Disorders of the menstrual cycle

“Dysmenorrhea and Premenstrual syndrome”

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Disorders of menstrual cycle

- Dysmenorrhea
- Premenstrual syndrome
Dysmenorrhea

Definition
• Painful menstruation with absence of pain between menstrual periods

Types
• Primary
• Secondary
Primary Dysmenorrhoea

- Prevalence: 20% - 90%
- Most common medical problem in young women
- Usually begins with ovulatory menstrual periods
- Usually appears within 6 to 12 mo of menarche
- Typical age of presentation: 17 – 22 years
- No causes could be identified
Primary Dysmenorrhea
Pathophysiology

Theories:

- Abnormal PG ratios or sensitivity
  “Prostaglandins are potent stimulators of uterine contractions \(\rightarrow\) vasospasm & ischaemia”
- Neuropathic dysregulation
- Venous pelvic congestion
- Psychological causes
Primary dysmenorrhea
Clinical picture

Pain
- Suprapubic
- Sharp
- Colicky
- Cyclic
- Begins just before or with the onset of menses
- Lasts 48-72 hours

Accompanying symptoms
- Headache
- Diarrhoea
- Nausea
Secondary dysmenorrhoea

- Prevalence: 15% - 75%
- Age: usually > 30 years
- Begins several days before menstruation and gradually increases in severity as period approaches
- Mechanism of pain:
  - Not fully understood
  - Related to the causes
Secondary dysmenorrhoea

Causes

- Endometriosis
- Adenomyosis
- PID
- IUCD
- Pelvic adhesions
- Fibroids
- Cervical stenosis (iatrogenic LLETZ / instrumentation)
- Congenital abnormalities causing genital tract obstruction, e.g. non-communicating rudimentary horn
Management

Explanation, Reassurance. ? Hot – water bottles.

Analgesics

• Paracetamol
• PGSI
  o Mefenamic acid 500mg TDS each period
  o COX-1, COX-2

COCP: Suppress ovulation

Mirena IUS: Effective
Treat underlying causes

- **Endometriosis**: COCP, progestagens, GnRH analogues
- **PID**: Antibiotics
- **Outflow obstruction**: Surgical
- **Laparoscopy**: For diagnosis + management of endometriosis / adhesions / PID
Premenstrual syndrome (PMS)
PMS

- Distressing psychological, physical, and/or behavioural symptoms
- Occurs during the luteal phase of the menstrual cycle (or cyclically after hysterectomy with ovarian conservation)
- Significant regression of symptoms with onset of the period
- Types
  - Physiological
  - Core

Warning: Due to the influence of hormones, I could burst into tears or kill you in the next 5 minutes.
Physiological PMS (Mild premenstrual disorder)

- 95% of all cases
- Cyclical, symptom free week in follicular phase
- Mild severity
- No serious impact on QoL
Core PMS

- 5% of all cases
- Cyclical, symptom free week in follicular phase
- Severe enough to cause significant impairment
- Have a serious impact on QoL
Aetiology of PMS

• Unknown

• ? Corpus luteum producing a symptom-provoking factor
Following menstruation, women often report a positive mood that improves with the increasing level of E2

• Concept of hormonal imbalance
No evidence to support the hypothesis

• Increased sensitivity to normal hormones
Neurotransmitter dysfunction (possibly serotonin)
PMS: Clinical features

Physical symptoms:
- Breast tenderness / pain
- Abdominal swelling / bloating
- Headaches
- Skin disorders
- Weight gain
- Swelling of hands, feet
- Joint pain, muscle pain...

Psychological and behavioural symptoms:
- Mood swings
- Irritability / anger, aggression
- Anxiety / depressed mood
- Confusion / tension
- Sleep disturbances
- Changes in appetite
- Fatigue, lack of energy
- Restlessness
- Poor concentration
- Social withdrawal / not in control
- Lack of interest in usual activities
- Loneliness / hopelessness
PMS: Diagnosis

- Daily records of premenstrual symptoms for two consecutive menstrual cycles
- Impairment and impact on QoL are important
- Characters of symptoms are less important than timing and severity
- Cyclical / luteal phase
- Must resolve by the end of menstruation to give at least one symptom free week
PMS: Treatment

Rx is symptom-based

Physiological (Mild):
- Support, reassurance
- Good nutrition, exercise and stress reduction

Core: 2 approaches:
- Suppression of ovulation
  - GnRh analogue / COCP / Estrogen
- Treatment w/o suppression of ovulation
  - SSRI / Diuretics
  - Non-pharmaceutical treatment
    - Herbal supplements
    - Cognitive behavioural therapy
    - Vitamin B6 / Calcium
    - Exercise
    - ? Primerose