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Fertility Associates

Auckland

Period Problems - Concurrent Workshop Repeated

Friday, 21 June 2013	Start 2:00pm	Duration: 55mins	Sigma
	Start 3:05pm	Duration: 55mins	Sigma

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Fertility Associates –
Leaders in Fertility

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Period Problems

Mary Birdsall

Medical Director

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Leaders in Fertility

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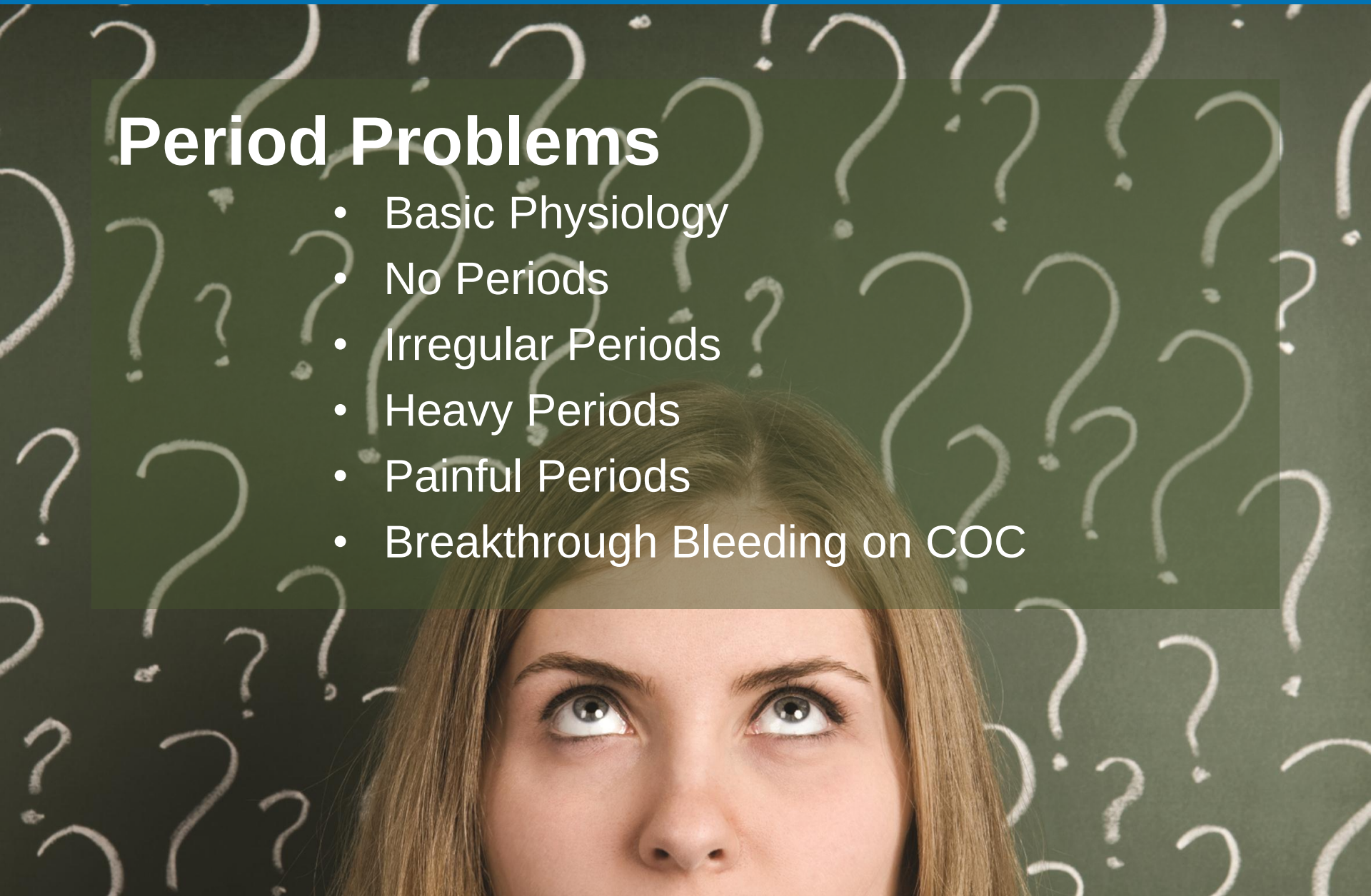
Period Problems

- Basic Physiology
- No Periods
- Irregular Periods
- Heavy Periods
- Painful Periods
- Breakthrough Bleeding on COC



Physiology

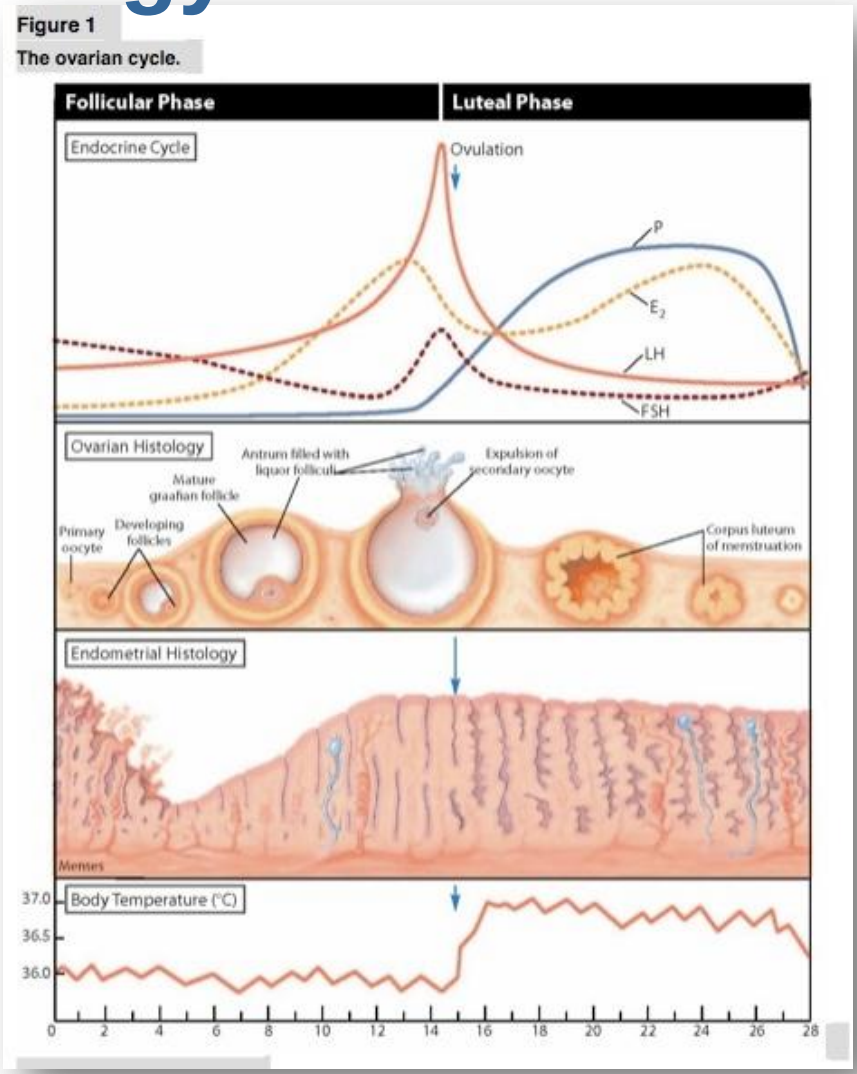


Figure 1
The ovarian cycle.
Follicular Phase
Luteal Phase
Endocrine Cycle
Ovulation
P
E_2
LH
FSH
Ovarian Histology
Antrum filled with liquor folliculi
Expulsion of secondary oocyte
Mature graafian follicle
Primary oocyte
Developing follicles
Corpus luteum of menstruation
Endometrial Histology
Menses
Body Temperature (°C)
37.0
36.5
36.0
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28

Regular Menstrual Cycle

- Need normally functioning hypothalamus
- Pituitary gland
- Eggs in ovaries
- Endometrium
- Normal Outflow Tract

No Periods: Amenorrhoea

- Always exclude pregnancy
- Delayed puberty: no breast development by age 14 or no periods by age 16 should refer
- Hypothalamic amenorrhoea
- Polycystic Ovary Syndrome
- Other causes: Prolactinomas, Thyroid disorders, Asherman's Syndrome, Drugs, Menopause, Structural abnormalities

Investigations For Amenorrhoea

- hCG
- FSH, LH, AMH, testosterone, prolactin, TFT
- Pelvic USS
- Outflow tract

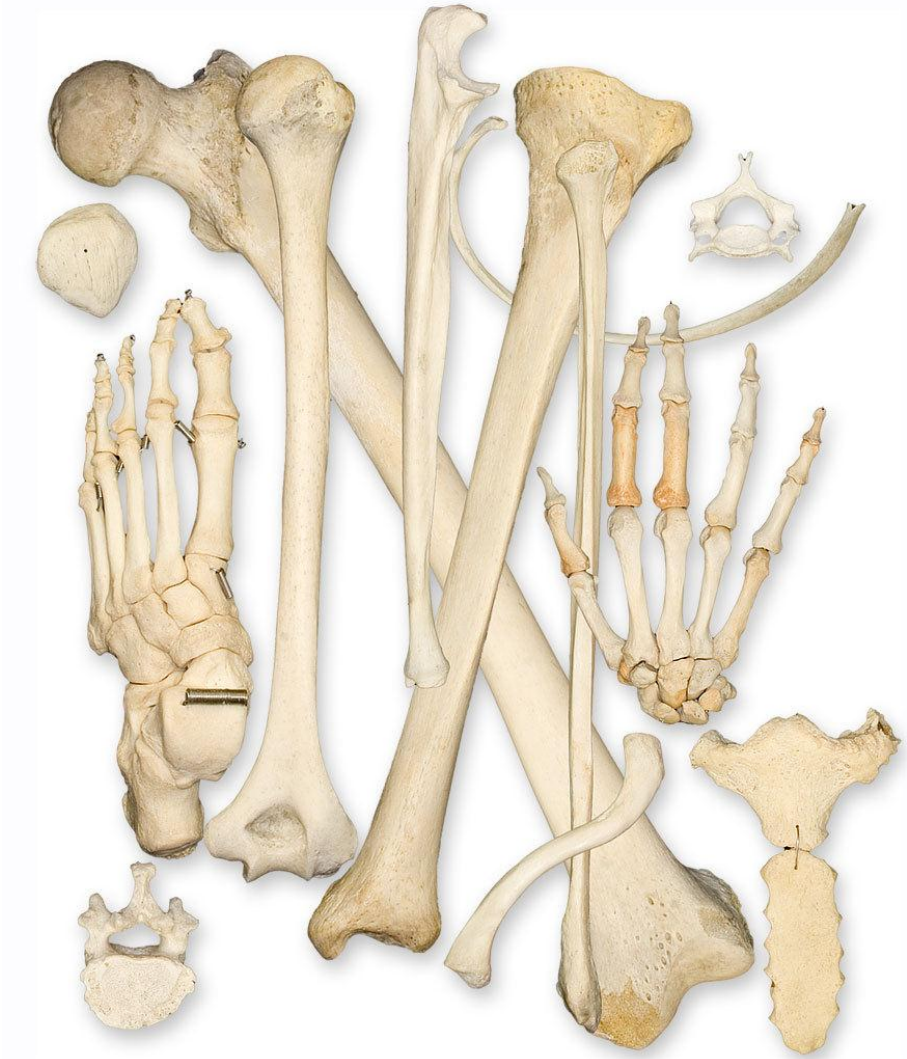
Hypothalamic Amenorrhoea

Examination and Investigations

- BMI (Normal 19 to 25)
- Body Fat Measurement (Normal above 20%)
- USS small uterus thin endometrium multicystic ovaries
- Reduced bone density
- FSH, LH and Estradiol low
- Normal AMH
- No withdrawal bleed in response to progesterone

Treatment of Hypothalamic Amenorrhoea

- Make Diagnosis
- Address Lifestyle
- Psychologist referral
- Dietician referral
- Bones
- Fertility: don't treat with drugs until BMI 19 use gonadotrophins need FSH and LH

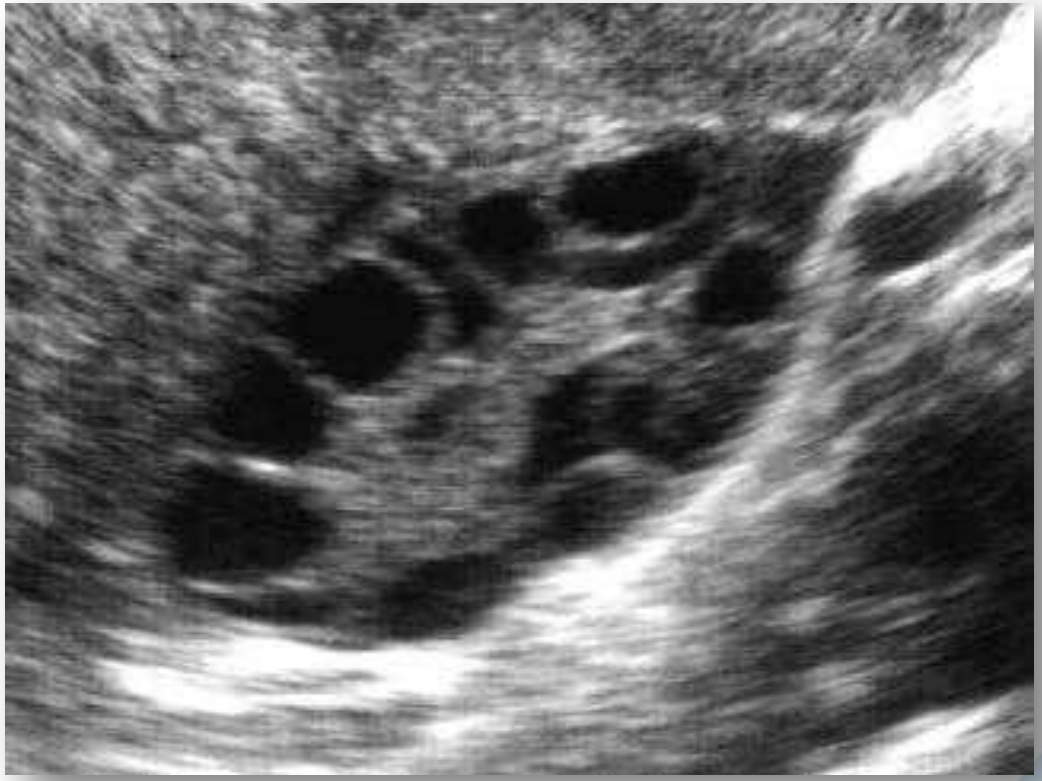


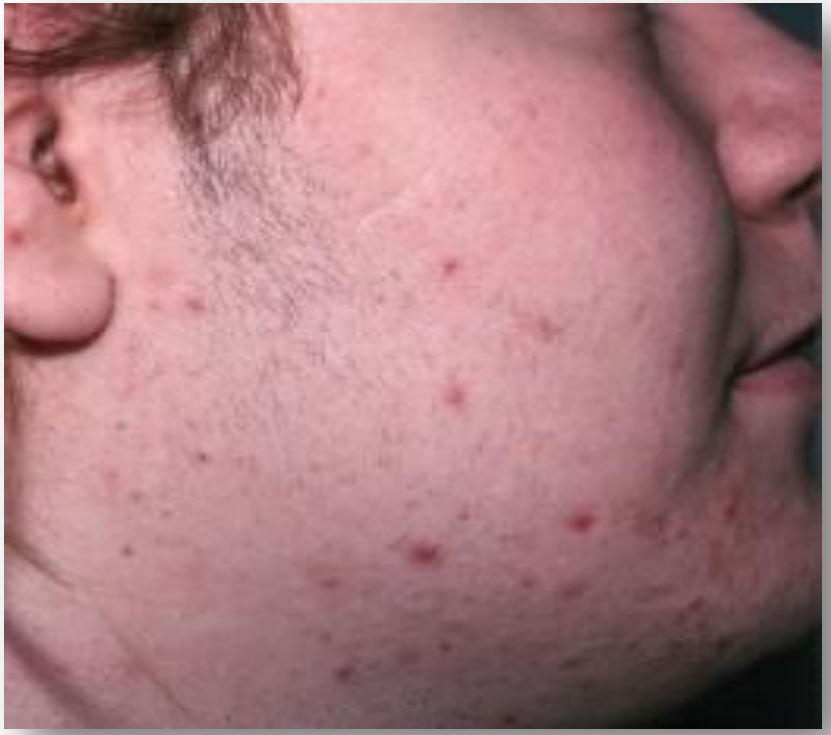
Polycystic Ovary Syndrome

Is there anything new?

Polycystic ovary syndrome

- Rotterdam criteria (2003)
- Need 2 out of 3
- 1. Irregular or absent ovulation
- 2. Signs of increased androgens eg acne or hirsutism
- 3. USS ovaries enlarged with 12 or more follicles in each ovary





Investigations for PCOS

- BMI and BP
- Pelvic USS refer if thickened endometrium
- FSH, LH, AMH, testosterone, HBA1C, prolactin and TFT

Management of PCOS

- Lifestyle and weight management
- COC
- Spironolactone
- Metformin
- Cyproterone acetate
- If wishing to conceive: Clomiphene, laparoscopic ovarian diathermy, gonadotrophins or IVF

Other Causes of Amenorrhoea

- Prolactin
- Breast Feeding
- Drugs eg COC, POP, antipsycotics, chemo, verapamil, opioids, clomipramine, cimetadine
- Asherman's Syndrome : always need precipitating event
- Menopause
- Outflow Tract

Irregular Periods

- V similar work up as for amenorrhoea
- Take a good history
- Always look at cervix, preg test, chlamydia
- Most common cause PCOS and hypo hypo
- Remember endometriosis with midcycle and premenstrual spotting

NHS
National Institute for
Health and Clinical Excellence

Heavy menstrual bleeding

Implementing NICE guidance

January 2007

Clinical Guideline Implementation Tools

NICE clinical guideline 44

Heavy menstrual bleeding

- Defined as excessive menstrual blood loss affecting quality of life:
  - physical
  - emotional
  - social
  - material
- Can occur alone or in combination with other symptoms

Need for this guideline

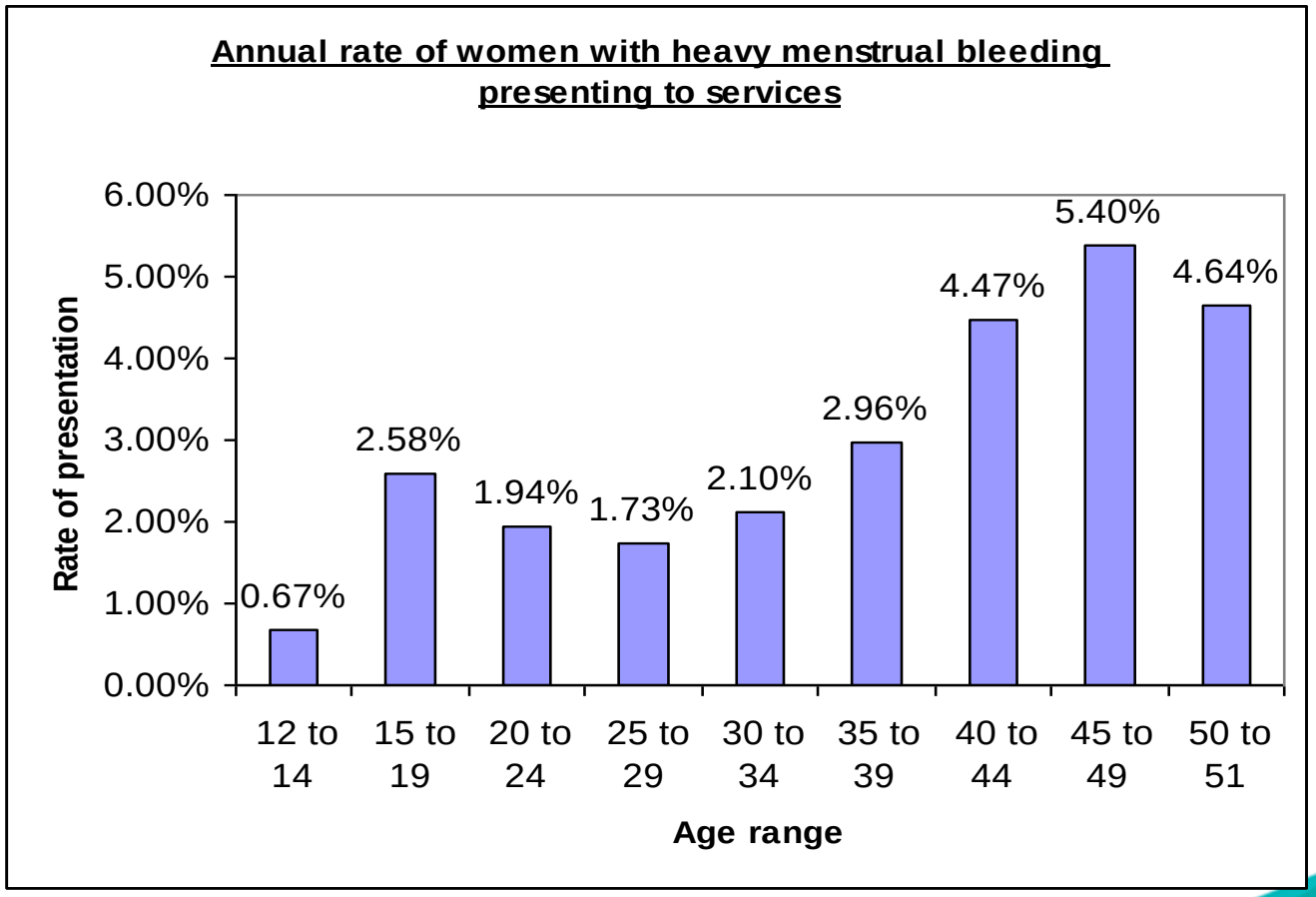
- Heavy menstrual bleeding (HMB):
  - can affect women of reproductive age
    - (post puberty and pre menopause)
  - can have an adverse effect on quality of life
  - is a common reason for referral to secondary care

Risk factors for HMB

- Gynaecological conditions such as:
  - uterine fibroids
  - adenomyosis or endometriosis
  - endometrial cancer
  - unopposed oestrogen use
- Increase in age
- Ethnic group
- Sociocultural factors

Incidence and prevalence

Affects approximately 880,000 women in England



Analysis performed by Information Centre for health and social care derived from IMS Health Disease Analyzer

What the guideline covers

- Investigations
- Hormonal and non-hormonal pharmaceutical treatments
- Prescribing considerations
- Surgical management
- Competencies

Investigations

- Ultrasound to identify structural abnormalities
- Hysteroscopy with biopsy if ultrasound outcomes are inconclusive
- Endometrial biopsy if:
  - intermenstrual bleeding persists
  - medical treatment fails or is not effective in women aged 45 and older

Investigations which are not recommended

- Measure menstrual blood
- Hormone Testing
- Thyroid testing
- MRI uterus
- D and C

Pharmaceutical treatment

- When either hormonal or non-hormonal treatments are acceptable consider in the following order:
  - levonorgestrel-releasing intrauterine system
  - tranexamic acid or non-steroidal anti-inflammatory drugs or combined oral contraception
  - norethisterone 15 mg days 5 to 26 or injected long-acting progestogens

Non-hormonal treatment

- When hormonal treatment is not acceptable, for example if the woman wishes to conceive, consider using:

  – tranexamic acid

  or

  – non-steroidal anti-inflammatory drugs

Prescribing considerations

- If symptoms do not improve within 3 months stop:
  - non-steroidal anti-inflammatory drugs
  - tranexamic acid

- When treating HMB do not use:
  - danazol
  - Etamsylate
  - D and C

Surgical management

- **Endometrial ablation methods**
- Use for HMB alone with uterus no bigger than 10-week pregnancy
- **Hysterectomy**
- Should not be used as first-line treatment
- Consider route of hysterectomy in the following order:
  - vaginal
  - abdominal

Painful periods

- Endometriosis and Adenomyosis
- Hx: increasing pain, premenstrual spotting, bloating , tiredness, bladder or bowel symptoms particularly constipation and pain on BM, deep dyspareunia
- Family hx: 1st degree relative with endo 9x increased incidence
- Exam but only way to dx is with laparoscopy

Prevalence of endometriosis diagnosed by laparoscopy in adolescents with dysmenorrhea or chronic pelvic pain: a systematic review.

Janssen EB, Rijkers AC, Hoppenbrouwers K, Meuleman C, D'Hooghe TM.

Abstract

METHODS A systematic literature search was carried out for relevant articles published between 1980 and 2011 in the databases PUBMED and EMBASE, based on the keywords 'endometriosis', 'laparoscopy', 'adolescents' and 'chronic pelvic pain (CPP)'. In addition, the reference lists of the selected articles were examined.

RESULTS Based on 15 selected studies, the overall prevalence of visually confirmed endometriosis was 62% (543/880; range 25-100%) in all adolescent girls undergoing laparoscopic investigation, 75% (237/314) in girls with CPP resistant to treatment, 70% (102/146) in girls with dysmenorrhea and 49% (204/420) in girls with CPP that is not necessarily resistant to treatment. Among the adolescent girls with endometriosis, the overall prevalence of American Society of Reproductive Medicine classified moderate-severe endometriosis was 32% (82/259) in all girls, 16% (17/108) in girls with CPP resistant to treatment, 29% (21/74) in girls with dysmenorrhea and 57% (44/77) in girls with CPP that is not necessarily resistant to treatment. Due to the quality of the included papers an overestimation of the prevalence and/or severity of endometriosis is possible.

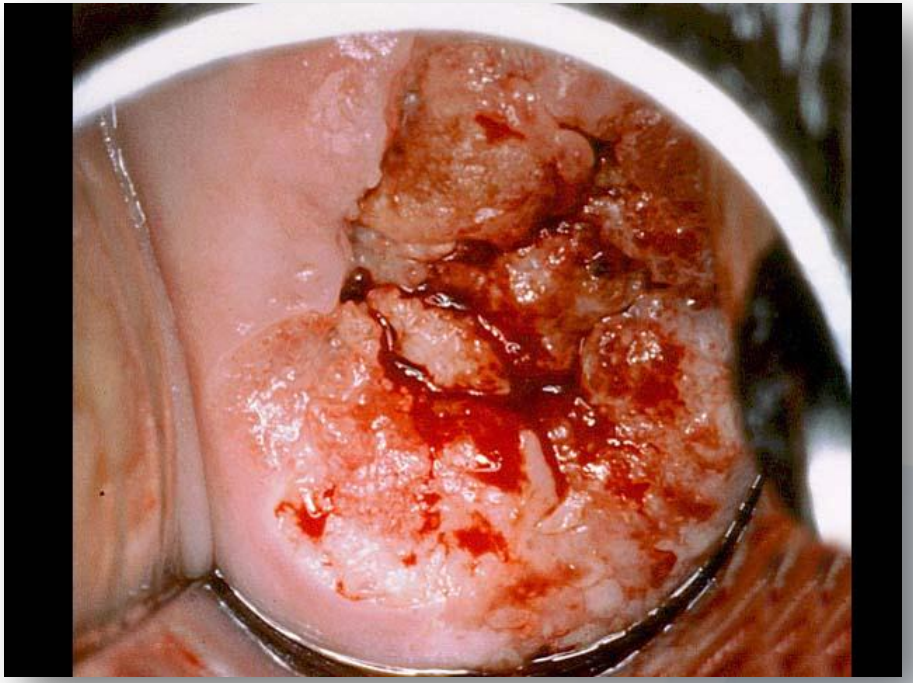
CONCLUSIONS About two-thirds of adolescent girls with CPP or dysmenorrhea have laparoscopic evidence of endometriosis. About one-third of these adolescents with endometriosis have moderate-severe disease. The value of early detection of endometriosis in symptomatic adolescents and the indications for laparoscopic investigation in adolescents require more research.

Breakthrough Bleeding on COC the ‘D’ list by John Guillebaud

- Disease
- Disorders of pregnancy
- Default
- Drugs
- Diarrhoea and vomiting
- Disturbances of absorption
- Duration of use
- Dose

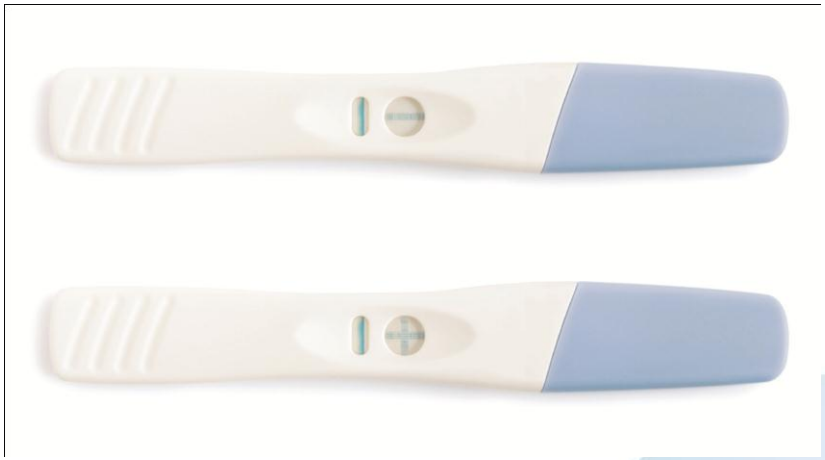
D for disease

- Cervical cancer
- Chlamydia



Disorders of Pregnancy

- Retained products of conception if COC started after TOP
- Miscarriage



Default

BTB may be triggered after 2 to 3 days of missed pills and can be persistent

Drugs

- Enzyme inducers eg rifampicin, rufinamide, barbiturates, phenytoin, carbimazepine, oxcarbazepine, eslicarbazepine, primidome need 4 weeks before liver reverts to normal
- Smokers BTB more common
- Not antibiotics!!!!!
- Not griseofulvin, proton pump inhibitors, ethosuximide, valproate, clonazepam,new antiepileptic drugs

Diarrhoea and Vomiting

Diarrhoea alone has to be exceptionally severe to interfere with COC absorption

Disturbances of Absorption

Massive gut resection : rare

Duration of Use Too Short

- BTB after starting on any formulation may settle if pill taker persists for 3 months
- BTB can occur during tricycling (running packs together) in this case take a bleeding triggered break

Dose

- After everything else has been excluded
- Try increase progesterone
- Then try increase estrogen
- Then a different progestagen some evidence that gesodestrel, desogestrel and norgestimate may give better cycle control than levonorgestrel pills

BTB

Important to reassure COC users that BTB is not indicative that there is any reduced contraceptive efficacy

Thank you

fertilityassociates.co.nz/gp