Disorders of Menstrual Cycle (Dysmenorrhea)

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The information included in this presentation are not the only source for this topic and you should explore other valuable references in order to satisfy the ILOs of this topic.

LEARNING OBJECTIVES

- Understand the causes and investigation of dysmenorrhea.
- Understand the action of medication used dysmenorrhea.

Dysmenorrhea

- Dysmenorrhea is defined as painful menstruation enough to interfere with the woman's daily routine.
- It is experienced by 45–95% of women of reproductive age.
- Primary dysmenorrhea describes *painful periods since onset of menarche and is unlikely to be associated with pathology*. It improves after childbirth & decline with increasing age.
- Secondary dysmenorrhea describes painful periods that have developed over time and usually have a secondary cause.

Etiology of secondary dysmenorrhea

Etiology includes:

1. Endometriosis and adenomyosis
2. Pelvic inflammatory disease
3. Cervical stenosis and hematometra (rarely).

Clinical Diagnosis: History

- Patients will have different ideas as to what constitutes a painful period.
- For some patients reassurance *that the pain may be normal for her* will help. For others the *ability to alter the menstrual cycle to avoid having a period during key events, for example school examinations or holidays,* will be helpful.
- To ascertain the actual severity of the pain, the following questions may be useful:

  - *Do you need to take painkillers for this pain? Which tablets help?*

  -Have you needed to take any time off work/school due to the pain?

Clinical Diagnosis: History

- Some primary dysmenorrhea is associated with flushing and nausea, which may be prostaglandin related.
- It is important to distinguish between menstrual pain that precedes the period (*a vital clue in endometriosis*) and pain that only occurs with bleeding.
- Other important clues about the etiology include *pain that occurs with passage of clots, in which case medication to reduce flow may be effective*.
- Secondary dysmenorrhea may be associated with dyspareunia or AUB, which may point towards a pathological diagnosis.

Clinical Diagnosis: Examination

- An abdominal and pelvic examination should be performed (excepting adolescents).
- Certain signs associated with endometriosis include:

  - pelvic mass (if an endometrioma is present),

  - fixed uterus (if adhesions are present) and

- - endometriotic nodules (palpable in the pouch of Douglas or on the uterosacral ligaments).

- An enlarged uterus may be found with fibroids.
- Abnormal discharge and tenderness may be seen with PID.

Investigations

- High vaginal and endocervical swabs.
- TVUSS scan may be useful to detect endometriomas or appearances suggestive of adenomyosis (enlarged uterus with heterogeneous texture) or to image an enlarged uterus.
- Ultrasound guided hysteroscopy in cases of cervical stenosis (not routine)
- Diagnostic laparoscopy: performed to investigate secondary dysmenorrhea (only):
    1. when the history is suggestive of endometriosis;
    2. when swabs and ultrasound scan are normal, yet symptoms persist;
    3. when the patient wants a definite diagnosis or wants reassurance that their pelvis is normal.

Management

1. Non-steroidal anti-inflammatory drugs (NSAIDs): effective in a large proportion of women. Some examples are naproxen, ibuprofen and mefenamic acid.
2. Hormonal contraceptives: COCP is widely used.
3. LNG-IUS: there is evidence that this is beneficial for dysmenorrhea and indeed can be an effective treatment for underlying causes, such as endometriosis and adenomyosis. It is often used as a first-line treatment before laparoscopy.

Management

4. Lifestyle changes: a low fat, vegetarian diet . Exercise may improve symptoms by improving blood flow to the pelvis.
5. Heat: It appears to be as effective as NSAIDs.
6. GnRH analogues: this is not a first-line treatment nor an option for prolonged management due to the resulting hypo-estrogenic state. These are best used to manage symptoms if awaiting hysterectomy or as a form of assessment as to the benefits of hysterectomy.
7. Surgery: signs or symptoms of pathology such as endometriosis may warrant surgical laparoscopy to perform adhesiolysis or treatment of endometriosis/drainage of endometriomas

KEY LEARNING POINTS

- Primary dysmenorrhea is rarely pathological.
- Secondary dysmenorrhea may be associated with pathology such as endometriosis or PID.
- First-line treatment of dysmenorrhea is medical with NSAIDs, COCP or progestogens.
- Women with secondary dysmenorrhea and signs or symptoms of other pathology may need laparoscopy.

- Thank you