

O&G

For the GP



*Done quickly*

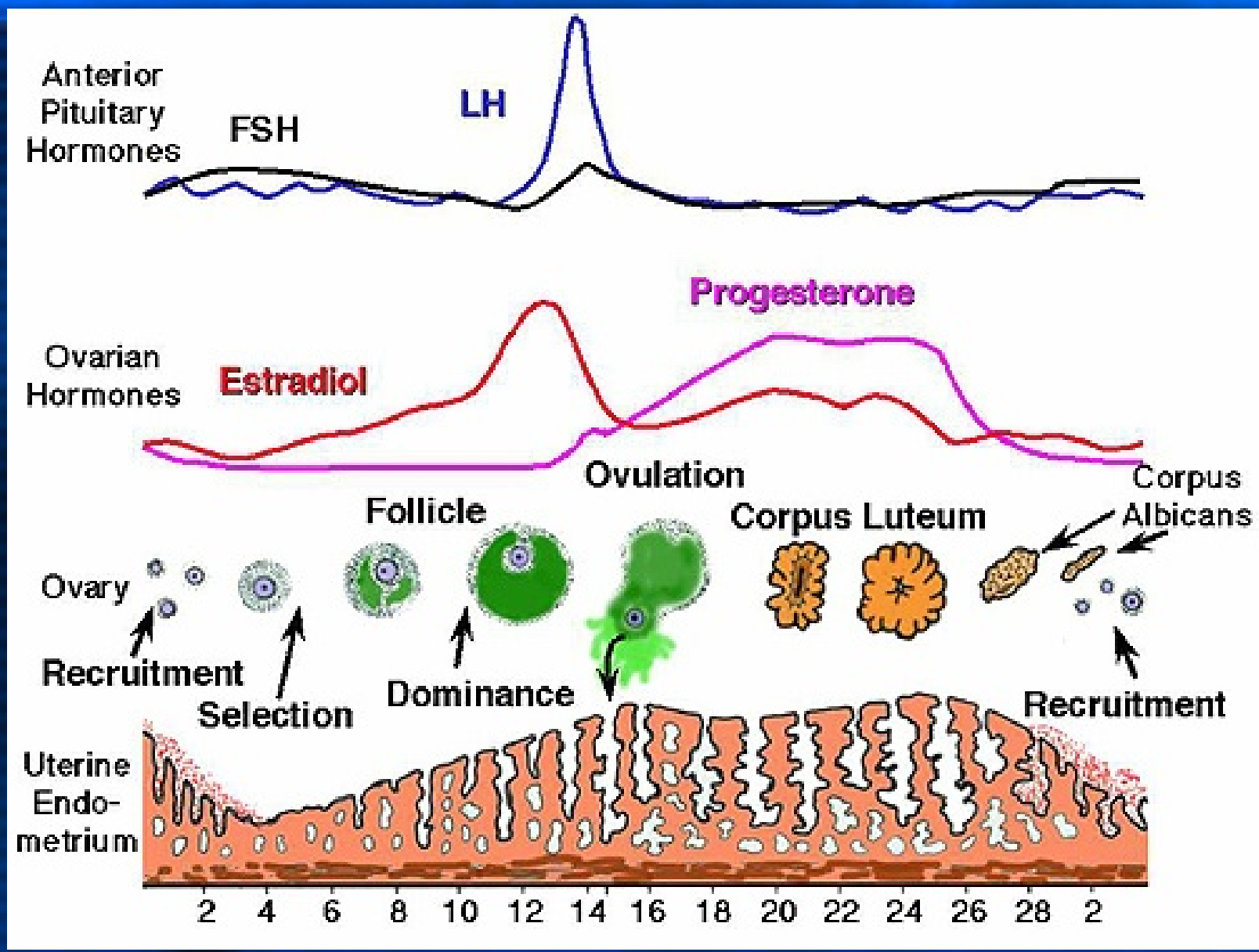
With CME

Jenny Westgate, Rotorua, June 2009

## Case: *menorrhagia*

- 42 year old Korean woman
- Missed periods in Dec and Jan
- Bled 4 weeks heavy in Feb
- Stopped for 3 weeks then started again



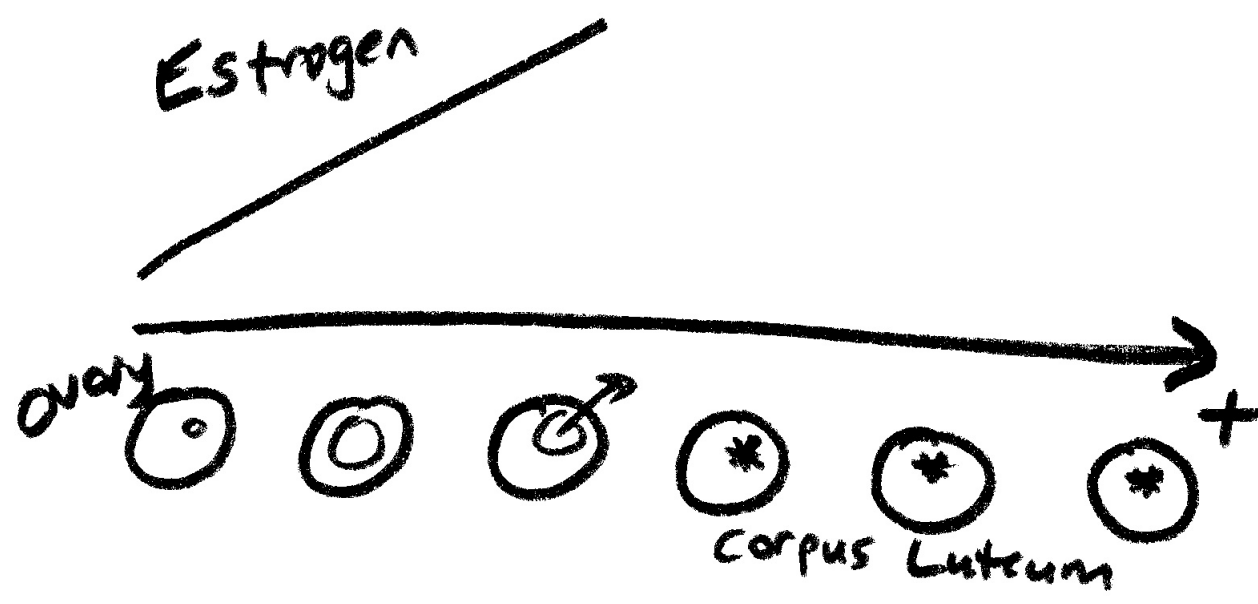


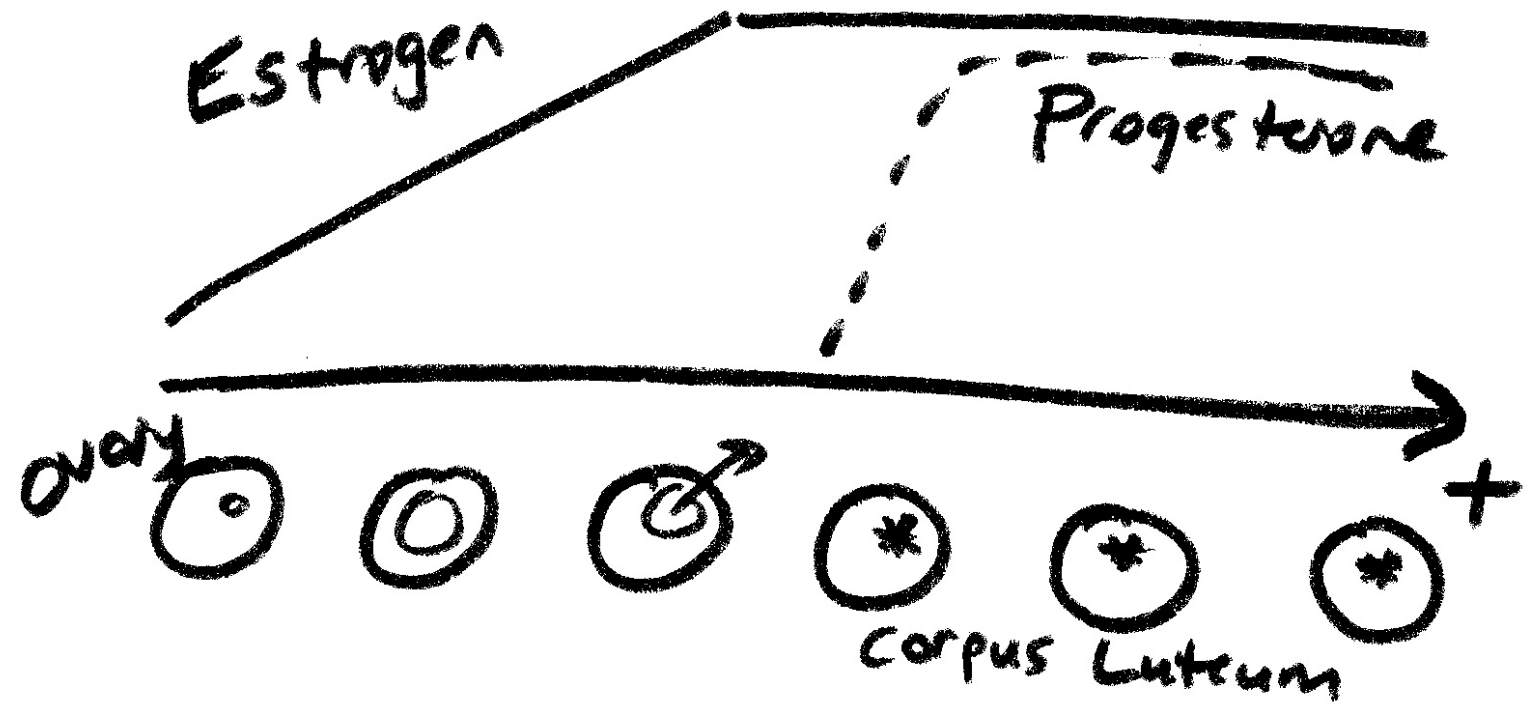
Estrogen

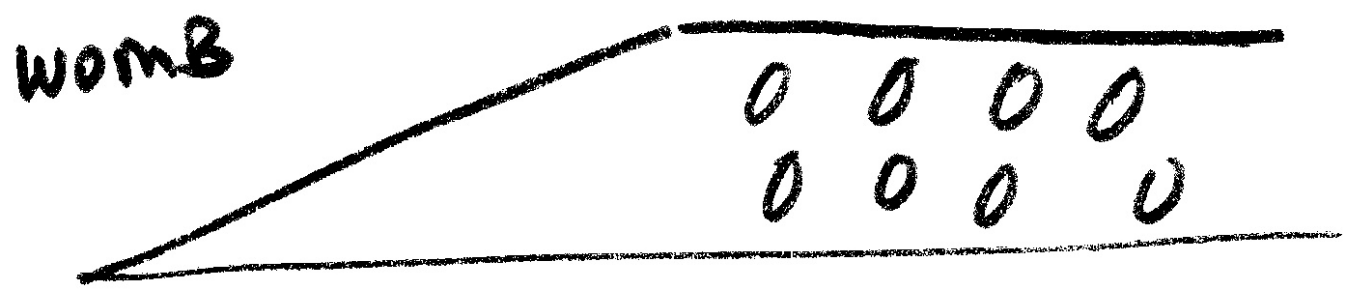
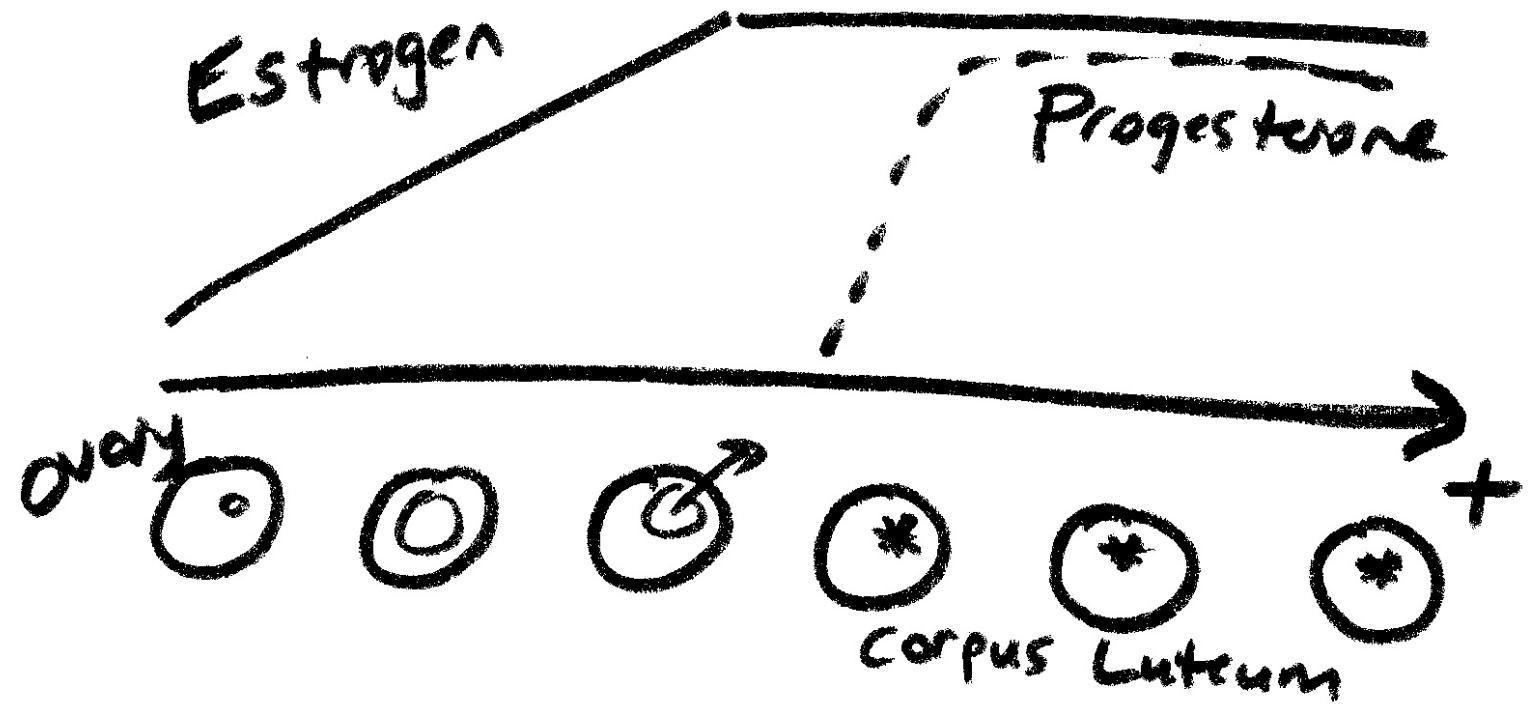


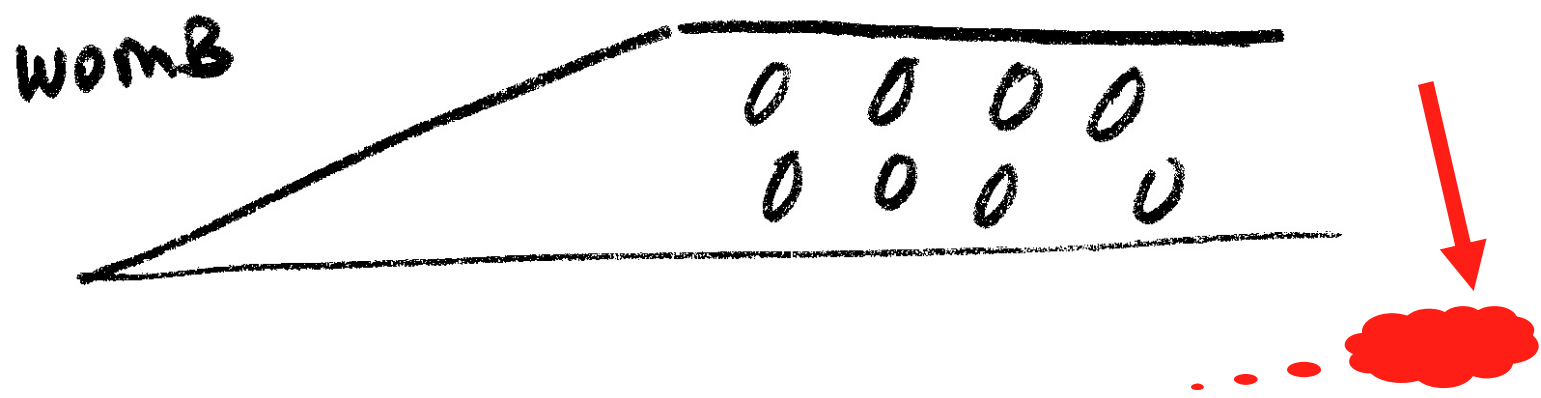
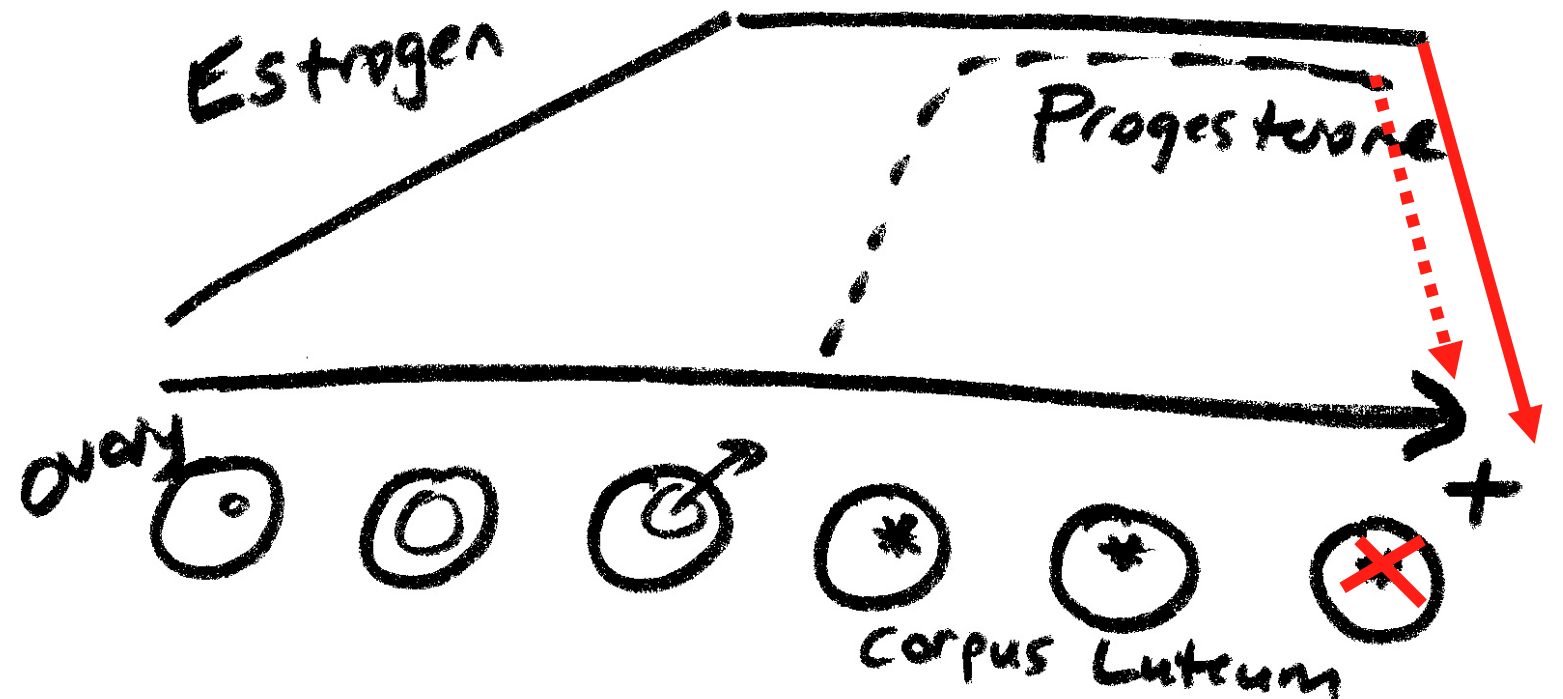
womb







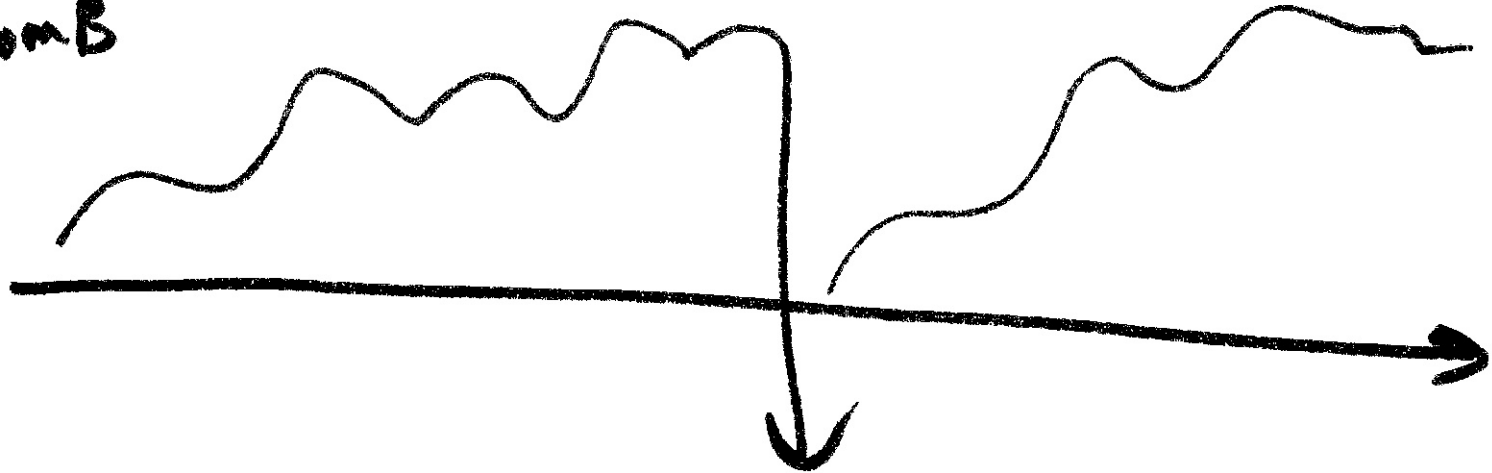




Estrogen



Womb



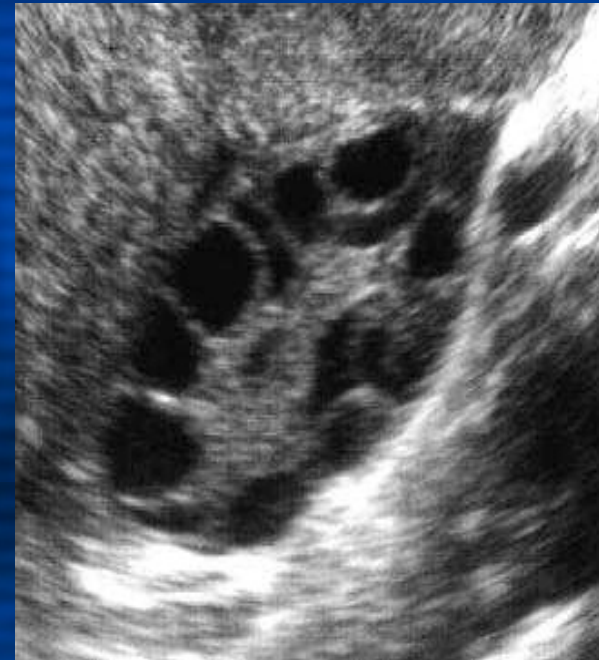
## *Who gets anovulatory?*

- Menarche
- perimenopausal
- Breast feeding
- STRESS
- Serious illness/operation, DXR
- Exercise/weight loss
- Weight gain
- Polycystic ovarian syndrome



# *Polycystic ovarian syndrome*

- Ovarian appearance in 20% of reproductive women
- Do not cause pain (teeny weeny cysts)
- Syndrome requires symptoms - irreg periods, hirsuite AND
- Elevated androgens
- Lots of variants - note association with obesity, impaired glucose tolerance, IHD



## *Pain and ovarian cysts*

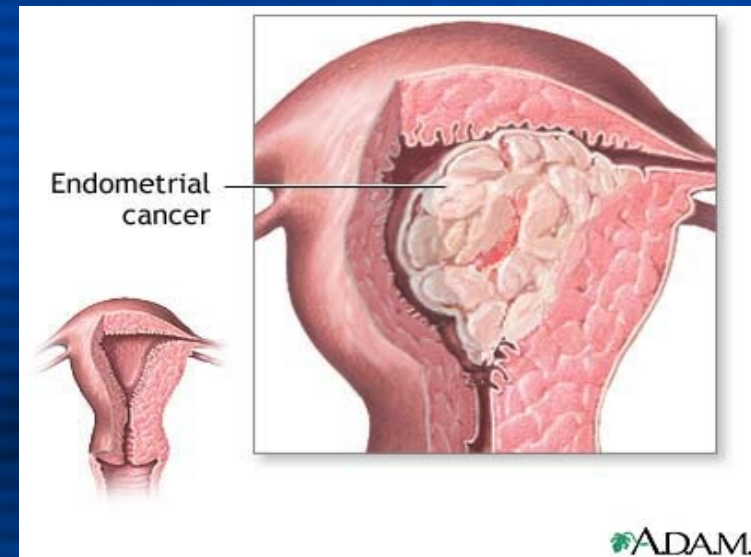
- Ovarian cysts: **functional** (3-4 cm, simple)
- Cyst **rupture or haemorrhage**
  - Acute, peritonism, resolve with time
- Cyst **torsion**
  - Acute, colic, severe, vomiting
  - Size usually 5cm or bigger
- Otherwise ovarian cysts **don't cause pain**

## Case: *menorrhagia*

- 42 year old Korean woman
  - Missed periods in Dec and Jan
  - Bled 4 weeks heavy in Feb
  - Stopped for 3 weeks then started again
- 
- Came to NZ in June
  - Periods were regular until Dec
  - Started cleaning job in Nov
  - Family upset in Dec/Jan

# Anovulation

- Why worry?
  - Trouble getting pregnant
  - Erratic, unpredictable bleeding
  - Prolonged, heavy bleeding, anaemia, blood transfusions



## *Anovulation - treatment*

- **Add Progesterone, protect endometrium**
  - Combined pill, HRT
  - Cyclical provera 10 mg/day for two weeks every calendar month
  - Mirena IUCD, depoprovera
- **Induce ovulation**
- **Take out endometrium**
  - Hysterectomy

# Anovulation - flooding

Exclude pregnancy

- **Norethisterone**
- 10 to 20 mg every 2 hours
- Max 60 to 80 mg/day
  
- **Can give Tranexamic acid as well**
- 1 gram QID
- Max 4 days/month
  
- Treat anaemia
- Investigate
- Check endometrium >40 or chronic anovulation

## *Anovulation - flooding*

- **Norethisterone**
- 10 to 20 mg every 2 hours
- Max 60 to 80 mg/day
  
- Stay on the dose that stops bleeding for 5 to 7 days
- Then slowly reduce down to 20 mg/day
- Stay on that dose for 2 to 3 weeks
- Will get a period 2 days after stopping tablets

# *Anovulation - flooding*

- **Perimenopause**
  - Regular monthly Provera until no more withdrawal bleeds
- **Chronic problem**
  - Long term treatment
- **Recent blip expect to get better**
  - ? Contraceptive needs
  - Wait and see - take 2 week course of Provera if period late
  - Provera monthly for 3 to 6 months then wait and see

## Case: menorrhagia

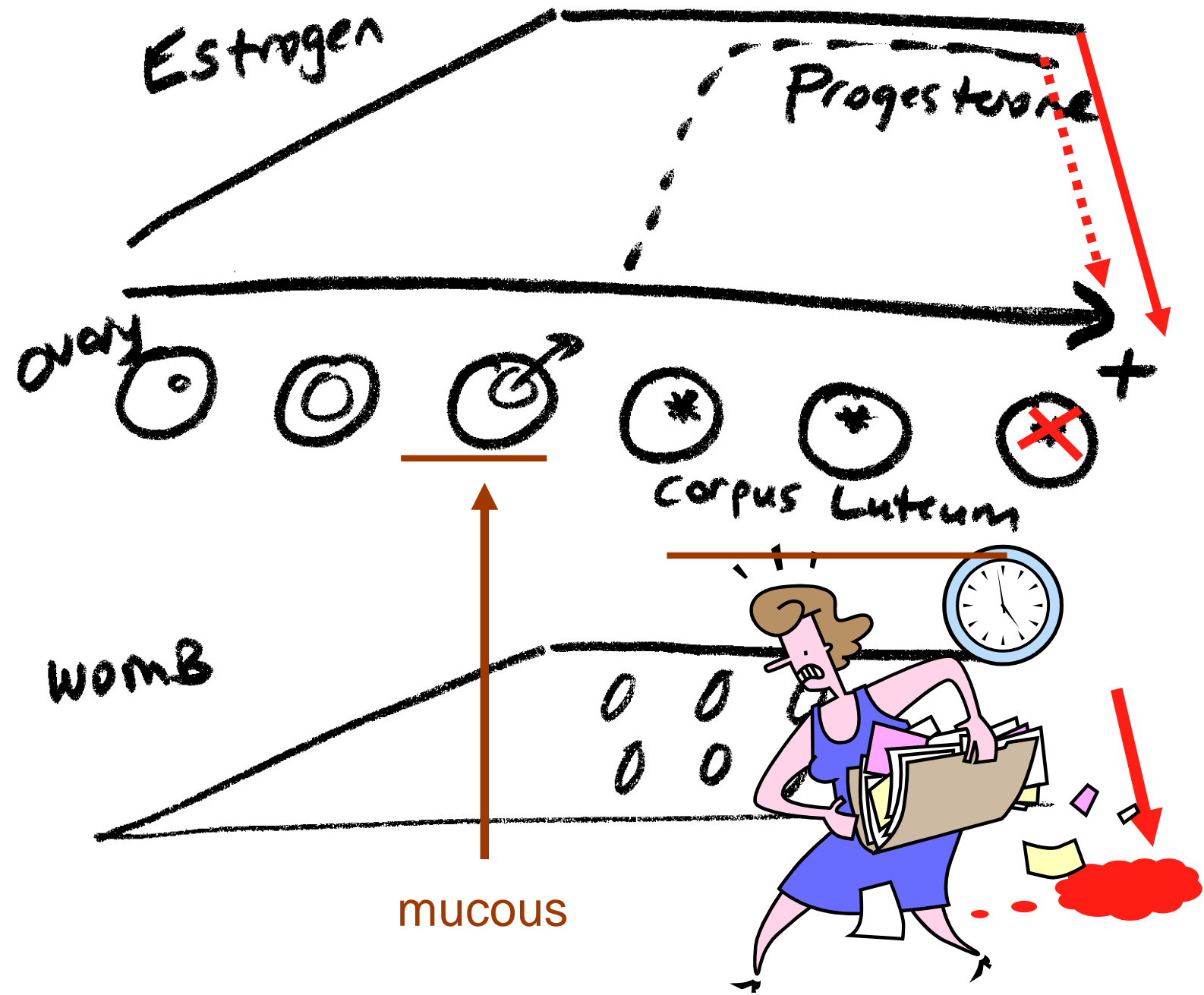
- 38 year old woman
- Regular periods
- Bleeds 7 days
- Heavy



- How heavy is heavy?

- Need pads
- Get up at night
- Hb and Fe stores
- Nb diet!!!

- How can we tell she's ovulating?



# *Symptoms and signs of ovulatory cycles*

- Regular periods (+/- 3 to 4 days)
- **Premenstrual molimina**
  - PMT
  - Tiredness
  - Acne
  - Bloating, bowel change
  - Breast tenderness
- Cyclical mucous changes

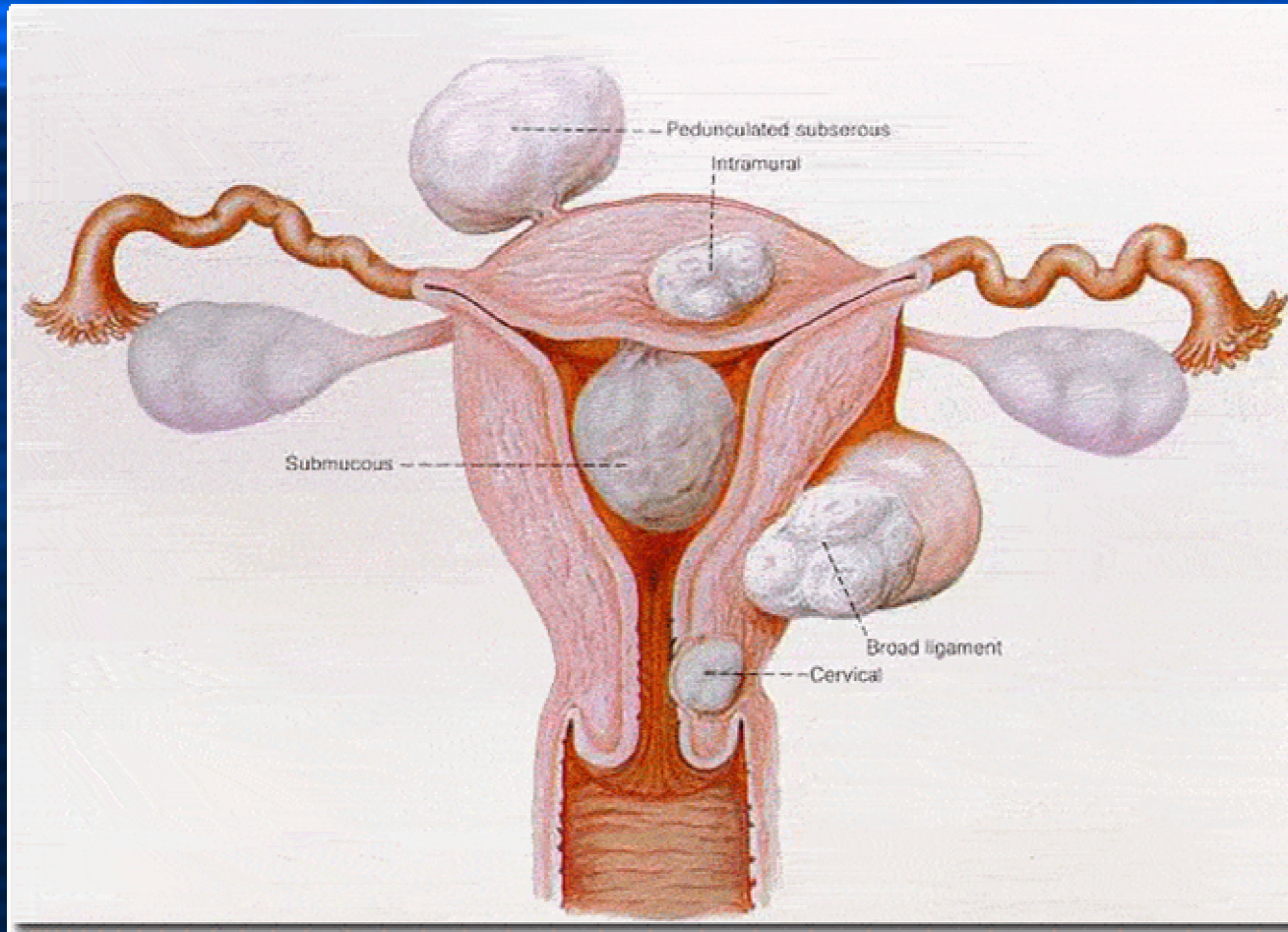


# *Heavy periods- ovulating*

- Causes

- cancer
- big uterus
- copper IUCD
  - bleeding disorders
  - infection
  - drugs - warfarin
- prostaglandins





## *Fibroids*

- blood if surface area
  - Submucosal
  - Fibroid polyps
  - BIG intramural
- Most women have some, but only small

## *Heavy periods - ovulating- treatment*

- **Stop ovulation, thin endometrium**
  - Combined pill, Depoprovera etc
- **Thin endometrium**
  - Mirena IUCD
- **Reduce amount of blood lost**
  - Tranexamic acid (Cyclokapron)
  - Antiprostaglandins - start before period due
- **Surgical**
  - Ablation (3rd generation), hysterectomy

# *Dysmenorrhoea in young women*

- **prostaglandins**

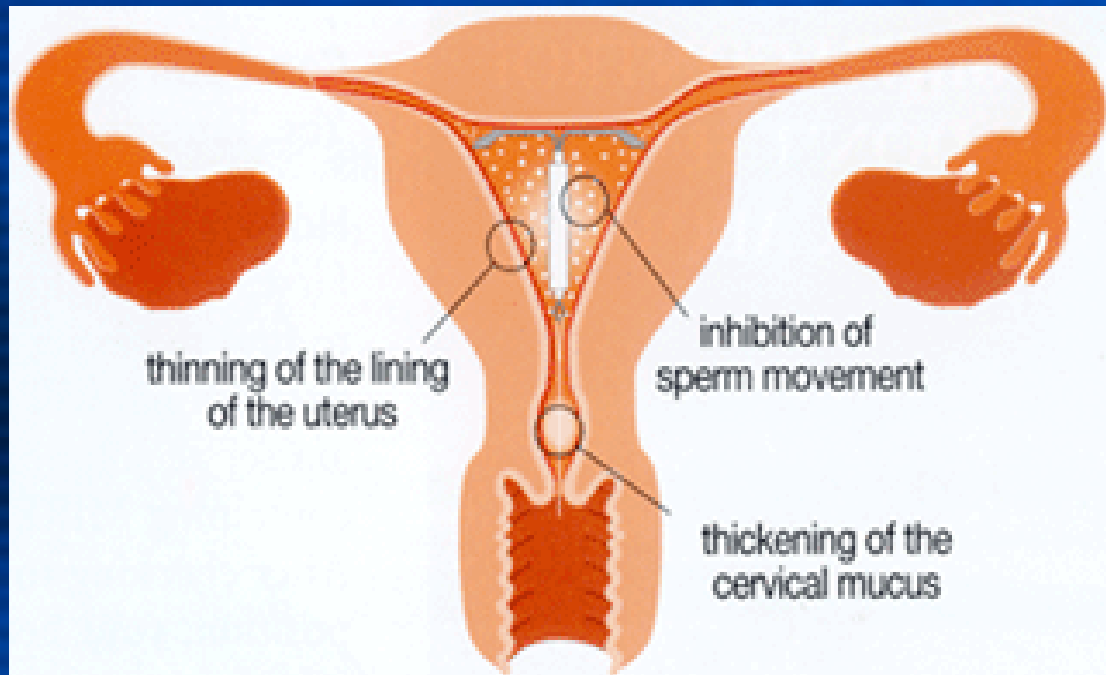
- Pale, nausea, vomit, diarrhoea,



- **Anti-prostaglandins NSAIDS**

- Decent drug
- Decent dose
- Decent duration
- NOT ponstan
- Start **BEFORE** period due

# Mirena



## Mirena

- Successful approx 90%
- Must expect irreg spotting for 3 months
- Variable reduction in bleeding - may take up to 9 months
- nb patient expectations vary



# Mirena

- **Progesterone side effects** in some
  - Breast tenderness
  - Nausea
  - Acne etc
- Usually first few months only but some persist
- Cause **anovulation in 20%**
  - Irregular bleeding
- **Hair loss** - very small numbers

# Mirena

- Can help in pain due to
  - endometriosis
  - Adenomyosis
  - ? cause
- Endometrial protection for estrogen only HRT in menopause.
- Specific lower dose device for postmenopausal use in Europe, one study n=150.

## *Mirena in nulliparous women*

- Increasing use in teenagers and special needs girls
- Can be difficult to insert (long closed cervix)
- Bigger than the average IUCD;
  - cavity length at least 5.5cm
  - 'short' Mirena in development
- **Second Mirena**
  - More painful insertion (Cx not open for period)
  - May not work as well - replace before it runs out

# Menopause

- HRT, drug companies and clinical trials
  - The ongoing saga
- **WHI study - primary prevention** of CHD, women 50 to 79
  - E + P arm
  - E only arm (prev hysterectomy)
- **HERS - secondary prevention** study in women who already had CHD
  - E + P

## *Hormone therapy and risk of clinical events: summary of WHI study*

	<b>Estrogen + Progestin</b>	<b>Estrogen alone</b>
Stroke	1.41 (1.07-1.85)	1.39 (1.10-1.77)
PE	2.13 (1.39-3.25)	1.34 (0.87-2.06)
CHD events	1.29 (1.02-1.63)	0.91 (0.75-1.12)
Breast cancer	1.26 (1.00-1.59)	0.77 (0.59-1.01)
Colon cancer	0.63 (0.43-0.92)	1.08 (0.75-1.55)
Hip fracture	0.66 (0.45-0.98)	0.61 (0.41-0.91)
Death	0.98 (0.82-1.18)	1.04 (0.88-1.22)

# Menopause

- **Subgroup analysis shows**
  - no increase in CHD in younger women (<60, <10 years post menopause)
  - Overall lower mortality
- **Decline in HRT** use associated with a fall in US rates of
  - Breast cancer
  - Death from MI
- **HRT carries increased risk**
- Don't use it if you can help it

## *Estrogen for flushes*

- Use lowest dose possible to get benefit
  - 1 mg micronized estradiol
  - 50 mcg/day transdermal estradiol
  - 0.625 mg conjugated equine estrogens
  
- Use shortest time (<2 years)
- Oppose with progesterone if uterus
  
- Most women have no problems stopping
- Tapering dose can reduce recurrence of Sx

## *Case: menopausal symptoms*

- 54 year old woman, menopausal 1 year
  - Hot flushes and not sleeping
  - Read about progesterone cream on the internet: can she have some?
- 
- 55 year old american woman
  - Using transdermal estrogen
  - Can she use progesterone cream to oppose estrogen as oral progesterones disagree with her?

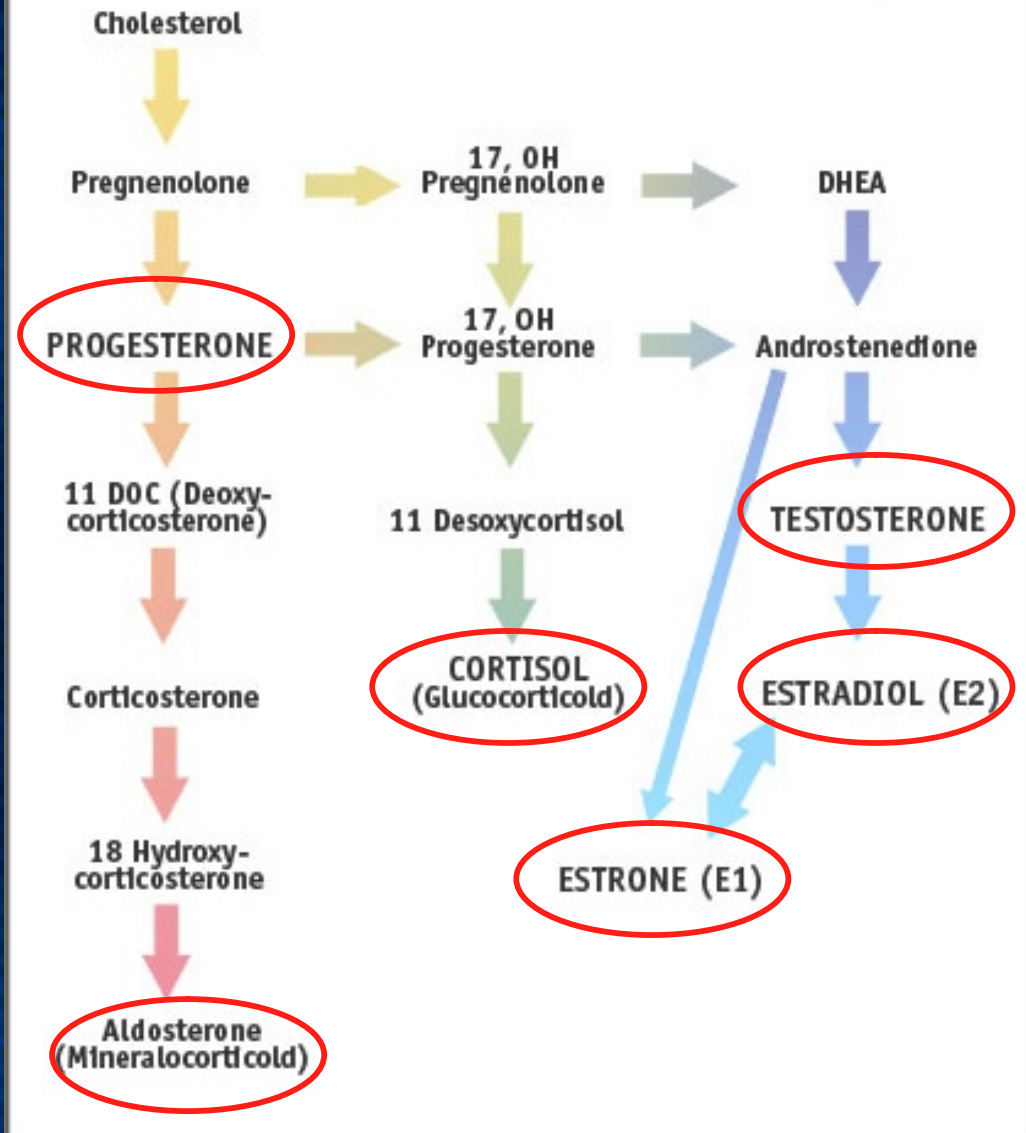
# *Progesterone creams*

- 'natural' hormones
- bioidentical
- Use to 'balance out' hormones in peri/menopausal women

- 'Phyto-estrogens'
  - Yam
  - Soyabean
  - Tofu



## How Hormones Are Made in Your Body



Which hormone produces the effect?

- Progesterone
- Estrogen or
- Androgens

# *Progesterone creams*

- Different recipes
- Never tested in RCTs
- Progesterone may be the ‘bad’ hormone
  - WHI study showed excess morbidity in estrogen *PLUS* progesterone arm

## *Hot flushes - non hormonal alternatives*

- Time, explanation, reassurance, life style
- Menopause support preparations,
  - Vitamin and mineral type
  - Isoflavones - phytoestrogens
    - Remifemin- black cohosh (plant root)
    - Soy
    - Red clover
    - Flaxseed
    - None effective in RCTs
  - Weakly estrogenic - but not helpless - assoc with Ca endometrium and breast

## *So what can we do?*

- Explain
- Assess risk of endometrial and breast Ca
- Negotiate
  - Report abnormal bleeding
  - ? 4 x two week courses of Provera 10 gm/year to get a withdrawal bleed
    - Not enough to successfully oppose estrogen HRT
  - Scan surveillance of endometrium

## *Hot flushes - non hormonal alternatives*

- **SSRIs and SRNIs**

- Shown to help in trials
  - Venlafaxine
  - Desvenlafaxine
  - Paroxetine (not with tamoxifen)

- **Gabapentin**

- Shown to help in trials
- 300 to 600mg at bed time useful for night flushes, avoids sedative effect in the day

- **Clonidine patches**

- Shown to help in trials

## *What's new in combined oral contraceptives?*

- **Yasmin - new progesterone**
  - Drospirenone - 17 alpha spironolactone derivative
  - Progestogenic, anti androgenic, anti mineralocorticoid
  - Less acne, hirsutism and weight gain
  - Caution in women at risk of hyperkalaemia
- **Yaz - shorter placebo phase 24/4**
  - drospirenone and ethinyl estradiol
  - Marketed to treat PMDD (premenstrual dysphoric disorder)
  - ?fewer contraceptive failures

# *New minipill - Cerazette*

- Desogestrol - synthetic progestogen
- Prevents ovulation as well as cervical mucous effects
- 12 hour dosing window
- Greater contraceptive efficacy
- Can cause irregular bleeding
- Tendency to amenorrhoea with prolonged use

# Contraceptive questions

- **Running pill packets together**
  - Omit sugar pills
  - Fewer periods
  - Safer contraceptively speaking
  - SE = Irregular bleeding/spotting
  
- Need to explain no build up of blood inside

**Why wouldn't you?**

# Contraceptive questions

- Contraception >35

Smokers - no COCs

Some say.... but if non smokers, no other risk factors can use COCs into 40s.

# MYOCARDIAL INFARCTION

## ESTIMATED INCIDENCE RATES AND ATTRIBUTABLE RISKS PER MILLION USER YEARS IN EUROPEAN WOMEN

COC status	<35 years		35 years +	
	Non-smoker	Smoker	Non-smoker	Smoker
Nonusers	0.83	7.78	9.45	88.4
Users	3.56	42.7	40.4	484.6
Attributable risk	2.73	34.9	31.0	396.2

- no effect of past use/duration of use
- BP risk MI x 3
- smoking risk MI x 10

# Contraceptive questions

- **Contraception >35**
  - Progesterone only preparations
    - Mini pill
    - Depoprovera
  - IUCDs
  - Mirena
  - COCs in low risk slim non smokers up to 40.
  - Condoms
  - Natural family planning
  - Sterilization

# Contraceptive questions - Depo

- **Bleeding on Depo**
  - Common - counsel before reduces discontinuation
  - 70% in first year BUT by 5 years 50 to 80% amenorrhoea.
- Exclude pregnancy, infection and cancer
- Oral or transdermal Estrogen for 2 to 3 weeks (1.25mg premarin, 2 mg estradiol, 0.1mg patch)
- NSAIDS
- Given next injection early (max 4 weeks)

## *Contraceptive questions - IUCDs and smears*

- **Actinomyces like organisms** on smear
  - 7%, most just colonisation
  - Assess patient - no symptoms and signs PID leave in
  - Otherwise take out and treat with penicillin
- **Benign changes** like inflammation and metaplasia said to be more common but ??
  - Exclude infection
- **No increased risk of dysplasia (CIN)**

# *Miscarriage Questions*

- Common 1 in 4 to 5 women
- Recurrent miscarriage is 3 or more consecutive first trimester losses
- So ....NOT women who have had live births interspersed between miscarriages
- The ability to successfully carry a pregnancy to term is hugely reassuring.
- Prof Liggins- Keep trying and eventually one will stick

# Miscarriage factors

- PCOs

- Higher miscarriage rates - up to double
- Why?
  - ? LH
  - ? testosterone
  - ? Insulin resistance

- Role of metformin

- Recent trial has shown no difference between metformin and clomiphene in reducing miscarriage rate.

# *Miscarriage factors*

- **Thyroid disorders**

- Poorly controlled hypo or hyper associated with infertility and miscarriage
- Some studies reported increased miscarriage with high serum thyroid antibody levels
- Conflicting evidence

- **Hyperprolactinaemia**

- Treatment of raised prolactin levels with bromocryptine shown to result in higher rates of successful pregnancies

# *Miscarriage management*

- **Options**
  - Surgical - Evac
  - Medical
  - Expectant
- **Infection rates** similar; 2 to 3%
- **Complete evacuation** within 48 hours;
  - Surgical > medical > expectant
- **Expectant**
  - incomplete 91% within 2/52
  - Missed 66% within 2/52

## *Case: miscarriage management*

- 32 year old, P1G2, 8 weeks
- spotting 3 days, then today crampy pain and fresh bleeding.
- last 1 hour severe pain and very heavy bleeding, clots and floods, vomiting.
- **Products of conception in cervix**
  - Remove with sponge forceps

# Questions

