Responding to common unique female patient complains in pharmacy

Period pain

قال رسول الله صلى الله عليه وسلم : ما من خارج خرج من بيته في طلب العلم إلا وضعت له الملائكة اجنحتها رضا بما يصنع

Dysmenorrhea/ painful menstruation

- Divided into primary and secondary disorders etiology
- Primary: idiopathic and associated with cramp like abdominal at the time of menstruation in the absence of pelvic disease
- Secondary: usually associated with pelvic pathology
- Prevalence is high in adolescence (up to 90% of women are affected)
- Occur only during ovulatory cycles
- Its prevalence decrease after age of 25. why ?

Risk factors

- Tobacco smoking
- Stress, anxiety
- Depression
- Low fish consumption
- Alcohol use
- Obesity

Pathophysiology

- Prostaglandins , leukotriens and vasopressin are involved

Pathophysiology

Prostaglandins , leukotriens and vasopressin are involved

Prostaglandins stimulate uterine contractions. Normal contractions and vasoconstriction help expel menstrual fluids and control bleeding as the endometrium sloughs.[6] However, the increased levels of prostaglandins, leukotrienes, and vasopressin present with dysmenorrhea can lead to strong uterine contractions and significant vasoconstriction, resulting in uterine ischemia and pain. In women without dysmenorrhea, uterine contractions are rhythmic and contraction pressure reaches 120 mm Hg. In women with dysmenorrhea, contractions occur more often and pressures can reach 180 mm Hg.[10] Both intrauterine pressure and the frequency of uterine contractions contribute to ischemia and tissue hypoxia and, thus, to pain.

Clinical presentation

- Pain is cyclic , directly related to onset of menstruation
- Experienced as continuous , dull aching pain with spasmodic cramping in the lower mid-abdominal or supra-pubic region , which may radiate to the lower back and upper thighs
- Other symptoms may include: nausea , vomiting, fatigue , dizziness , irritability, diarrhea and headache
- The onset of pain is several hours is prior to or coincident with the onset of menses and usually lasts less than 48 hours , but pain may persist up to 72 hours

Clinical presentation

- Primary dysmenorrhea usually initially occurs within the first 6 to 12 months after menarche , when ovulatory cycles begin
- This clinical presentation can be adequate for the diagnosis of primary dysmenorrhea, if the pain is mild to moderate and the patient responds to NSAID therapy

Clinical presentation

Secondary dysmenorrhea is suggested if dysmenorrhea initially begins years after menarche (at age 25 years or older); if pelvic pain occurs at times other than during menses and is not related to the first day of menses; or if the patient experiences irregular menstrual cycles, or has menorrhagia (excessively prolonged or profuse menses), or a history of pelvic inflammatory disease (PID), dyspareunia, or infertility.[5,7] Causes of secondary dysmenorrhea include endometriosis, PID, ovarian cysts, uterine tumors, uterine fibroids, cervical os stenosis, inflammatory bowel disease, and congenital abnormalities.[7,11] Secondary dysmenorrhea may also be caused by the presence of an intrauterine contraceptive (IUC).

TABLE 9-1 Differentiation of Primary and Secondary Dysmenorrhea

	Primary Dysmenorrhea	Secondary Dysmenorrhea
Age at onset of dysmenorrhea symptoms	Typically 6–12 months after menarche—age 12–13 years for most girls	Mid to late 20s or older; usually 30s and 40s for women with secondary dysmenorrhea
Menses	More likely to be regular with normal blood loss	More likely to be irregular; menorrhagia more common
Pattern and duration of dysmenorrhea pain	Onset just prior to or coincident with onset of menses; pain with each or most menses, lasting only 2–3 days	Pattern and duration vary with cause; change in pain pattern or intensity also may indicate secondary disease
Pain at other times of menstrual cycle	No	Yes, may occur before, during, or after menses
Response to NSAIDs and/or oral contraceptives	Yes	No
Other symptoms	Nausea, vomiting, fatigue, dizziness, irritability, diarrhea, and headache may occur at same time as dysmenorrhea pain	Vary according to cause of the secondary dysmenorrhea; may include dyspareunia, pelvic tenderness

General treatment approach

An important initial step in managing dysmenorrhea is distinguishing between primary and secondary disease. Self-care is appropriate for an otherwise healthy young woman who has a history consistent with primary dysmenorrhea and is not sexually active, or a woman who has been diagnosed with primary dysmenorrhea.[4,5,6] Adolescents with pelvic pain who are sexually active (at risk for PID) and women with characteristics indicating secondary dysmenorrhea should be referred for medical evaluation. Table 9-1 compares primary and secondary dysmenorrhea.

Exclusions for Self-Treatment[a]

- Severe dysmenorrhea and/or menorrhagia
- Dysmenorrhea symptoms inconsistent with primary dysmenorrhea (e.g., onset after age 25, dysmenorrhea pain at times other than onset of menses)
- History of PID, infertility, irregular menstrual cycles, endometriosis, ovarian cysts
- Use of IUC
- Allergy to aspirin or NSAIDs; intolerance for NSAIDs
- Use of warfarin, heparin, or lithium
- Active GI disease (PUD, GERD, ulcerative colitis)
- Bleeding disorder

[a] Women who are lactating should avoid use of herbs. Selected drug interactions and disease interactions are listed in Figure 9-3, but this list is not comprehensive.

Non-pharmacologic therapy

- Sleep
- Hot baths or heating pads
- Smoking cessation (how smoking affect pain??)
- Increased consumption of fish rich in omega 3 fatty acids (tuna, salmon, sardins, trout, mackerel, herring) or use of fish oil

Pharmacologic therapy

1. Paracetamol

- Adequate only for treating mild symptoms
- Weak inhibitor of prostaglandin synthesis
- Useful in managing dysmenorrea in doses of 1000 mg X 4 times daily (at this dose, less effective than ibuprofen)
- Lower doses less effective
- Compatible with breast feeding (according to AAP)

Pharmacologic therapy

2. NSAIDs

- Ibuprofen (200 mg) and naproxen Na (220 mg) are available as nonprescription NSAIDs
- effective in 66-90% of patients
- Therapy with NSAIDs should begin at onset of menses or pain , if inadequate pain relief occurs, treatment beginning 1 to 2 days of expected menses may improve symptomatic relief
- If the possibility of pregnancy exist then therapy should be initiated only after menses begins.
- Optimal pain relief is achieved when these agents are taken on scheduled rather than an as needed basis

Pharmacologic therapy

- Ibuprofen &Naproxen Na: see table for dosing (important to be memorized)
- Given for the first 48-72 hours of menstrual flow (max prostaglandin release)
- Effect of these drugs occur within 30-60 minutes 9benifit will be optimal with continued regular dosing)
- A patient may respond better to one NSAID than to another (may switch to another agent if response to max recommended dose was suboptimal)
- Peptic ulcer ??
- Concurrent use with warfarin or other anticoagulants??
- Alcohol use ?? (GI and liver toxicity)

TABLE 9-2 Treatment of Dysmenorrhea with Nonprescription Medications

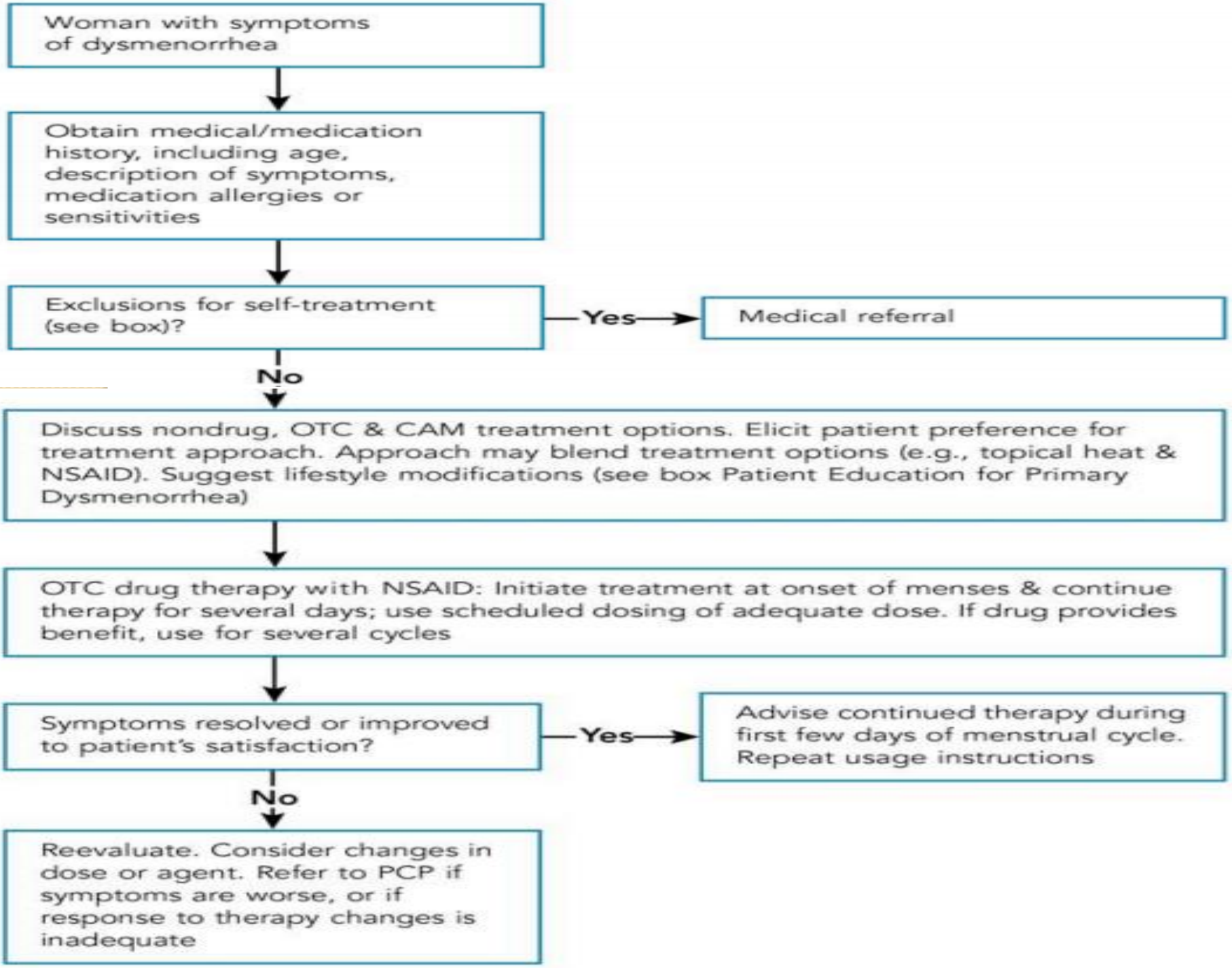
Agent	Recommended Nonprescription Dosage (Maximum Daily Dosage)
Acetaminophen	650–1000 mg every 4–6 hours (4000 mg)
Aspirin	650–1000 mg every 4–6 hours (4000 mg)
Ibuprofen	200–400 mg every 4–6 hours[a] (1200 mg)
Naproxen sodium	220–440 mg initially; then 220 mg every 8–12 hours (660 mg)

[a] If 200 mg every 4–6 hours is ineffective, the recommended dosage for dysmenorrhea of 400 mg every 6 hours should be taken.

Pharmacologic therapy

drug effects rather than provide more benefit. Therapy with non-salicylate NSAIDs should be undertaken for three to six menstrual cycles, with changes made in the agent, dosage, or both before judging the effectiveness of these agents for a particular patient. If nonprescription NSAID therapy does not provide an adequate therapeutic effect, prescription NSAIDs; prescription doses of the nonprescription NSAIDs; or use of a combined oral contraceptive, medroxyprogesterone acetate (Depo-Provera), or the levonorgestrel IUC (Mirena) may provide relief from dysmenorrhea.

- Side effects of NSAIDs
- Limited (include; heartburn, upset stomach, vomiting, abdominal pain, diarrhea, constipation and anorexia
- May be decreased by taking the drug with food
- Should be avoided in breastfeeding women (affects CV system of infant)


Woman with symptoms of dysmenorrhea
Obtain medical/medication history, including age, description of symptoms, medication allergies or sensitivities
Exclusions for self-treatment (see box)?
Yes
Medical referral
No
Discuss nondrug, OTC & CAM treatment options. Elicit patient preference for treatment approach. Approach may blend treatment options (e.g., topical heat & NSAID). Suggest lifestyle modifications (see box Patient Education for Primary Dysmenorrhea)
OTC drug therapy with NSAID: Initiate treatment at onset of menses & continue therapy for several days; use scheduled dosing of adequate dose. If drug provides benefit, use for several cycles
Symptoms resolved or improved to patient's satisfaction?
Yes
Advise continued therapy during first few days of menstrual cycle. Repeat usage instructions
No
Reevaluate. Consider changes in dose or agent. Refer to PCP if symptoms are worse, or if response to therapy changes is inadequate

Patient counseling

The objective of self-treatment is to relieve or significantly improve symptoms of dysmenorrhea so as to limit discomfort and disruption of usual activities. For most patients, carefully following product instructions and the self-care measures listed here will help ensure optimal therapeutic outcomes.

Nondrug Measures

- If effective, apply topical heat to the abdomen, lower back, or other painful area.
- Stop smoking cigarettes.
- Consider eating more types of fish that are high in omega-3 fatty acids or taking a fish oil supplement.
- Participate in regular exercise if it lessens the symptoms.

Nonprescription Medications

- Nonprescription nonsalicylate NSAID medications (ibuprofen and naproxen sodium) are the best type of nonprescription medication to treat primary dysmenorrhea. These medications stop or prevent the strong contractions (cramping) of the uterus.
- Start taking the medication when the menstrual period begins or when menstrual pain or other symptoms begin. Then take the medication at regular intervals following the product instructions, rather than just when the symptoms are present. See Table 9-2 for recommended dosages of nonprescription nonsalicylate NSAIDs.

Patient counseling

- Take a nonsalicylate NSAID with food to limit the most common side effects: upset stomach and heartburn.
- Do not take nonsalicylate NSAIDs if you are allergic to aspirin or any nonsalicylate NSAID, or if you have peptic ulcer disease, gastroesophageal reflux disease, colitis, or any bleeding disorder.
- If you have hypertension, asthma, or congestive heart failure, watch for early symptoms that the nonsalicylate NSAID is causing fluid retention.
- Do not take a nonsalicylate NSAID if you are also taking anticoagulants or lithium.

If abdominal pain occurs at times other than just before or during the first few days of a menstrual period, seek medical attention.

Seek medical attention if the pain intensity increases or if new symptoms occur.

Patient outcome evaluation

Patient monitoring is accomplished by having the patient report whether the symptoms are resolved. Symptoms should improve within an hour or so of taking an NSAID. The optimal effect of drug therapy may not be seen, however, until the woman has used the medication on a scheduled basis. The woman should be encouraged to contact her health care provider to report on treatment effectiveness (i.e., continued or altered symptoms). The patient with persistent symptoms should be advised to try another nonprescription nonsalicylate NSAID, to add adjunct therapy, or to see a primary care provider for evaluation.