Dysmenorrhea

Dysmenorrhea: mean a menstruating pain, are of two types;

- Primary dysmenorrhea:
- It affect between 30-60% of menstruating woman, more common in adolescents and women in their early twenties. It is characterized by over production of prostaglandin E2 which increases uterine activity causing muscle contraction experienced as pain. So it is a pain in the absence of pelvic pathology and can be treated by OTC drug.

- Primary dysmenorrhea present as a cramping lower abdominal pain, often begins during the day before bleeding starts (about 6 hours before menstruation). The pain gradually subsides after the start of menstruation and is often gone by the end of the first day of bleeding or may persist for 2-3 days after onset of bleeding, associated with back pain, nausea, &/or vomiting.

- Primary dysmenorrhea is uncommon in women after having children.

- **Secondary dysmenorrhoea:**
- It is a dull aching pain rather than spasmodic or cramping in nature, often occurring up to 1week before menstruation or during other parts of menstrual cycles and can be relieved or worsened by menstruation.
- Both lower abdominal and lower back pain may occur. Pain may also be non-cyclical & may occur with sexual intercourse (dyspareunia).

- Secondary dysmenorrhea refers to pain, which may be due to underlying disease (Endometriosis or pelvic infection)

- **Endometriosis** mainly occurs in women aged between 30 & 45years , but can occur in women in their twenties.

- The uterus has a unique inner lining surface (endometrium).
- In endometriosis, pieces of endometrium are also found in places outside the uterus or ovaries, or elsewhere in the pelvis. Each section of endometrium is sensitive to hormonal changes occurring during the menstrual cycle and goes through the monthly changes of thickening, shedding and bleeding. *This causes pain wherever the endometrial cells are found.*

- Endometriosis may cause subfertility.
- Diagnosis can be confirmed by laparoscopy.

Pelvic inflammatory disease.

Pelvic infection may be acute or chronic in nature. There is usually severe pain associated with menstruation , fever and vaginal discharge. The pain is in the lower abdomen and some times may confused with appendicitis. Pain may also may be experienced during intercourse.

Acute pelvic infection occurs when a bacterial infection develops within the fallopian tubes. It is thought that adhesions that develop around the tubes following an infection may be responsible for the symptoms in some women.

The use of intrauterine contraceptive device can cause heavier periods & may also predispose to infection.

Note: ترك

Dysmenorrhea is often not associated with the start of menstruation (menarche). This is because during the early months (and sometimes years) of menstruation, ovulation does not occur. Anovulator cycles are usually, but not always, pain free .

Severe intermenstrual pain (mittelschmerz), is ovulation pain which occurs midcycle, at the time of ovulation.

The abdominal pain usually lasts for a few hours, but can last for several days and may be accompanied by some bleeding.

Questions to be asked ترك

Age

Previous history

Regularity and timing of cycle

Timing and nature of pains

Other symptoms

Fever

Headache, backache

Nausea, vomiting, constipation

Faintness, dizziness, fatigue

Premenstrual syndrome (PMS)

Presence of abnormal vaginal discharge

Abnormal bleeding

Symptoms suggest secondary dysmenorrhoea

Severe intermenstrual pain (mittelschmerz) and bleeding

Pain with a late period (possibility of an ectopic pregnancy)

Failure of medication

- **Significance of questions and answers ترك**
- **Age:**
- The peak incidence of primary dysmenorrhea occurs in women between the ages of 17 and 25 years.

Secondary dysmenorrhea is most common in women aged over 30 years and is

rare in women aged under 25 years.

- **Previous history, timing and nature of pains**

The pharmacist should establish whether the menstrual cycle is regular and the length

of the cycle.

- Further questioning should then focus on the timing of pains in relation to menstruation.
- Pain in primary dysmenorrhea is cramping whereas the secondary one is dull pain and continuous. Severity is rare in primary dysmenorrhea and it decrease with onset of menses. But in secondary the pain is more sever and persist & any pain in lower abdomen should refer.
- **Other symptoms**

Women who experience dysmenorrhea will often describe other associated symptoms. These include nausea, vomiting, general GI discomfort, constipation, headache, backache, fatigue, feeling faint and dizziness.

- **Treatment timescale**

If the pain of primary dysmenorrhoea is not improved after two cycles of treatment, referral to the doctor would be advisable.

- **Management**

OTC drug medication

The pain of dysmenorrhoea is thought to be linked to increased prostaglandin activity, that have been found to be raised in the menstrual fluids and circulating blood of women who suffer from dysmenorrhoea.

Therefore, the use of analgesics that inhibit the synthesis of prostaglandins is logical provided that the patient is not already taking NSAID.

Ibuprofen, diclofenac and naproxen are treatment of choice for dysmenorrhoea, provided they are appropriate for the patient, no history of GI problems and asthma.

A maximum daily dose of Ibuprofen 1200 mg/day i.e. 200-400 mg 3t.d. Sustained-release formulations of ibuprofen are also available. Naproxen 250mg tablets can be used by women aged between 15 and 50 years for primary dysmenorrhoea only. Two tablets are taken initially then one tablet 6–8 hours later if needed. Maximum daily dose is 750mg and maximum treatment time is 3 days.

Aspirin also inhibits the synthesis of prostaglandins but is less effective in relieving the symptoms of dysmenorrhoea than is ibuprofen. It can cause GI upsets and is more irritant to the stomach than NSAIDs. For those who experience symptoms of nausea and vomiting with dysmenorrhoea, *aspirin* is probably best avoided. Soluble forms of *aspirin* will work more quickly than traditional tablet formulations and are less likely to cause stomach problems.

Paracetamol:

has little or no effect on the levels of prostaglandins involved in pain & inflammation & is less effective for the treatment of dysmenorrhoea than either NSAIDs or *aspirin*.

It is a useful treatment when the patient cannot take NSAIDs or *aspirin* because of stomach problems or potential sensitivity. Also when the patient is suffering from N & V as well as pain, since it does not irritate the stomach**.**

Hyoscine Buscapan (hyoscin butylbromide):

A smooth muscle relaxant, is marketed for the treatment of dysmenorrhoea because its antispasmodic action will reduce cramping. It is a good alternative to NASIDs.

Caffeine: may enhance analgesic effect of NSAIDs but best avoided near bed time, it cause stimulant effect.

Oral contraceptive

Women taking oral contraceptives usually find that the symptoms of dysmenorrhoea are reduced or eliminated all together and so a woman presenting with the symptoms of dysmenorrhoea and who is taking the pill is probably best referred to the doctor for further investigation.

Acupuncture may be helpful . The treatments should given once a week for 3 weeks per month over a 3-month period.

Locally applied low-level heat may also help pain relief.

Fish oil (omega-3 fatty acids)

Can give some pain relief.

Pyridoxine alone and combined with magnesium showed some benefit in reducing pain, compared with placebo.

Exercise

Exercise during menstruation is not harmful since it raises endorphin levels, reducing pain and promoting a feeling of well-being. There is some evidence that moderate aerobic exercise can improve symptoms of premenstrual syndrome.

Advice to women taking analgesics for dysmenorrhoea:

(1) Take the first dose as soon as your pain begins or as soon as the bleeding starts, whichever comes first. Some doctors advise to start taking the tablets on the day before your period is due. This may prevent the pain from building up.

(2) Take the tablets regularly, for 2–3 days each period, rather than 'now and then' when pain builds up.

(3) Side-effects are uncommon if you take an anti-inflammatory for just a few days at a time, during each period.