

P-GU-002 DYSMENORRHEA (MENSTRUAL CRAMPS)

DEFINITION & EPIDEMIOLOGY

- Dysmenorrhea is defined as difficult menstrual flow or painful menstruation. It is one of the most common gynecologic complaints in young women who present to clinicians.
- Dysmenorrhea can be divided into 2 broad categories: primary (spasmodic) and secondary (congestive).(1)
- Globally the prevalence of dysmenorrhea is reported from 15.8% to 89.5%, with higher rates reported in adolescent populations.(2) In India the prevalence in adolescent girls was found to be 79.67%, with 37.96%, suffered regularly from dysmenorrhea.(2)

ETIOLOGY (1,3)

Etiology	Risk factors
<p>The condition can be classified into spasmodic and congestive based on the risk factors.</p> <ul style="list-style-type: none"> • Spasmodic is the condition with excess blood flow during menstrual cycle leading to abdominal spasm, this is also positively confounded with increased length of menstrual cycle. • Congestive type is where physical or chemical barrier lead to obstruction of blood flow during the menstrual cycle 	<p>Risk factors for primary dysmenorrhea</p> <ul style="list-style-type: none"> • Early age at menarche (< 12 years) • Heavy or prolonged menstrual flow • Smoking • Positive family history • Obesity <p>Risk factors for secondary dysmenorrhea</p> <ul style="list-style-type: none"> • Leiomyomata (fibroids) • PID • Tubo-ovarian abscess • Ovarian torsion • Endometriosis

PATHOPHYSIOLOGY

Hormones like prostaglandins, interleukins play major role in the primary dysmenorrhea. The increase in prostaglandins in the endometrium after the fall in progesterone in the late luteal phase results in increased myometrial tone and excessive uterine contraction. In primary dysmenorrhea, there is a highly complex interplay between hormones and mediators, basal body temperature, sleep patterns, and the central nervous system (CNS), the extent of which is not completely understood.

In secondary dysmenorrhea along with prostaglandins number of other risk factors which cause obstruction of blood flow via smooth muscle walls play active role bringing about contraction of smooth muscles.(2, 3)

Signs & Symptoms (4–7)

Specific symptoms	Common symptoms
Cramping pain in the lower abdomen	<ul style="list-style-type: none"> • Cramping pain • Radiating pain • Headache • Vomiting • Tiredness • Dizziness • Diarrhea

History

H/O Present Illness

- Onset of symptoms: when it started usually occurs during just before or during menstruation
- Duration : duration of symptoms
- Character of pain: Pain can be Dull, throbbing or cramping pain in the lower abdomen
- Severity: how severe is symptoms?
- Radiation: Pain radiates back to thighs and lower back
- Aggravating & relieving factors?

Menstrual H/o

- Cycle – duration, regularity
- Marital status
- Obstetrical H/o

Past H/o

- Previous H/o similar illness
- H/o infertility, pelvic injuries?

Personal H/o

- Ask for any h/o contraceptive methods?

Vital Signs

- Body temperature: Normal
- Heart rate: Normal
- Respiratory rate: Normal
- Blood Pressure: Possible hypotension, in case of prolonged, increased bleeding

Patient Examination

Systems	Inspection	Palpation	Percussion	Auscultation	Positive sign
General examination	None	None	None	None	No specific finding
CVS	None	None	None	Routine CVS	No specific finding
RS	None	None	None	Routine RS-	No specific finding
Abdomen	Look for abdominal swelling	Look for tenderness , swelling	None	Bowels sound	Lower abdominal swelling could indicate fibroids, malignancy (REFER) Tenderness+ (PID)
Musculoskeletal system	None	None	None	None	No specific finding
CNS	None	None	None	None	No specific finding

Diagnostic Test (8,9)

Proper clinical history and physical examination are usually sufficient to diagnosis dysmenorrhea

Diagnosis

Dysmenorrhea

Differential Diagnosis

- Endometriosis
- Adenomyosis
- Uterine myomas
- Endometrial polyps
- Pelvic inflammatory disease
- Pelvic adhesions
- Irritable bowel syndrome

Treatment (1–3, 6, 7)

Non-pharmacological Management

- Proper rest

Pharmacological Management

- Tab. Mefenamic acid 500 mg initially, then 250 mg every six hours **PLUS**
- Tab. Ranitidine 150mg BD till symptoms resolve.
- If nausea and vomiting present - Tab. Domperidone 10mg TDS

When to Refer

- Severe pain
- Suspected secondary dysmenorrhea (Swelling and tenderness found during abdomen examination)

References

1. Dysmenorrhea: Practice Essentials, Background, Pathophysiology. 2016 Oct 27 [cited 2016 Nov 30]; Available from: <http://emedicine.medscape.com/article/253812-overview>
2. Agarwal AK, Agarwal A. A Study of Dysmenorrhea During Menstruation in Adolescent Girls. Indian J Community Med Off Publ Indian Assoc Prev Soc Med. 2010 Jan;35(1):159–64.
3. Kural M, Noor NN, Pandit D, Joshi T, Patil A. Menstrual characteristics and prevalence of dysmenorrhea in college going girls. J Fam Med Prim Care. 2015;4(3):426–31.
4. Coco AS. Primary dysmenorrhea. Am Fam Physician. 1999 Aug;60(2):489–96.
5. Lefebvre G, Pinsonneault O, Antao V, Black A, Burnett M, Feldman K, et al. Primary dysmenorrhea consensus guideline. J Obstet Gynaecol Can. 2005;27(12):1117–46.
6. Agarwal K, Agarwal A. A study of dysmenorrhea during menstruation in adolescent girls. Indian J Community Med. 2010;35(1):159.
7. Omidvar S, Bakouei F, Amiri FN, Begum K. Primary Dysmenorrhea and Menstrual Symptoms in Indian Female Students: Prevalence, Impact and Management. Glob J Health Sci. 2015;8(8):135.
8. Osayande AS, Mehulic S. Diagnosis and initial management of dysmenorrhea. Am Fam Physician. 2014 Mar 1;89(5):341–6.
9. Proctor M, Farquhar C. Diagnosis and management of dysmenorrhoea. BMJ. 2006 May 13;332(7550):1134–8.