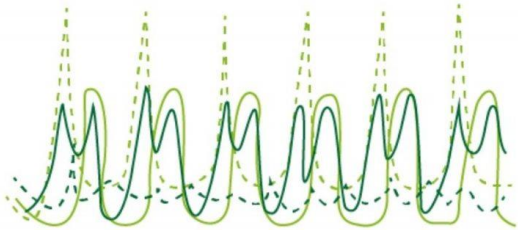
- Turns fat into muscle

- Helps improve cognitive function

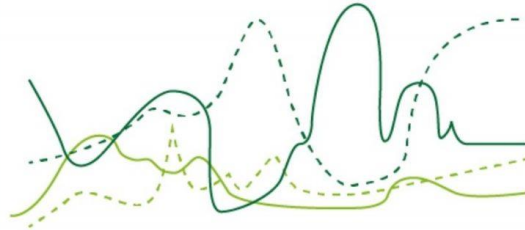
What's happening to a woman's hormones...

HORMONE FLUCTUATIONS DURING MENOPAUSE

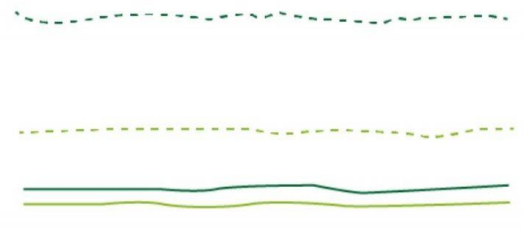
Premenopause (180 days)



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



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

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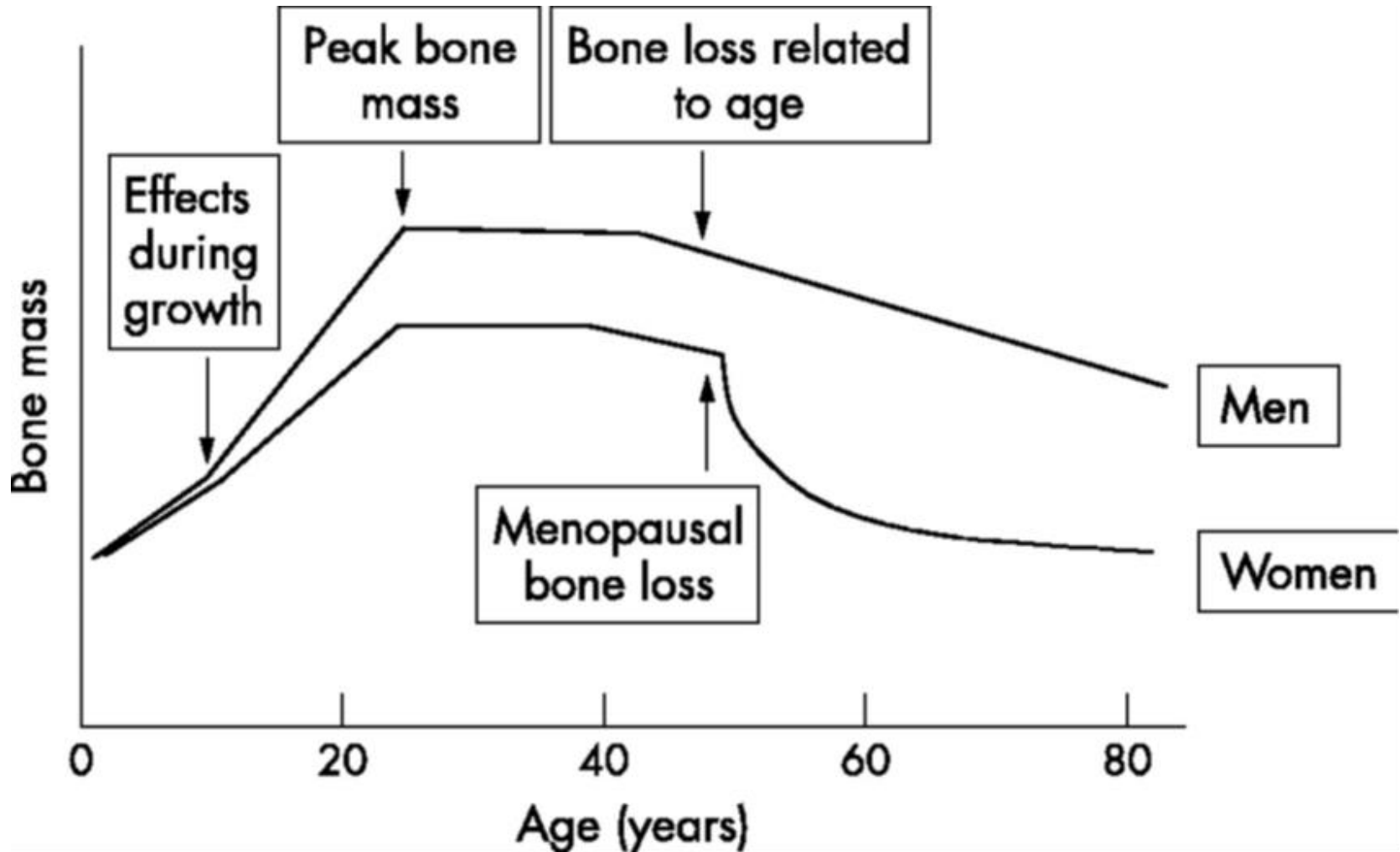
The heart and circulation...

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
- 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

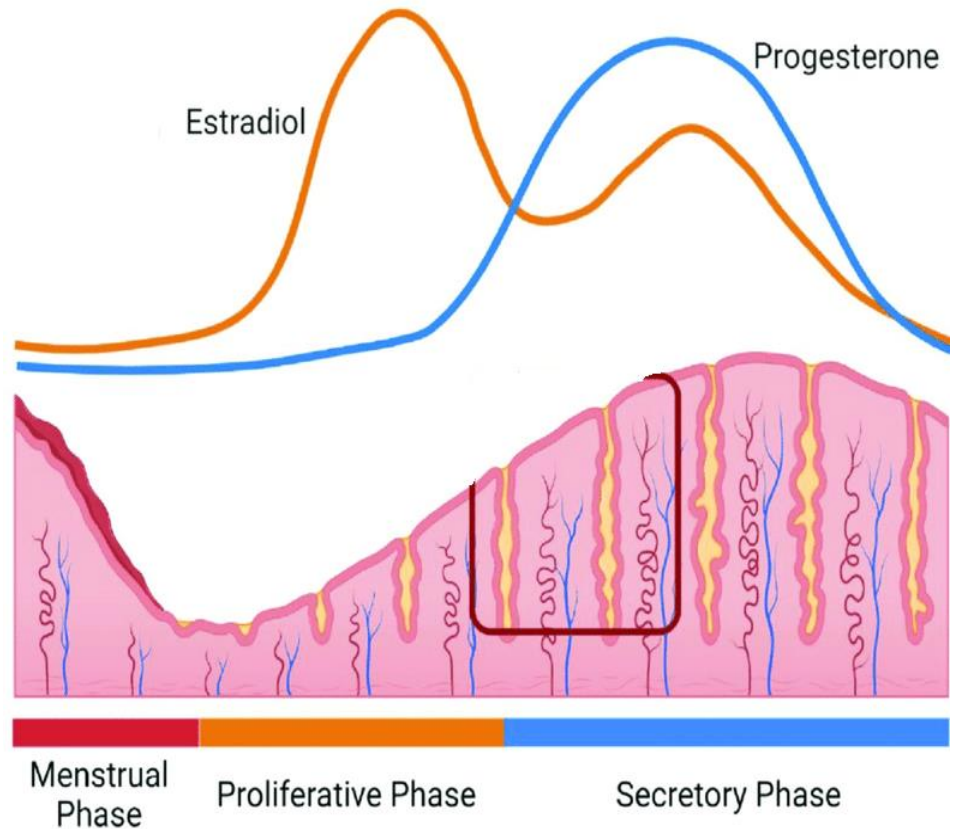


HRT – The Hormones...

- **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
- 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

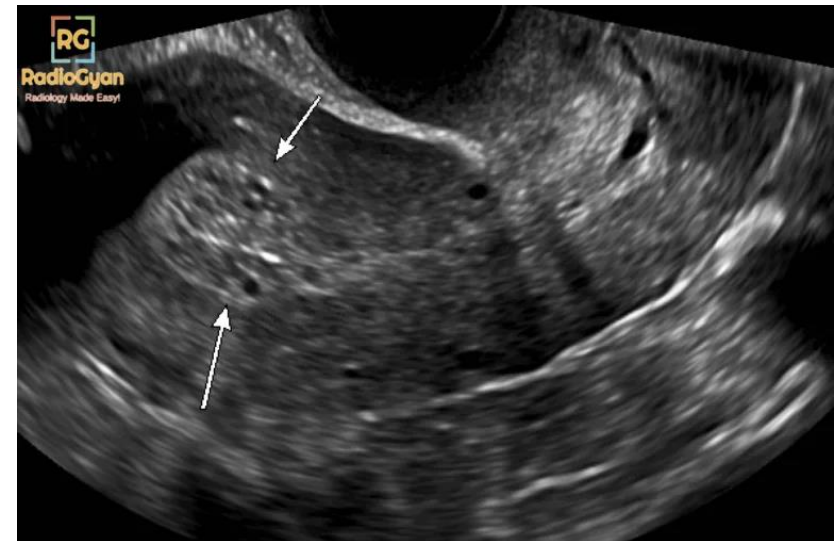
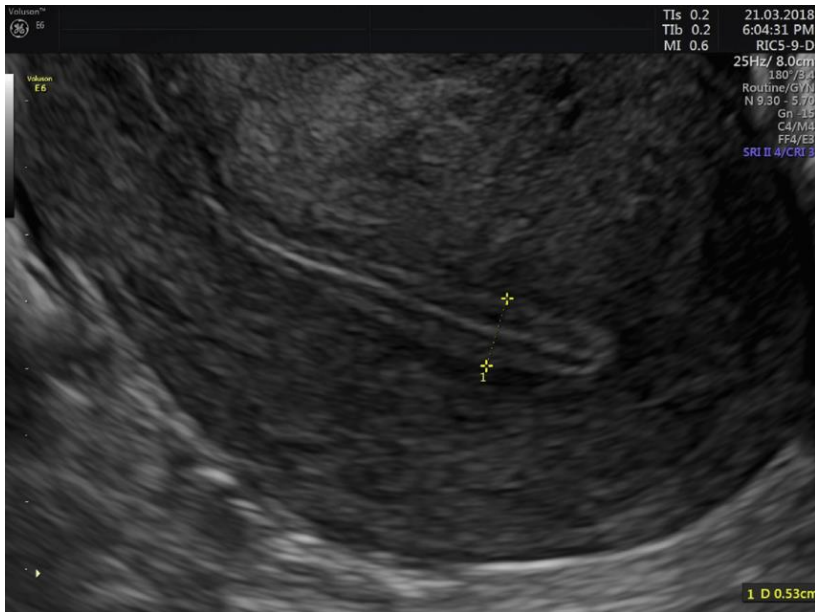


Understanding USS

- Cut through view
- 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 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, increase risk of heart disease



“Herbal” HRT

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



Contraception

- If final period before age 50, carry on for 2 years
- If final period after age 50 carry on for 12 months
- If on Mini Pill, Implant, injection, continue to age 55
- If HRT required, use continuous combined
- Valid Mirena for contraception and 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 pessaries
- Estrin 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
do **not use with Tamoxifen**
- Venlafaxine safest with Tamoxifen

Can all cause dependence

CBT better than any of the above

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 any woman any age (almost)

Any Questions?



Further Information...

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

