

DYSMENNORHEA

Dysmenorrhea or painful menstruation can be defined as cramps in the lower abdomen before or during the menstruation which can be so severe that hinder the women's routine activity.

The pain starts from the lower abdomen and radiates to low back and the inner thighs. Other symptoms include nausea, vomiting, diarrhoea, headache or fatigue.

It is the most common gynaecological problem among the women.



CLASSIFICATION

It can be broadly classified into:

1. **Primary dysmenorrhea (spasmodic dysmenorrhea)**, the painful menstruation that is not related to any pelvic disease.
2. **Secondary dysmenorrhea (congestive dysmenorrhea)**, defined as pain during menstruation that is caused to any underlying problems in the uterus such as pelvic inflammatory disease, uterine fibroid, ovarian cyst, etc.

SIGNS AND SYMPTOMS

The clinical features of **Primary Dysmenorrhea** are as follows:

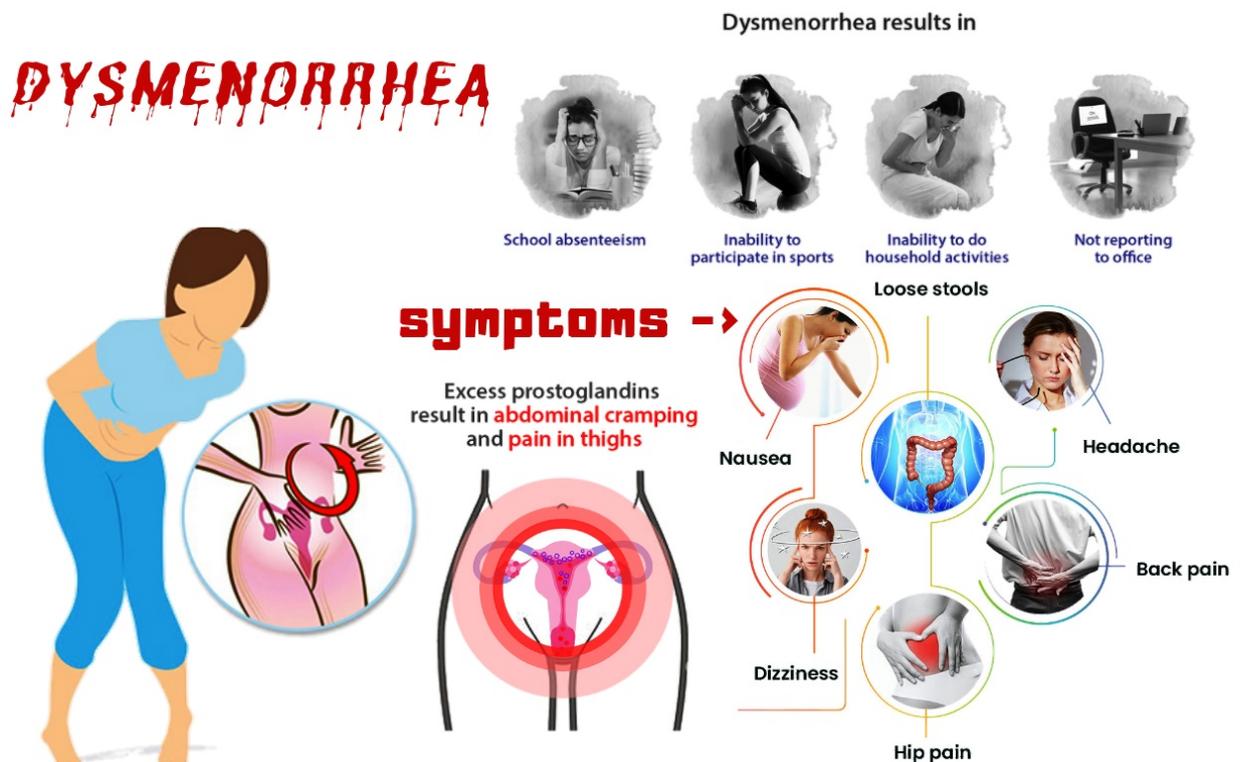
- Onset shortly after menarche (after 6 months)
- Usual duration of 48-72 hours (often starting several hours before or just after the menstrual flow)
- Cramping or labour like pain
- Constant lower abdomen pain that radiates to low back and thigh
- Often unremarkable pelvic examination findings
- The pain may diminishes as the age progress or after childbirth

The clinical feature of **Secondary Dysmenorrhea** is as follows:

- Usually dysmenorrhea begins after 20s or after previously related painless cycles.
- Heavy menstrual flow or irregular bleeding

- Poor response to NSAIDS or oral contraceptives
- Pelvic abnormality on pelvic examination finding
- Infertility
- Dyspareunia (painful sexual intercourse)
- Abnormal vaginal discharge

If the symptoms are severe then vomiting, loose stools, fatigue may often accompany them.



ETIOLOGY

Causes of **Primary Dysmenorrhea** are as follows:

- Excessive level of hormone prostaglandins:-These are the hormones that make the uterus to contract during menstruation and childbirth. The pain results from the release of these hormones when the lining of uterus (endometrium) is shedding off during menstruation. This makes the uterus to contract and decreased blood flow to the uterus.
- Retroverted uterus:-It is a condition where the uterus tilts backwards instead of forward.
- Longer, heavier or irregular menstrual periods.
- Lack of exercise

- Psychological or social stress
- Smoking or alcohol drinking
- Overweight or obese
- A family history of primary dysmenorrhoea.
- Menarche before age of 12

Secondary dysmenorrhea can be caused by a number of conditions, including:

- Fibroids- benign tumours that develop within the uterine wall or are attached to it
- Adenomyosis-the tissue that lines the uterus (endometrium) begins to grow within its muscular walls
- A Sexually transmitted infection (STI)
- Endometriosis-fragments of the endometrial lining that are found on other pelvic organs
- Pelvic inflammatory disease (PID), which is primarily an infection of the fallopian tubes, but can also affect the ovaries, uterus and cervix
- An Ovarian cyst or tumour
- The use of an Intrauterine device (IUD), a birth control method.
- Cervical stenosis-In some women opening of the cervix is small enough to impede menstrual flow causing a painful increase of pressure within the uterus.

DIAGNOSIS

- A proper medical history about the onset, duration and severity of the pain is taken
- Pelvic examination
- Ultrasonography of the lower abdomen
- Laparoscopy

TREATMENT AND MANAGEMENT

Treatment of Primary Dysmenorrhea is directed providing relief from cramping pelvic pain and associated symptoms.

NSAIDS and the combination of oral contraceptives are the most commonly used treatment modalities. They decrease pain by lowering prostaglandin levels thereby reducing intrauterine pressure.

FDA approved NSAIDS are:

- Diclofenac
- Ibuprofen
- Ketoprofen
- Meclofenamate
- Mefenamic acid
- Naproxen

If NSAIDS is contraindicated then acetaminophen can also be taken.

Oral contraceptives are the ideal option to those who do not want to conceive. Some of them are:

- Estradiol valerate plus dienogest
- Ethinyl estradiol levonorgestrel
- Medroxyprogesterone
- Levonorgestrel releasing intrauterine device

Treatment of secondary dysmenorrhea involves correction of underlying organic cause. Specific measures such as medical or surgical may be required to treat pelvic pathological conditions.

PREVENTION

Dysmenorrhea can be prevented by modifying the diet and lifestyle.

Lifestyle changes

- Exercise regularly
- Have enough sleep at least for 6 hours
- Cessation of tobacco smoking
- Avoid stressful situation while approaching menstruation

Dietary changes

- Dietary supplements like vitamin e ,omega 3 fatty acids ,thiamine and magnesium supplements may reduce menstrual cramps
- Low fat vegetarian diet
- Reduce caffeine intake
- Reduce alcohol intake

DYSMENORRHEA IN AYURVEDA

In Ayurveda all the gynaecological disorders are well explained in a separate chapter called *Yoni vyapath* which consists of 20 gynaecological diseases.

Dysmenorrhea is termed as *Kashta artava* in Ayurveda texts and mentioned not as a disease but as a symptom in many of the gynaecological disorders.

Aggravated *Vata dosha* is the cause for all types of pain in the body. *Apana vata* (subtype of *vata*) which is responsible for normal regulation of menstruation gets disturbed due to some causative factors and *vata* gets vitiated. This causes painful menstruation.

DERIEVATION (NIRUKTI)

Kashtartava can be expressed as *kashtena muchyati iti kashtaartava* i.e. the condition in which *artava* (menstrual blood) is shredded with great difficulty and cause pain.

REFERENCE OF KASHTARTAVA IN AYURVEDA TEXTS

The features of *kashtaartava* are mentioned as symptom in many of the *yonivyapad*. Some of them along with their *lakshanas* (symptoms) are as follows:-

Vatika Yoniroga

When a *vata* constitution women resorts to food and regimen which causes aggravation in *vata* then this *Apana vata* gets aggravated

Symptoms are pain, stiffness, a sensation of ants crawling, dryness around areas near to vagina.

Because of *vata* aggravation there is untimely menstruation which is frothy, thin and ununctuous and is associated with pain and sound

It can be closely related to primary dysmenorrhea

Udavartini Yonivyapad

Due to suppression of natural urges like flatus etc. it moves in reverse direction, the aggravated *vata* (*Apana vata*) instead of normal downward movement moves upward and fills the *yonis* (uterus). This *yonis* pushes the *rajas* (menstrual blood) upwards and fills with pain. The women feel immediate relief from pain when the menstrual blood is discharged. Besides the painful and frothy menstruation associated symptoms are body ache and malaise. This is closely related to primary dysmenorrhea.

Antarmukhi Yonivyapad

When women after heavy meals indulges in sexual intercourse or sleep in improper position then the *vata* situated in reproductive organs gets pressed by food and causes crookedness of cervix or uterus

She suffers from pain caused by the vitiated *vata* near the vagina/uterus i.e. bones and muscles near the pelvic cavity

She also suffers from dyspareunia (pain during sexual intercourse)

This can be closely related to retroverted uterus and cause secondary dysmenorrhea

Suchimukhi Yonivyapad

Acharya Charaka had described this as a congenital disease.

When the pregnant woman indulges in *vata* increasing regimen, *vata* aggravates and, the genital organs of the female foetus in the womb of the mother become narrow or stenosed.

This can be related to the cervical stenosis and cause secondary dysmenorrhea.

Mahayoni yonivyapad

According to Acharya Charaka, this condition is caused when the women indulges in sexual intercourse in uneven bed that makes *vata* aggravates which affects the uterus.

Symptoms are stiffness in the orifice of uterus and cervix, dysmenorrhea, discharge of menstrual blood which is dry and frothy, muscular protuberance in the vagina, pain in the groins, excessive dilatation of the uterus orifice.

This can be closely related to prolapse of uterus (procentia) and cause secondary dysmenorrhea.

Artavakshaya

This is a condition with several features of *vata* vitiation i.e. irregular menstruation, scanty menstrual blood with dysmenorrhea.

This can be closely related to primary dysmenorrhea due to nutritional deficiency.

SAMANYA NIDANA (ETIOLOGY)

1. Mithya Ahara (Improper diet)

Excessive intake of food which aggravates *vata dosha* like *rooksha* (dry), *sheetha* (cold), *khara* (hard) and *guna* (qualities) with *katu rasa* (pungent taste), *tikta* (bitter) and *kashaya* (astringent) predominant food.

Anashana (inadequate intake of food) and *vishamashana* (improper diet).

2. Mithya Vihara (Improper activities)

Excessive *vyayama* (excessive exercise, running, etc.)

Faulty sexual practices

Vegodharana (suppression of natural urges like flatus, micturition, sneezing etc.).

3. *Pradushta artava*

It can be correlated to any fault in reproductive hormones.

4. *Bija dosha (genetic factors)*

Abnormalities in the genes which can affect the function of the reproductive organs.

5. *Daiva (idiopathic)*

Cause due to the sins committed in the previous life.

It can be known as unknown causative factor.

6. *Manasika hetu*

Vata vitiating *chinta* (thinking), *shoka* (grief), etc. that makes psychological stress.

SAMPRAPTHI (ETIOPATHOGENESIS)



UPASHAYA (PACIFYING FACTORS)

- Hot bag fomentation on the lower abdomen during the pain.
- Hot water shower after application of warm oil all over the body.
- Intake of warm and unctuous food and drink.
- Intake of food which are sweet, sour and salty predominant.
- Daily practice of pranayama and yoga.

ANUPASHAYA (NON PACIFYING FACTOR)

- Exposure to cold weather.
- Skipping meals.
- Consuming food which is cold and dry.
- Intake of food which is spicy, bitter, astringent predominant taste.
- Excessive stress.
- Daytime sleeping.
- Keeping awake at night.

CHIKITSA SUTRA (PRINCIPLE LINE OF TREATMENT)

As *vata dosha* is the main cause for all *yonivyapad*, the treatment should be directed towards the vitiated *vata* and eradication of the cause. The principles of treatment can be subdivided into:-

SHODANA (PURIFICATION THERAPY)

Snehana (Oleation) :

Bahya Snehana: External oil massage with *vata* pacifying oil like *Bala taila*, *Dhanwanthara tailam*, sesame oil, etc., *Abyantara Snehana*: intake of *traivrita sneha*

Swedana (fomentation) with *ksheera* (milk)

Virechana (purgation):

Mild purgation is beneficial for all *yonivyapad*

Trivrit Lehyam is the best because it has *vata anulomana* (downward passage of *vata*) and *sukha rechaka* (mild purgation)

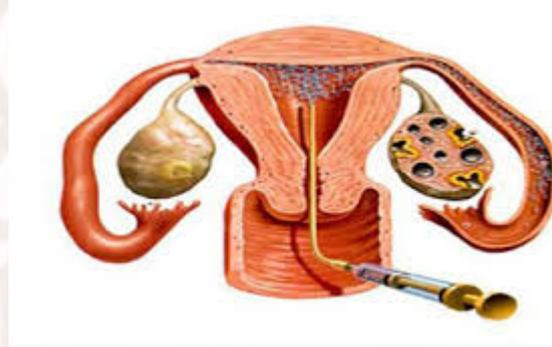
Vamana (emesis)

Basti (enema)

A series of decoction enema and medicated oil enema is given after proper *snehana* and *swedana*. It is most effective treatment to normalize the *Apana vata* localized in the abdomen by entering the *srotas* (channels) by removing the spasm.

Kashaya basti like *Dashamooladi niruha basti* is the best. Also *Anuvasana basti* like *tila taila* (sesame seed oil) and *Sahacharadi taila*, *Dhanwantharam tailam* can be given.

Uttara basti is a procedure for administration of medicines inside of the uterus. This helps to remove the blockage and gives nutrition to the uterus. *Tila taila* or *trivrit taila* are some of the examples.



UTTARA BASTI

SHAMANA (PALLIATIVE TREATMENT)

STHANIKA CHIKITSA (LOCALISED TREATMENT)

It is done using the drugs predominant for the vitiated *doshas*

Kalka, *pichu* (tampon), *yoni prakshalana* (douching), *abhyanga* (massage)

Pichu is done by soaking the tampon with oils like *tila taila*, *Dhanwanthara tailam* and inserted inside the vagina for specific time.

Yoni prakshalana (douching) is done using with *triphala Kwatha*.

Abhyanga over the abdomen with warm *tila taila* few days before menstruation is found to be very effective.

ABHYANTARA CHIKITSA (INTERNAL THERAPY)

Kashayam: *Nyagrodhadhi kashayam*, *Maharasnadi kashayam*, *Sapthasaram Kashayam*, *Dashamoolakatutrayam kashayam*, *Dhanwantharam Kashayam*, *Vizhalveradi Kashayam*, *Kurunthotti kashayam*

Arishtam: *Dashamoolarishtam*, *Jeerakaarishtam*, *Ashokaarishtam*

Gritham (medicated ghee): *Phala sarpi*, *Brhat shatavari gritam*, *Triphaldi gritam*

Choornam (powder): *Hinguwashtaka Choornam*, *Pushyanaga Choornam*

Vati (tablets): *Rajapravaartini vati*, *Nashtapushpantaka rasa*, *Soubhaagyadi vati*, *Dhanwantharam gulika*, *Chandraprabha vati*, *Kanchanara guggulu*

KEY DRUGS

- **LASHUNA** (*Allium sativum*)
- **GINGER** (*Zingiber officinalis*)
- **SHATAVARI** (*Asparagus racemosus*)
- **ALOE VERA** (*Aloe barbadensis miller*)
- **ASOKA** (*Saraca asoka*)
- **FENUGREEK** (*Trigonella foenum*)

HOME REMEDIES

- Sip 2 cups per day of chamomile tea few days prior to menstruation
- Grate a small piece of ginger into warm water
- Take 2-3 garlic cloves in the early morning
- Boil 5 g of Carom seeds/cumin seeds/fenugreek seeds/fennel during the menstruation
- Boil around 1 tsp. of sesame seeds in 60 ml of water and drink every morning few days prior to menstruation
- Intake 5 ml of castor oil in warm milk provides immediate relief from menstrual cramps.
- Prepare a dessert with sesame seeds, cumin seeds mixed with jaggery and ghee and make small balls out of it. Consume it frequently.
- Intake 1 glass of parsley juice twice every day
- Drink cinnamon tea with honey during menstruation
- Intake of dark chocolate after meals proven to relief from menstrual cramps.
- Massage the lower abdomen, thigh with warm sesame oil/castor oil and apply hot bag fomentation
- Avoid vata increasing factors such as travelling, stress, drinking caffeine etc. few days prior to menstruation.
- Drink 6-8 glass of warm water daily
- Always consume food which is warm and easy to digest.

AROMATHERAPY

- Lavender essential oil
 - Clary sage
 - Marjoram
- Mixed with carrier oil such sweet almond oil or grape seed oil. A safe concentration is one drop of essential oil to 1 tsp. of carrier oil.

YOGASASNAS

- *Eka pada raja kapotaasana*

- *Matsyaasana*
- *Janu shirshasana*
- *Dhanurasana*
- *Bhujangasana*
- *Ustrasana*
- *Utthita trikonasana*
- *Virabhadrasana*
- *Supta virasana*

PATHYAAPATHYA (DO AND DONT'S)

PATHYA (DOS)	APATHYA (DONT'S)
oats (cooked), brown rice, wheat, quinoa, barley, millet	corn flour (chips, bread, tortilla), dry oats, rye
Ghee (clarified butter), buttermilk, yoghurt, sour cream	ice cream, frozen yoghurt
avocado, beets, okra, onion, sweet potatoes, tomatoes, spinach, kale, cauliflower, cucumber, seaweed; cooked vegetables	asparagus, brussel sprouts, cabbage, potatoes; raw vegetables should be avoided
baked or cooked apples, apricots, bananas (ripe), blackberries, cantaloupe, cherries, cranberries, dates, figs, grapes, papaya, peach, pomegranate	dry fruits of any kind
green gram, tofu, chickpeas, black beans	kidney beans
lightly roasted nuts, almonds, cashews, pumpkin seeds, sesame seeds, sunflower seeds	peanuts
cane sugar jaggery, maple syrup, honey	refined sugar
chicken, fish	red meat
Regular exercise and pranayama	bread, rolls, pastries, etc.
	caffeine, alcohol intake
	Spicy or oily foods
	stress, cold water shower, suppression natural urges like flatus, etc.

CLINICAL EXPERIENCE

A patient aged of 21 years old came to our clinic complaining of severe cramps and pain in lower abdomen radiating to her lower back on the first day of her menstruation as well as

of headache. The pain would usually last for 1- 2 days. These problems started 3 years after her menarche at age of 15.

Physical examination

- *Prakrithi: vata pitta*
- Appetite: reduced
- Bowel: constipation especially during menstruation
- Sleep: good

Gynaecological history

- Menarche: at the age of 15 years.
- Cycle duration: on every 26-30 days, 5 days of normal flow.

LAB and USG

- Haemoglobin level in blood was 9 gm/ dl, ultrasound examination of the abdomen was negative.

Treatment

The patient was advised to take 2 *Dhanwanthara vati* (sublingual) every 4 hours along with 10 ml of *Dashamoolarishtam* for the pain relief.

For three consecutive cycles she was advised after menstruation

- *Hinguwastaka Choornam* 5gms with hot water morning and evening before food for first 15 days
- *Bala kwatha (kurunthotti kashayam)*-10 ml in 40 ml of water morning and evening before food
- *Matra basti* with *Dhanwanthara tailam* for 8 days every month
- Mild purgation with *Trivrit Lehyam* (10g) once in a month.
- Warm localised massage with *Dhanwanthara tailam* followed by hot water shower few days prior to menstruation.
- She was instructed to strictly follow *Pathya* and *Apathya* especially intake of iron rich food.

After 3 months of medication her periods were on time and without any pain. There was only mild discomfort on the abdomen that lasted only for few hours.

CONCLUSION

Ayurveda has proven to have effective remedies to treat *Kashtaartava* by correcting the aggravated *vata* and removing any obstruction for the free flow of menstrual blood. It is done by administrating the drugs having properties of *vata anulomana*, *vedanasthapana* and *srothorodhana*. Mild purification at least for 3 consecutive cycles is also beneficial. The patient should also strictly adhere to *pathyapathya*.

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