مدیریت دیسمنوره در نوجوانان

ارایه دهنده:

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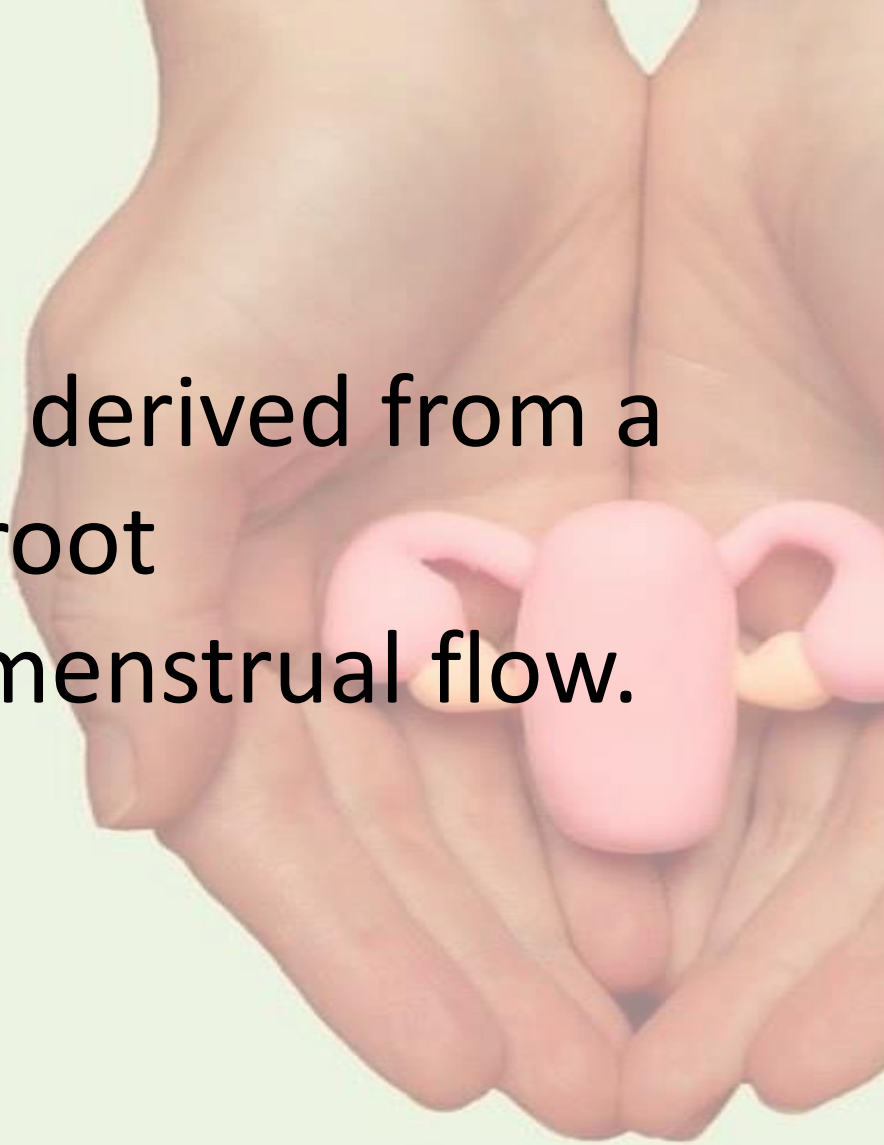
متخصص جراحی زنان و زایمان

عضو هیات علمی دانشگاه علوم پزشکی تهران



“Dysmenorrhea” is derived from a Greek root
meaning difficult menstrual flow.

Types of dysmenorrhoea

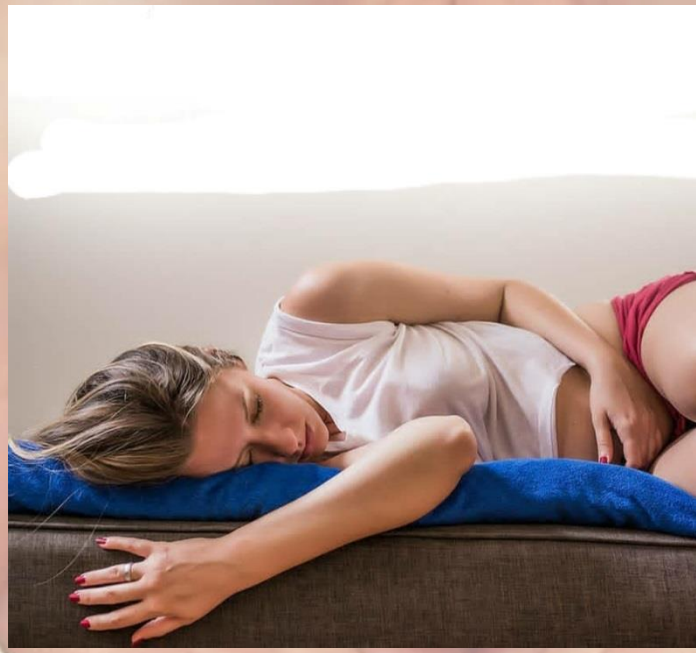
- Primary dysmenorrhoea
- Secondary dysmenorrhoea

Primary dysmenorrhoea

- Primary dysmenorrhoea usually starts within 6–12 months of menarche, once ovulatory cycles are established.

- Presentation beyond a year after menarche should give rise to suspicion of secondary dysmenorrhoea

- The menstrual cramps are intermittent, vary in intensity, and usually are centered in the suprapubic region, although some women also experience pain in their thighs and lower back
- few hours after the onset of flow and peaking 24–36 hours into the mense. They rarely last more than two or three days



Dysmenorrhea generally does not occur until ovulatory menstrual cycles are established, which occurs from months to several years after menarche,

Approximately 18 to 45 percent of teens have ovulatory cycles two years postmenarche, 45 to 70 percent by two to four years, and 80 percent by four to five years

Dysmenorrhea occasionally accompanies anovulatory cycles, especially if heavy bleeding and clots are present

EPIDEMIOLOGY

- The worldwide prevalence of PD ranges from 45% to 95% in females of reproductive age, with 2% to 29% experiencing severe pain

- a loss of 600 million hours per year, with an annual loss of $2 billion in the United States .

- The rate of school absenteeism ranged between 14% and 51% among females with PD

- Michelle Obama tweeted, “Why are girls still missing so many days of school because of their menstrual cycles?”

- The transcultural impact of this problem was highlighted when Chinese Olympic medalist Fu Yuanhui acknowledged that menstrual pain affected her Olympic swimming performance

severity of dysmenorrhea

- volume and duration of menstrual flow
- reduced in women who had delivered a child in the intervening years

Secondary dysmenorrhoea

- SD originates from a pathological disorder, such as endometriosis, chronic pelvic inflammatory disease, adenomyosis, endometrial polyps, ovarian cyst, congenital anomalies, and complications of intrauterine contraceptive devices
- It is associated with diffused or constant pain, that does not necessarily occur during menstruation and is usually detected in older females (>24 years) with no history of dysmenorrhea

- Females with SD often have clinical features that distinguish their condition from PD. These include a large uterus, pain during sexual intercourse, and resistance to effective treatment
- Endometriosis is considered one of the most common causes of SD

	Primary dysmenorrhoea	Secondary dysmenorrhoea
Pathophysiology	No underlying gynaecological pathology	Pain manifestation of underlying gynaecological pathology
History		
Age	16–25 years	30–45 years
Onset	Menarche	After menarche
Duration	8–72 hours during menses	Prior to onset of menses and throughout menstrual cycle
Nature	Cramping pelvic pain, with or without nausea and vomiting, which commences with the start of menstrual flow; the pain may radiate to the lower back or upper legs	Variable number of days; noncyclical and cyclical episodes
Co-morbidity	No other gynaecological, renal tract or gastrointestinal symptoms	Co-existent gynaecological symptoms, *eg* heavy periods, dyspareunia, vaginal discharge, intermenstrual bleeding, postcoital bleeding, chronic pelvic pain; possible bowel and urological symptoms
Responds to NSAIDs or COCs	Yes	Yes, but may require further treatment
Clinical examination	Normal pelvis	Fixed retroverted uterus, thickened uterosacral ligaments, endometriotic nodules on vaginal examination, enlarged tender uterus, adnexal masses
Specialist investigations	Normal pelvic ultrasound no evidence of pelvic inflammatory disease (PID)	Pelvic ultrasound may show adenomyosis or uterine fibroids, ovarian endometriosis, evidence of PID on genital tract swabs

Table 1. Distinguishing features of primary and secondary dysmenorrhoea

Risk factors for dysmenorrhoea

- early age at menarche (<12 years)
- low body mass index
- a family history of dysmenorrhoea
- longer intermenstrual intervals and duration of bleeding, irregular or heavy flow
- history of sexual assault
- smoking

decrease the likelihood of dysmenorrhea

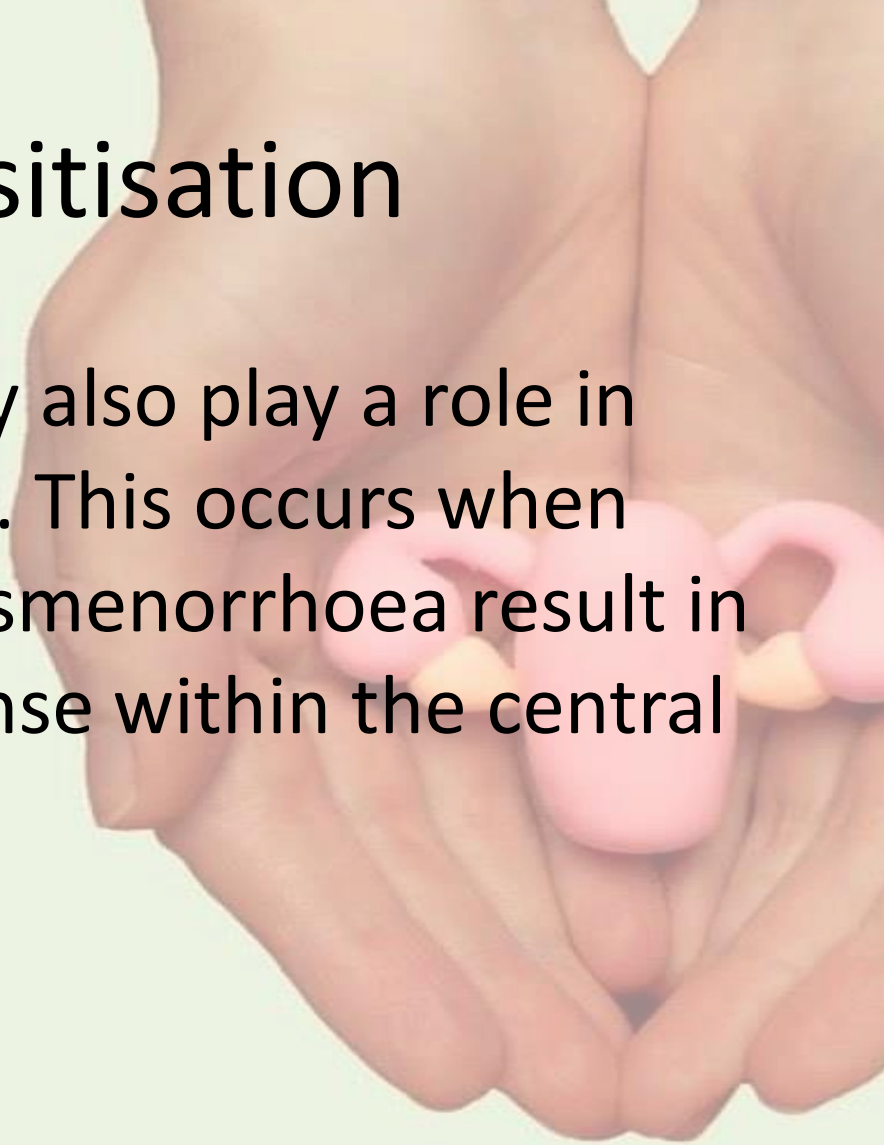
- Exercise
- being married or in a stable relationship
- higher parity

Pathophysiology

- excessive secretion of prostanoids, which induce uterine contractions, thus reducing uterine blood flow leading to uteine hypoxia and pain. The symptoms accompanying primary dysmenorrhoea, ie nausea, vomiting and diarrhoea, are typical of prostaglandin adverse effects.

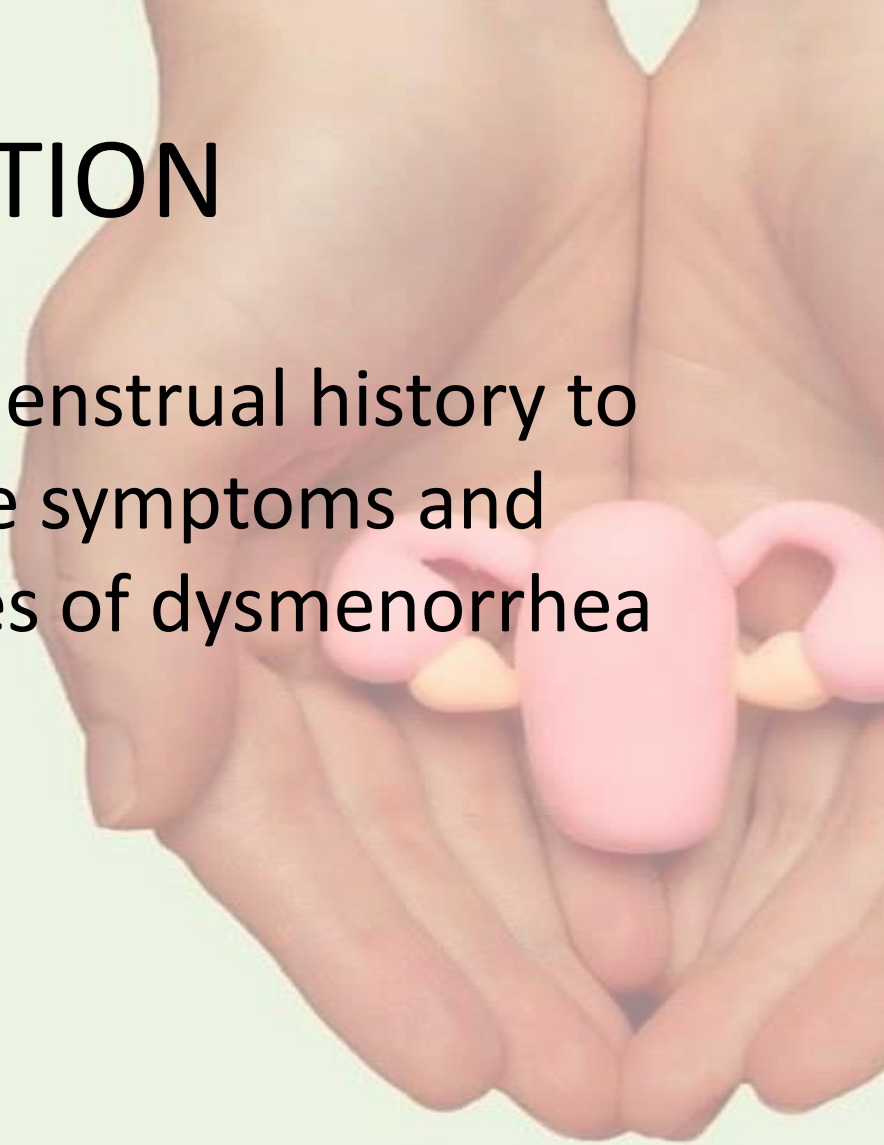
Central sensitisation

- Central sensitisation may also play a role in primary dysmenorrhoea. This occurs when repeated episodes of dysmenorrhoea result in an increased pain response within the central nervous system



EVALUATION

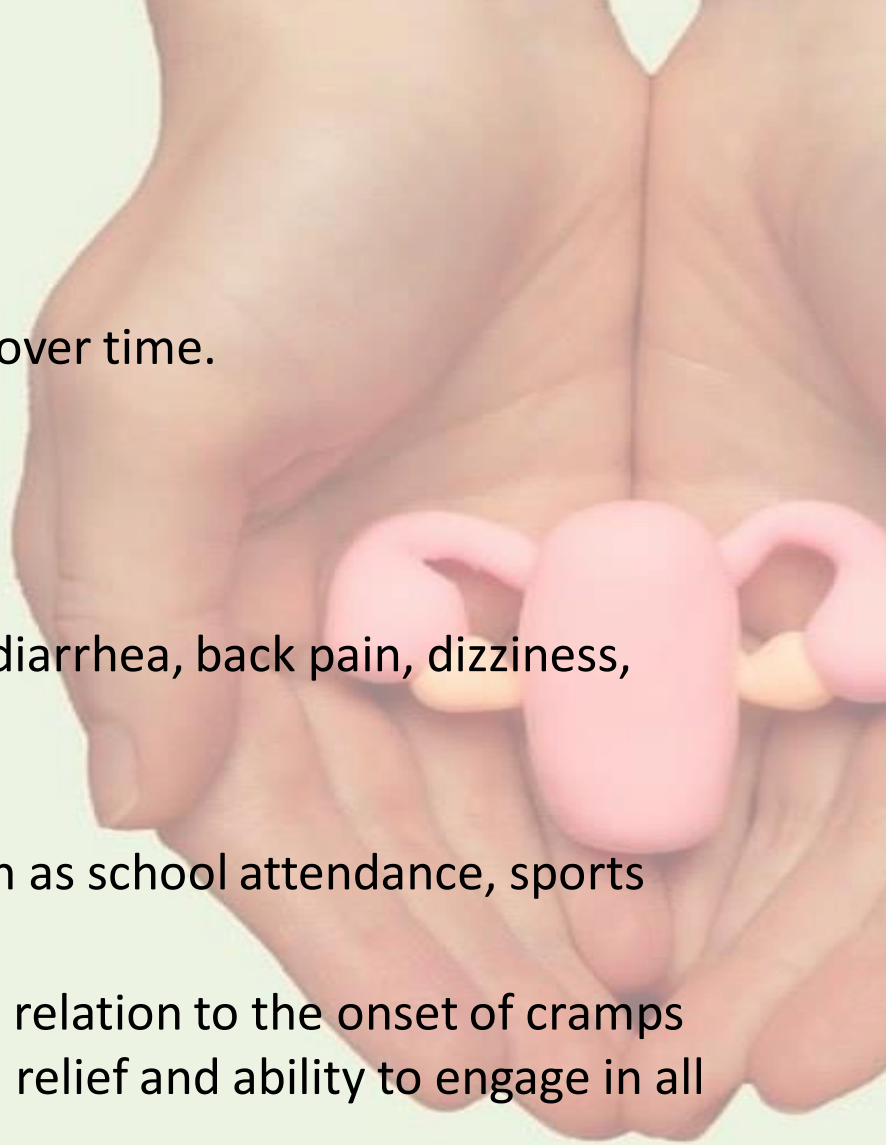
- complete medical and menstrual history to assess the severity of the symptoms and exclude secondary causes of dysmenorrhea



History

Menstrual history

- Age at menarche
- Duration of menstrual bleeding
- Menstrual flow assessment
- Interval between menstrual periods (from first day of one period to the first day of the following period)
- First day of last two menstrual period



•Symptom history

•Initial onset of symptoms and progression over time.

•Relation of symptoms to periods.

•Presence or absence of nausea, vomiting, diarrhea, back pain, dizziness, fatigue, and headache during menstruation.

•Impact of symptoms on daily activities such as school attendance, sports participation, and other activities.

•Medication use – Type, dose, and timing in relation to the onset of cramps and perceived effectiveness in terms of pain relief and ability to engage in all daily activities.

•The severity of the disorder

Sexual history

- Current sexual activity and type of contraception used

- History of sexually transmitted infections
- History of pelvic inflammatory disease

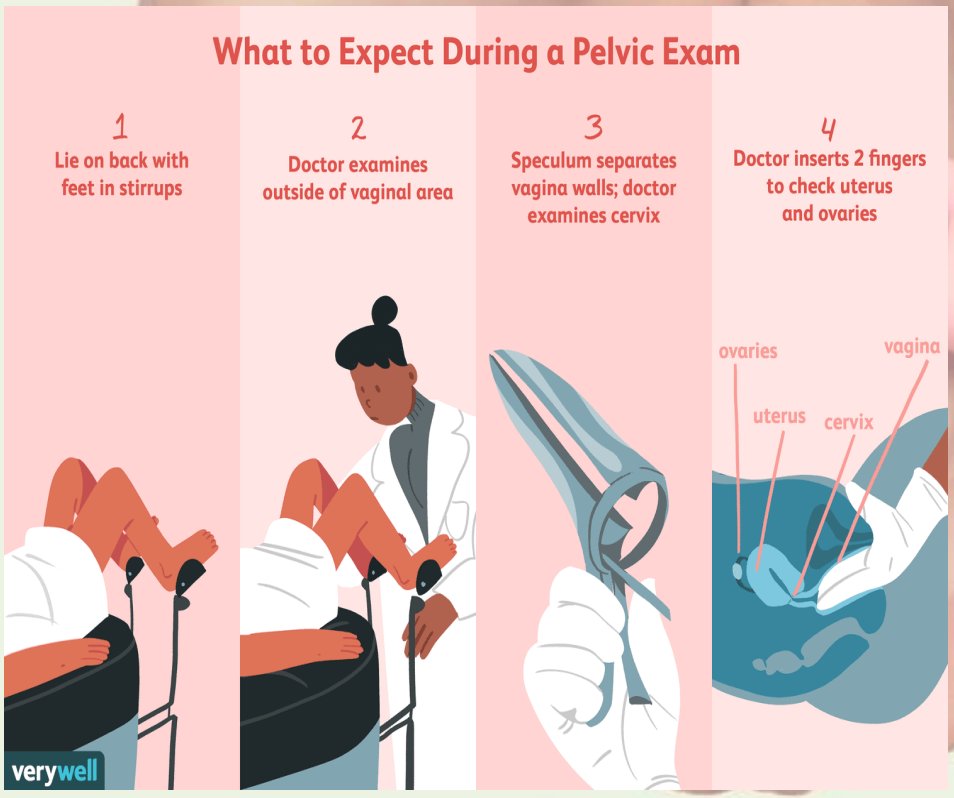
Table 3. Dysmenorrhea history checklist

1. Menstrual history
2. Relationship between menarche and onset of dysmenorrhea
3. Timing of pain in relation to menses and amount of menstrual flow
4. Characterization, severity, chronology, and resulting disability
5. Sexual history including inquiry about sexual abuse
6. Inquiry about chronic pain syndromes and medical conditions
7. Presence of symptoms of depression, anxiety, or other psychiatric disorders
8. Previous treatment including dose, duration of use, side effects, and response

Physical examination

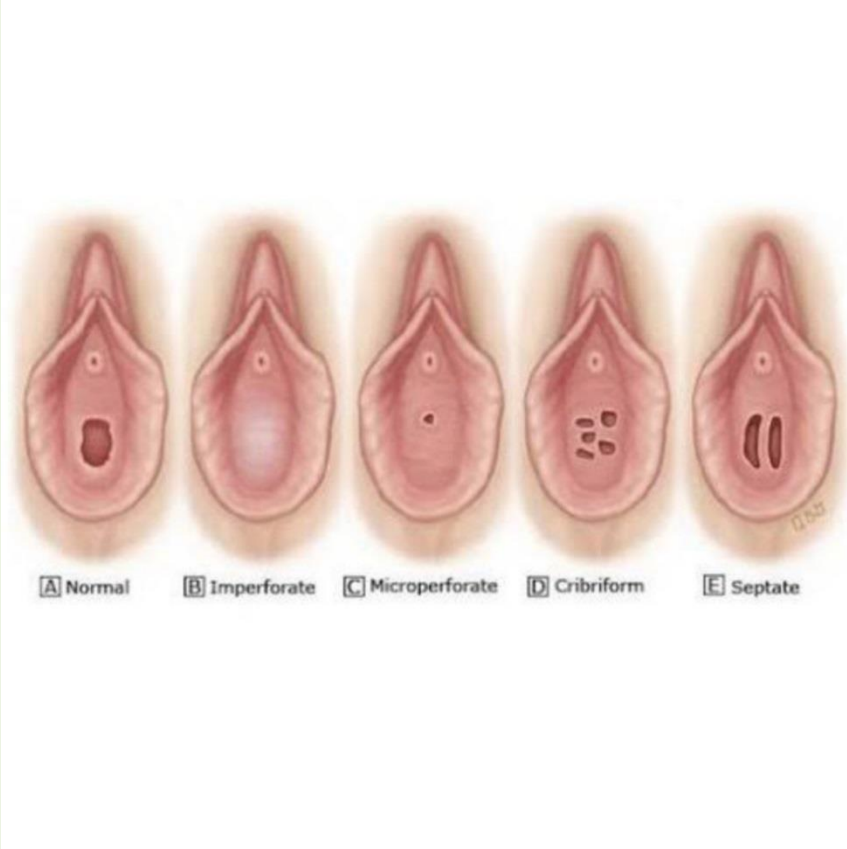
- the abdominal examination is unremarkable when the patient is not menstruating and may include generalized lower abdominal tenderness during menses

- pelvic examination and/or pelvic ultrasound should be performed in all females with severe symptoms
- pelvic examination is also suggested for all sexually active adolescents with dysmenorrhea, even if the symptoms are mild



Differential diagnosis

- Anatomic abnormalities – A history of painful menses commencing at menarche is unlikely to be primary dysmenorrhea because most females are anovulatory for several months to several years after menarche



- vaginal introitus should be visualized and a cotton swab may be inserted into the vagina

- ●Psychogenic contributors – A complete psychosocial history may suggest other causes for abdominal pain such as depression, substance abuse, or stress secondary to abuse or other trauma.

- ●Endometriosis – Menstrual pain that has become progressively worse over time is characteristic of endometriosis, which may present as cyclic or noncyclic pain.

- ●Pelvic inflammatory disease – Adolescents who have had pelvic infections (eg, gonorrhea, chlamydia) may develop adhesions that result in pelvic pain, especially during menstruation.

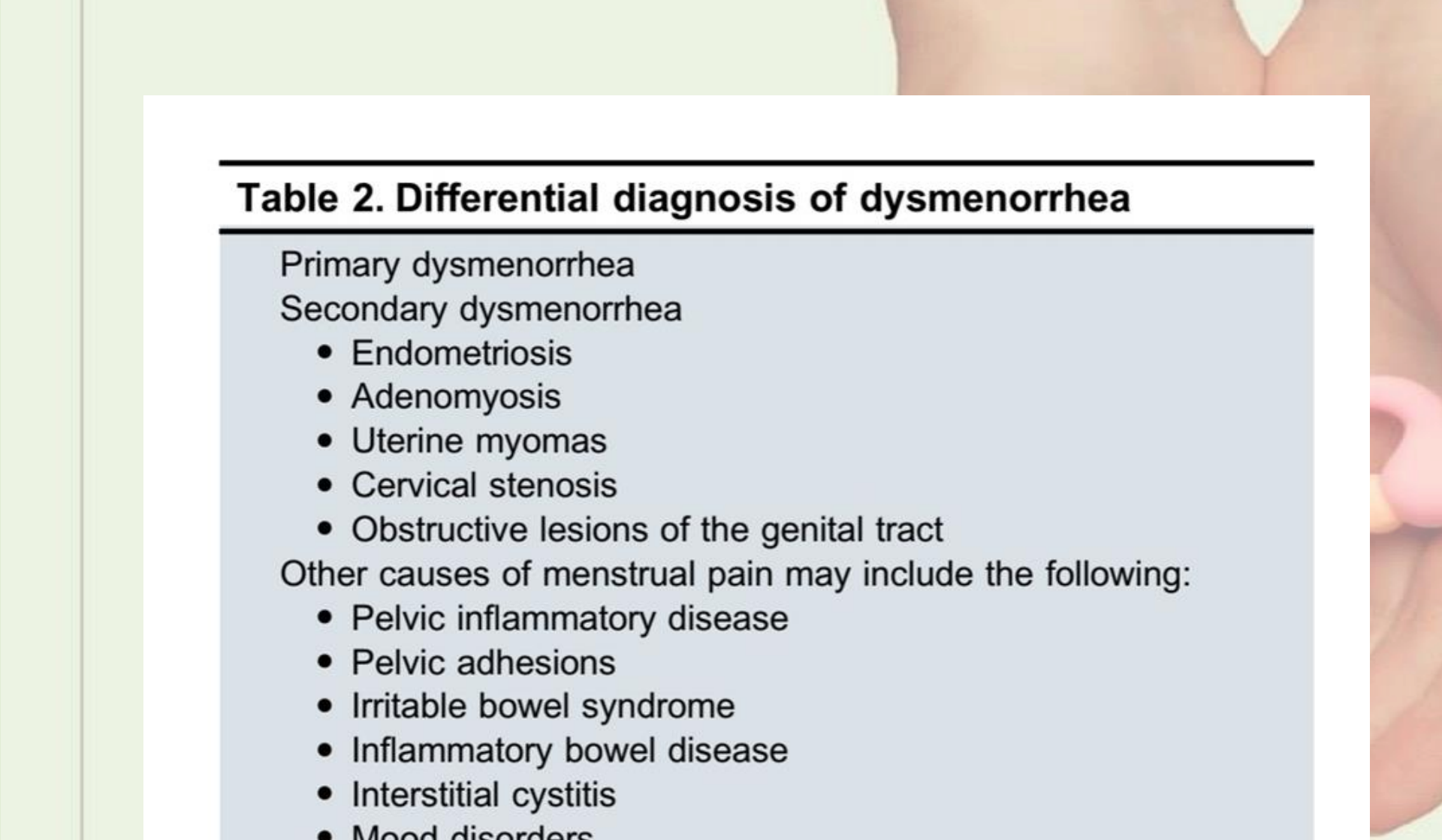


Table 2. Differential diagnosis of dysmenorrhea

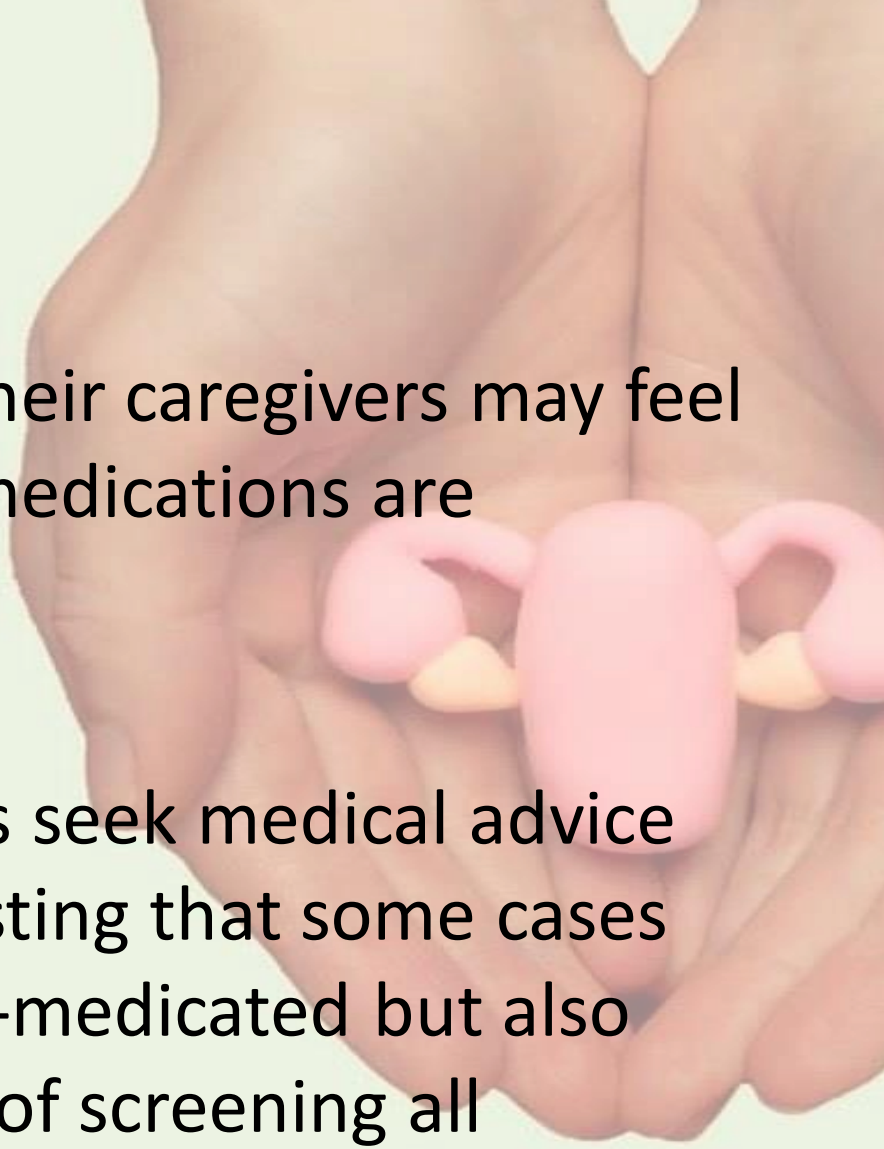
Primary dysmenorrhea

Secondary dysmenorrhea

- Endometriosis
- Adenomyosis
- Uterine myomas
- Cervical stenosis
- Obstructive lesions of the genital tract

Other causes of menstrual pain may include the following:

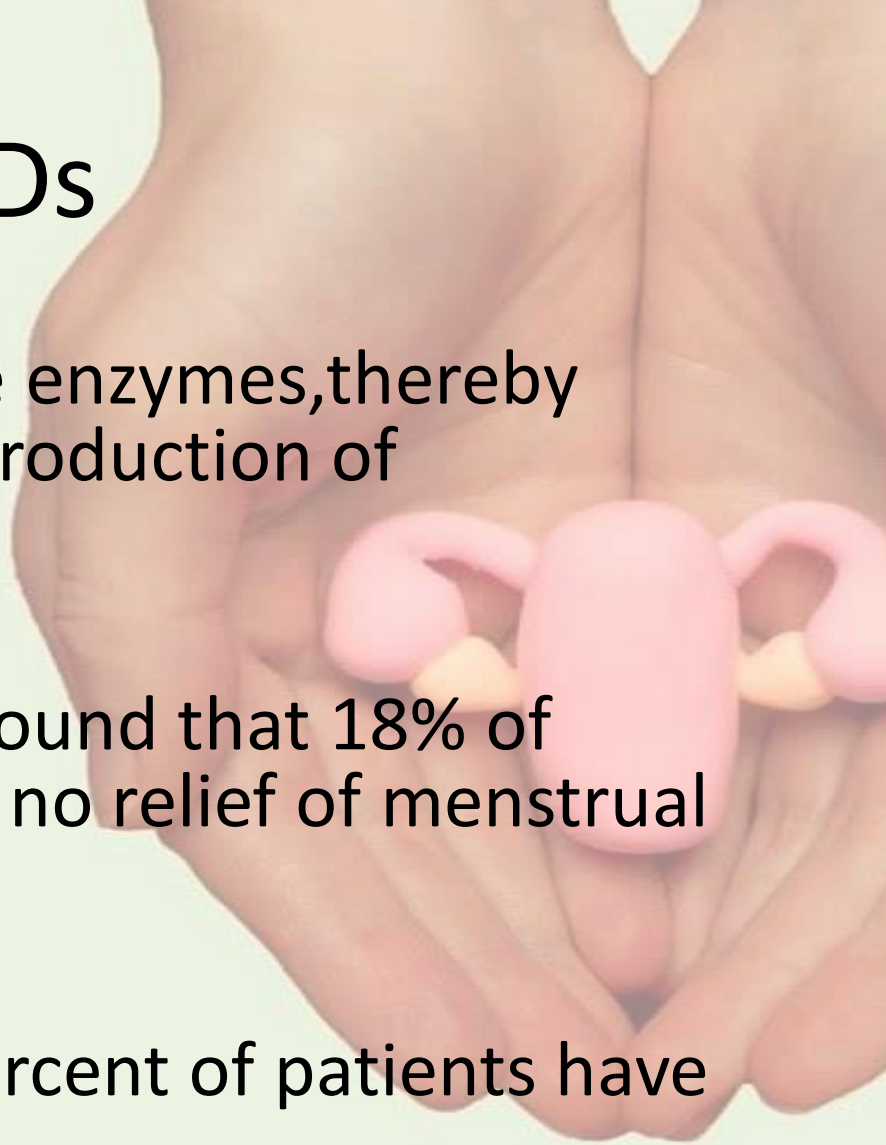
- Pelvic inflammatory disease
- Pelvic adhesions
- Irritable bowel syndrome
- Inflammatory bowel disease
- Interstitial cystitis
- Mood disorders
- Myofascial pain



- Adolescent patients and their caregivers may feel that pain is ’normal’ and medications are unnecessary

- only 15 percent of females seek medical advice for menstrual pain, suggesting that some cases are mild or effectively self-medicated but also signifying the importance of screening all adolescent females for dysmenorrhea

NSAIDs



- inhibit the cyclooxygenase enzymes,thereby inhibiting the peripheral production of prostaglandin
- 51 different clinical trials found that 18% of women report minimal or no relief of menstrual pain with NSAIDs.
- approximately 70 to 90 percent of patients have effective pain relief

Recommended dosing

- starting with an initial loading dose followed byregular, scheduled dosing up to the recommended daily maximum.

- To be most effective, patients should take NSAIDs 1–2 days before the start of the menstrual cycle

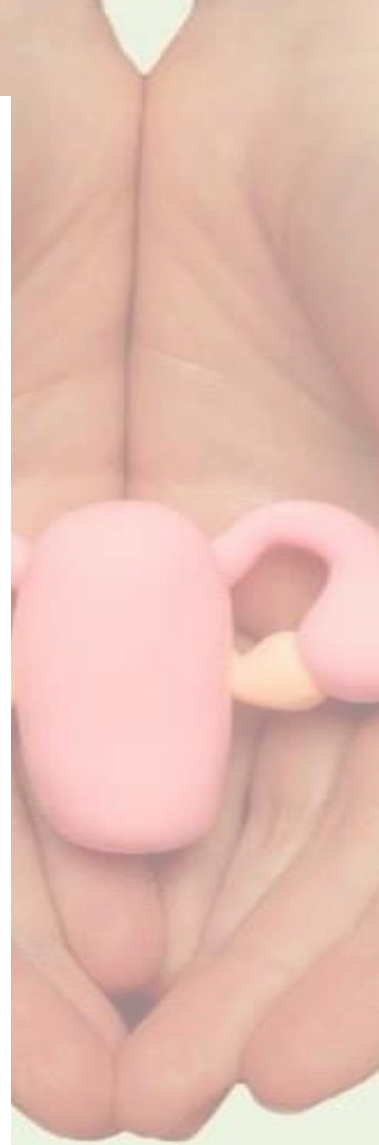
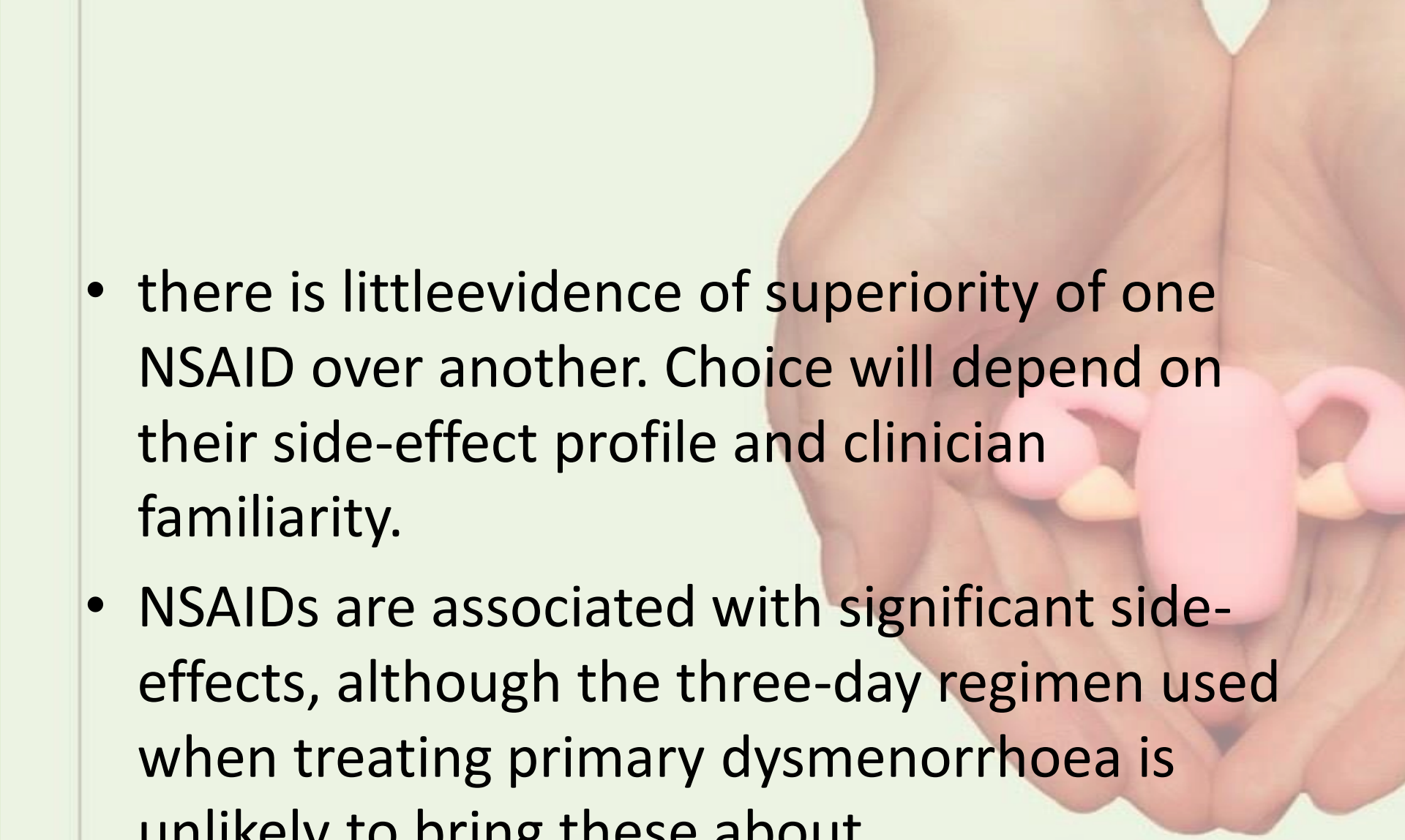


Table 1

Suggested nonsteroidal anti-inflammatory drugs dosing regimen for primary dysmenorrhoea.[2]

Medication	Dosage
Ibuprofen	Loading dose 800 mg, followed by 400–800 mg every 8 h as needed
Naproxen sodium	Loading dose 440–550 mg, followed by 220–550 mg every 12 h as needed
Mefenamic acid	Loading dose 500 mg, followed by 250 mg every 6 h as needed
Celecoxib	Loading dose 400 mg, followed by 200 mg every 12 h as needed



- there is littleevidence of superiority of one NSAID over another. Choice will depend on their side-effect profile and clinician familiarity.
- NSAIDs are associated with significant side-effects, although the three-day regimen used when treating primary dysmenorrhoea is unlikely to bring these about

- If one agent does not work, consider trying a different one.

Acetaminophen

- analgesic that that acts as a weak cyclooxygenase inhibitor in the presence of high peroxide concentrations present in inflammatory tissues.

- Acts centrally and produces analgesia by raising the pain threshold

Hormonal

- Oral contraceptives
- transdermal skin patches
- vaginal rings
- injectable progestogens

Oral contraceptives

- Inhibition of ovulation and reduced volume of endometrium at the time of menstruation reduces the amount of prostaglandins produced, thereby relieving menstrual cramps

- They may also be appropriate for" first-line" therapy in patients who are sexually active because they prevent both dysmenorrhea and pregnancy

- COC was shown to be significantly more effective when used in a continuous manner

Effect on height

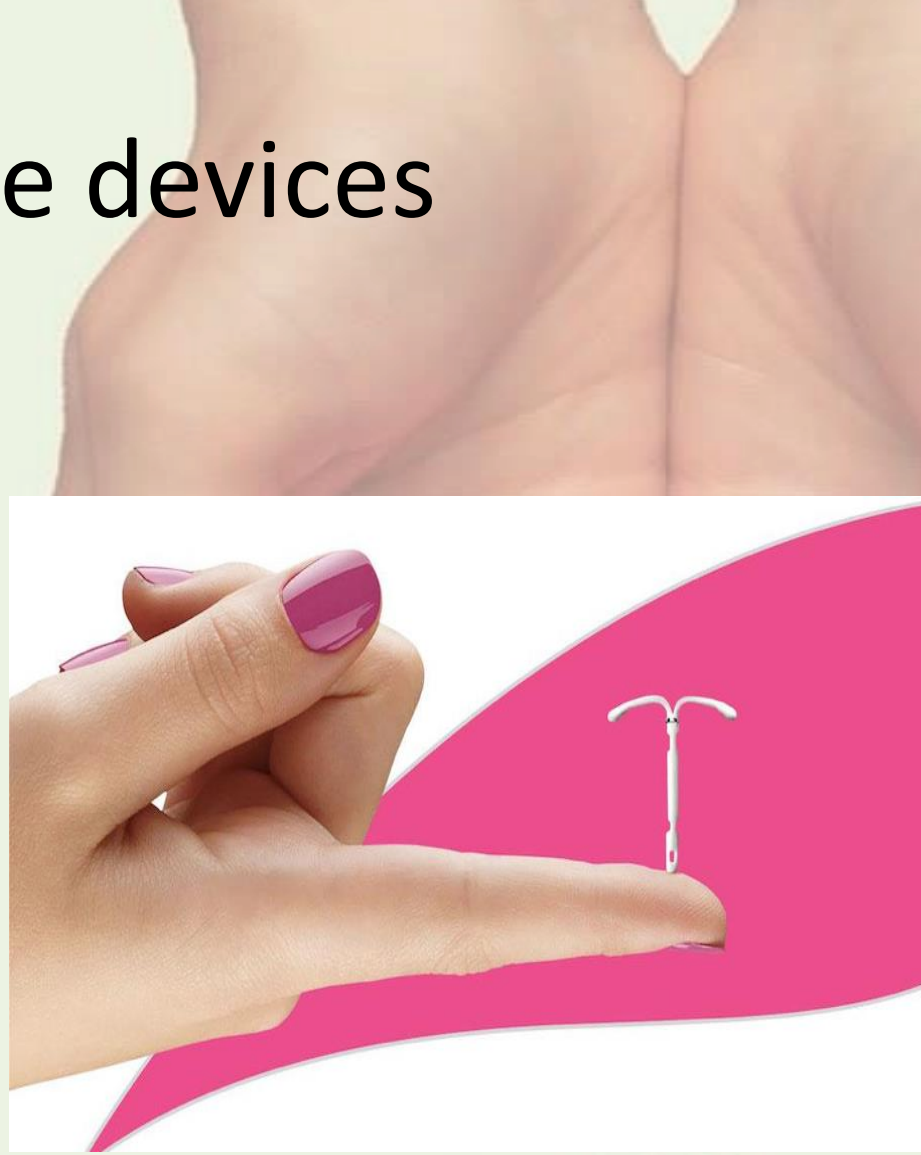
- Adolescents may be concerned that hormonal contraception may cause premature closure of the growth plates, reducing their ultimate adult height. However, by the time of menarche, most female adolescents have already undergone their growth spurt and achieved approximately ≥95 percent of their adult height

Progestin regimens

- Depot medroxyprogesterone acetate works primarily by suppressing ovulation.It can also induce endometrial atrophy. Amenorrhea rates range from 55% at 12 months to 68% at 24 months.

Intrauterine devices

- The levonorgestrel-releasing intrauterine system Mirena has been shown to be associated with improved pain scores and
- In contrast, the copper IUS may be associated with an increase in menstrual pain
- smaller frame levonorgestrelreleasing intrauterine system (Jaydess) is also available for use in younger nulliparous women



Exercise

exercise is unlikely to result in harm, it is reasonable to recommend it even without strong supportive evidence from randomize

Transcutaneous Electrical Nerve Stimulation

- involves the use of electrodes to stimulate the skin at various frequencies and intensities in an attempt to diminish pain perception
- it may be a useful alternative for women unable or unwilling to use NSAIDs

Acupuncture

- evidence supporting acupuncture is inconsistent and unreliable

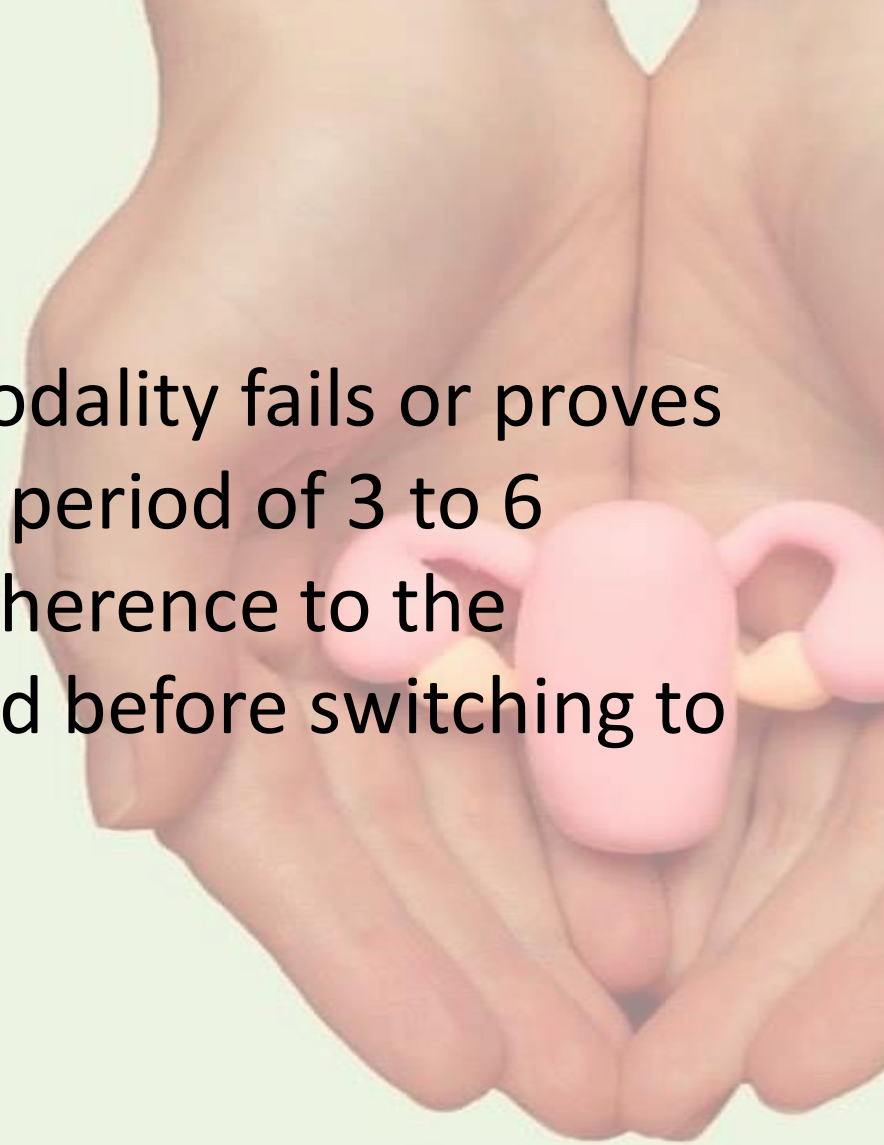
Topical Heat

- Heated pads applied to the lower abdomen were superior to placebo and comparable to ibuprofen for pain relief.

- Faster improvement occurred when heat was applied along with ibuprofen compared with ibuprofen alone.

Dietary Supplements

- there was some evidence for the efficacy of
- ginger
- fenugreek(شنبليله)
- fish oil
- fish
- oil plus vitamin B
- valerian سنبل طيب
- vitamin B1 alone
- Zataria(آويشن)
- zinc sulphate.

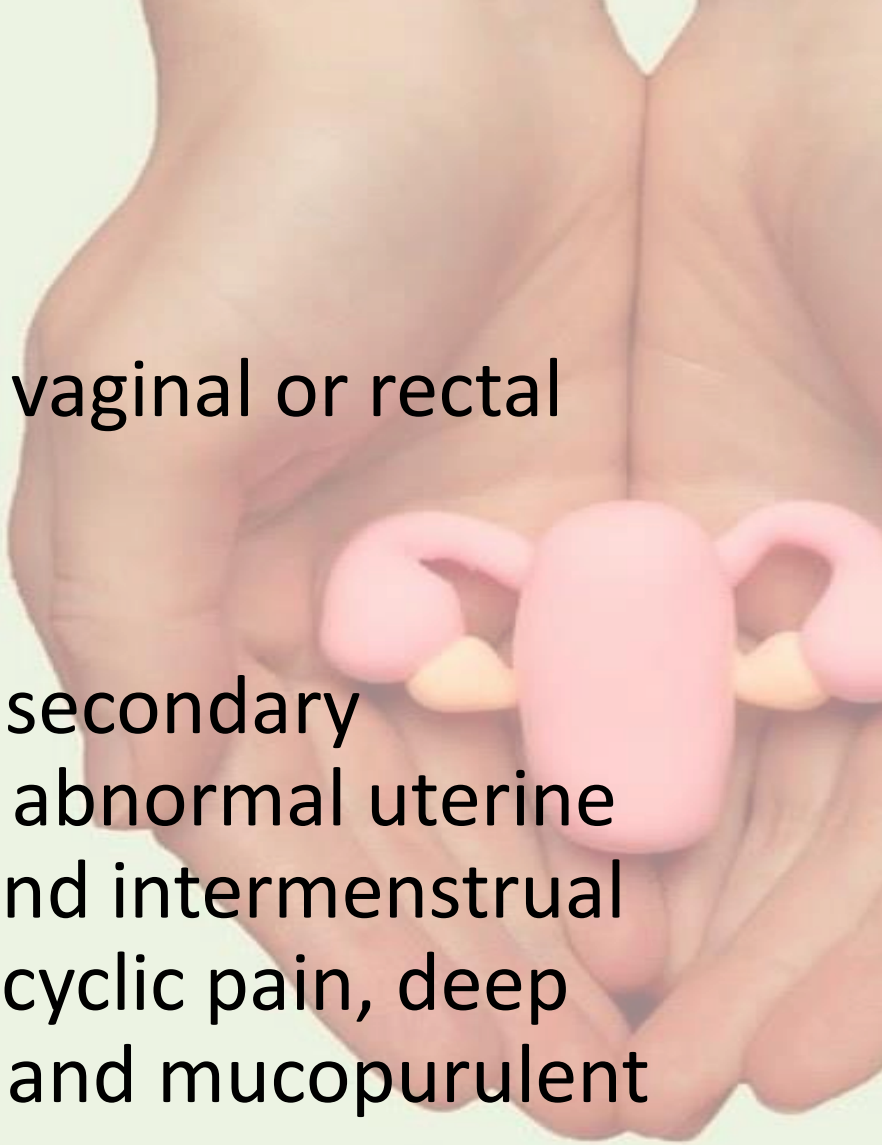


- If treatment with one modality fails or proves to be inadequate after a period of 3 to 6 months, the patient’s adherence to the therapy must be assessed before switching to the other modality

WHAT RED FLAGS TO LOOK OUT FOR?

- Dysmenorrhoea with poor response to nonsteroidal anti-inflammatory drugs (NSAIDs) or hormonal contraception after three cycles

- Patients in whom dysmenorrhoea started more than 2 years after the onset of menarche or who present with progressively worsening dysmenorrhoea

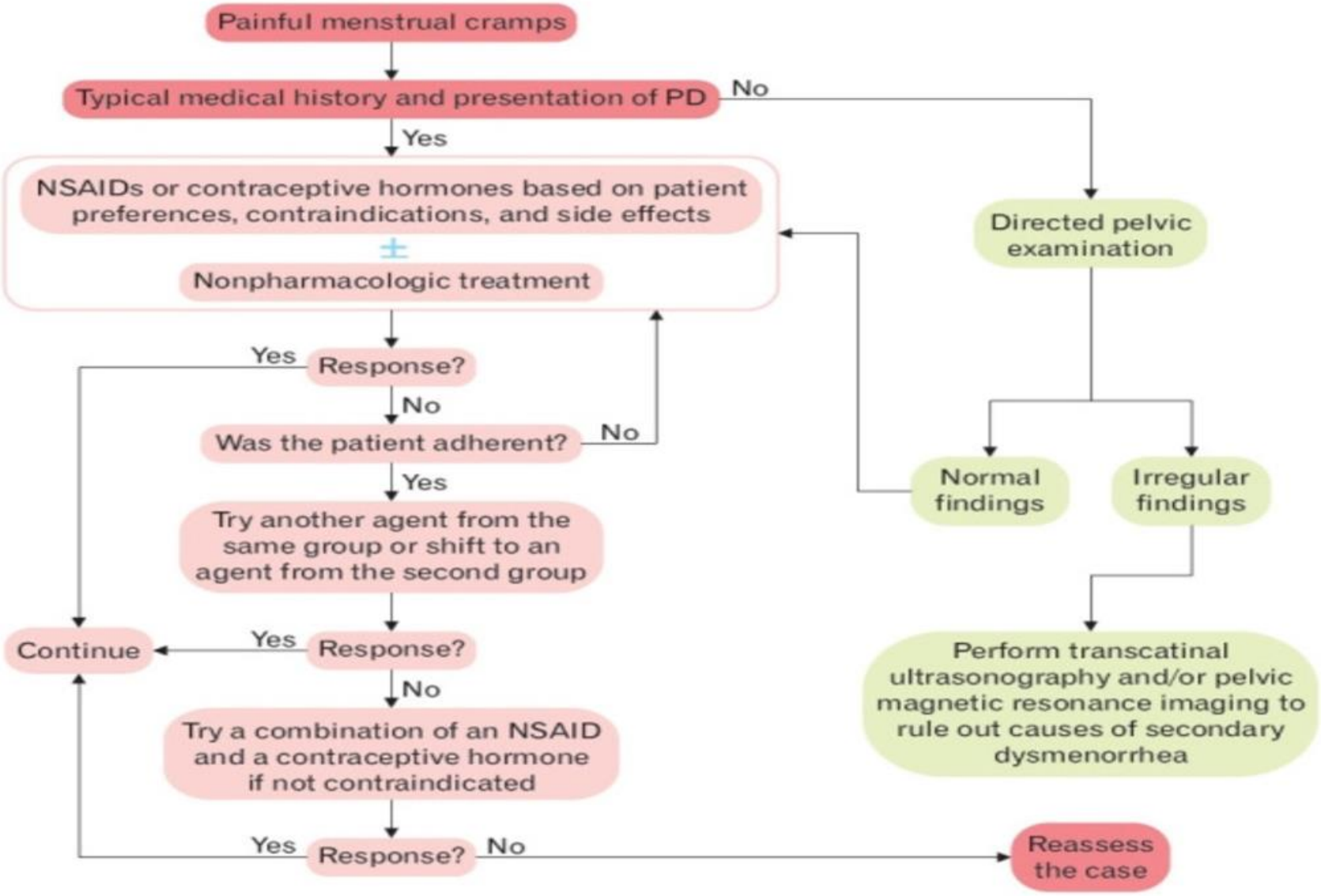


- Pelvic mass or abnormal vaginal or rectal examination

- Symptoms suggestive of secondary dysmenorrhoea, such as abnormal uterine bleeding (menorrhagia and intermenstrual bleeding), mid-cycle or acyclic pain, deep dyspareunia, subfertility and mucopurulent vaginal discharge

- Family history of endometriosis or adenomyosis

Figure. 1.


Painful menstrual cramps
Typical medical history and presentation of PD
No
Yes
NSAIDs or contraceptive hormones based on patient preferences, contraindications, and side effects
±
Nonpharmacologic treatment
Directed pelvic examination
Yes
Response?
No
Was the patient adherent?
No
Yes
Try another agent from the same group or shift to an agent from the second group
Normal findings
Irregular findings
Continue
Yes
Response?
No
Try a combination of an NSAID and a contraceptive hormone if not contraindicated
Perform transcatinal ultrasonography and/or pelvic magnetic resonance imaging to rule out causes of secondary dysmenorrhea
Yes
Response?
No
Reassess the case

surgery

- Prior treatment algorithms suggest that symptomatic patients with NSAID-resistant dysmenorrhea that do not respond to OCPs undergo diagnostic laparoscopic examination
- Recent consensus guidelines suggest trials of levonorgestrel-releasing intrauterine devices, with surgery being the last diagnostic and therapeutic option.


“thank you for your ATTENTION :)”