ABSTRACT
Menstruation is a normal process in every woman’s life, but it becomes horrible when it cause severe pain and discomfort. This condition is known as Dysmenorrhea. It can feature different kinds of pain including sharp, throbbing or dull and other associated symptoms nausea, vomiting, headaches, fainting and others etc. This condition significantly interferes with everyday activities for several days each month. According to Ayurveda menstruation is governed by Apana vayu (a subtype of Vata dosha) and due to movement of apana vayu in opposite direction or its disturbance obstruction in the flow of vayu causes severe pain during menstruation called as Kashtarta condition similar to dysmenorrhea. This condition is occurred due to stressful life resulting in mithya ahar-vihar, over exertion & malnutrition which is main cause of this disease. Different diet modulations, purifying therapies including anuvasa & uttar basti, internal & external medications, dinacharya and ritucharya, yogasanas mentioned in ayurvedic classics helps to cures and prevent this condition on regular basis.

KEYWORD: Dinacharya and ritucharya, yogasanas.

INTRODUCTION
Dysmenorrhea refers to the symptoms of painful menstruation or literally translated as difficult monthly flow. It describes the presence of painful lower abdominal cramps, often accompanied by lower back and upper thigh pain which occurs monthly with menstruation.[1]
It is one of the most frequently encountered gynecological complaint amongst adolescents or young women\(^2\) and one of most common complaint in women of reproductive age.\(^3\)

It is very common although the precise incidence is not known, as it frequently goes unreported. It is one of the most common reasons for non-attendance at school or work among young women and while not life threatening, can have a considerable impact on the patients quality of life.\(^4\) A recent systemic review of the world literature on chronic pelvic pain reports prevalence of dysmenorrhea ranging between 17% and 80%.\(^5\) More than 50% of post-pubescent menstruating women are affected by dysmenorrhea, with 10-12% of them having severe dysmenorrhea with incapacitation for 1-3 days each month.\(^6,7,8\)

It is most common in women between the ages of 20 and 24 years, with most of the severe episodes occurring before 25 years of age.\(^9\) Primary dysmenorrhea also occurs more frequently in unmarried women than in married women (61% vs. 51%). In India the true prevalence of dysmenorrhea is not yet clearly established. 33.5% prevalence of Dysmenorrhea among adolescent girls in India was reported by Nag.\(^10\) George and Bhaduri found dysmenorrhea to be a common problem in India with prevalence of 87.7%.\(^11\) Similar finding has been reported by Jayashree and Jayalakshmi in rural married women of Andhra Pradesh.\(^12\) Prevalence studies also have shown several associated factors that increase the risk duration and severity of dysmenorrhea include early menarche, long menstrual periods, body mass index (BMI), smoking and psychological disturbances.\(^13\)

**Classification**

It is classified as.\(^15\)

**Primary dysmenorrhea** also called true dysmenorrhea refers to pain which has no obvious cause. It tends to occur in younger women with no pelvic abnormality, particularly in the first few years after menarche. It mostly affecting more than 50% of women and quite severe in about 10%.

**Secondary dysmenorrhea** refers to pain which arises as a result of underlying conditions. It usually begins in older women in the third or fourth decade.\(^14\) It may be caused by a number of conditions including-

- Fibroids (benign tumors within the uterine wall)
- Adenomyosis, Endometriosis (gynecological disorders)
• Sexually transmitted infections
• Pelvic inflammatory disease
• Ovarian cyst or tumor
• Use of an intrauterine device

It can also be classified as\[^{16}\]

• Congestive dysmenorrhea- due to congestion of pelvis (due to premenstrual syndrome, pelvic diseases etc.)

• Spasmodic dysmenorrhea- occurs mostly during periods due to narrowing of cervix with stricture or hormonal problem. Clots in menses also cause this type of pain.

• Membranous dysmenorrhea- extreme case of dysmenorrhea where patient can see the disintegrated membranes of uterus in bleeding which may be due to chronic inflammation.

• Psychogenic dysmenorrhea- usually occurs after an unpleasant sexual activity or painful condition or fear of sex with lack of sexual knowledge. This type of pain is mostly neurological.

Symptoms
Symptoms of dysmenorrhea can include

• Pain in lower abdomen that can spread to the hips, lower back and inner thighs.
• Pain that is gripping or experienced as a constant ache or a combination of both.
• Typically the pain starts when the period starts or earlier
• The first 24 hours is most painful
• Clots are passed in the menstrual blood.

And associated symptoms include Nausea and vomiting, headaches, digestive problems such as diarrhea or constipation, dizziness, fainting, fatigue, hypersensitivity to sound, light, smell and touch, premenstrual symptoms such as tender breasts and a swollen abdomen which may continue throughout the period, pain continuing after the first 24 hours.\[^{17}\]

Mechanism of Dysmenorrhea
During a women’s menstrual cycle, the endometrium thickens in preparation for potential pregnancy. After ovulation, if the ovum is not fertilized and there is no pregnancy, the built up uterine tissue is not needed and thus shaded. Molecule compounds called prostaglandins
are released during menstruation due to the destruction of the endometrial cells and the resultant release of their contents.\textsuperscript{[18]} Release of prostaglandins and other inflammatory mediators in the uterus cause the uterus to contract. These substances are thought to be a major factor in primary dysmenorrhea.\textsuperscript{[19]} when the uterine muscles contract, they constrict the blood supply to the tissue of the endometrium, which in turn, breaks down and dies. These uterine contractions continue as they squeeze the old, dead endometrial tissue through the cervix and out of the body through the vagina. These contractions and the resulting oxygen deprivation to nearby tissues are responsible for the pain or cramps experienced during menstruation.

**Ayurvedic concept of Dysmenorrhea**

In Ayurveda dysmenorrhea can be considered as Kashtartava. Due to movement of apana vayu in opposite direction or disturbance, obstruction in the flow of vayu may cause severe pain during menstruation called as Kashtartava. It is not separately described as a disease anywhere in Ayurvedic classics, but there are many other diseases in which kashtartava is considered and described as a symptoms, which is explained in below table:

- **Charaka samhita\textsuperscript{[20]}**

<table>
<thead>
<tr>
<th>Kashtartava as a symptom</th>
<th>Disease</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saruka</td>
<td>Vatika yoni vyapad</td>
<td>Ch.chi.30/10-11</td>
</tr>
<tr>
<td>Sashoola</td>
<td>Sannipatika yoni vyapad</td>
<td>Ch.chi.30/14-15</td>
</tr>
<tr>
<td>Sarati</td>
<td>Paripluta and Mahayoni</td>
<td>Ch.chi.30/23-24,36</td>
</tr>
<tr>
<td>Rajah krichchha</td>
<td>Udavartini yoni vyapad</td>
<td>Ch.chi.30/25-26</td>
</tr>
<tr>
<td>Saruja</td>
<td>Vataja Asrigdara</td>
<td>Ch.chi.30/211-213</td>
</tr>
<tr>
<td>Manda rujakarma</td>
<td>Kaphaja Asrigdara</td>
<td>Ch.chi.30/219</td>
</tr>
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- **Sushruta samhita\textsuperscript{[21]}**

<table>
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<tbody>
<tr>
<td>Rajah Krichchha</td>
<td>Udavarta yoni vyapad</td>
<td>Su.utt.38/9-11</td>
</tr>
<tr>
<td>Vedana</td>
<td>Artava dushti</td>
<td>Su.sha.2/5</td>
</tr>
<tr>
<td>Yonivedana</td>
<td>Artava kshaya</td>
<td>Su.su.15/12</td>
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- **Ashtanga samgraha\textsuperscript{[22]}**

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<td>Udavarta yoni vyapad</td>
<td>A.S.Utt.38/36</td>
</tr>
<tr>
<td>Sarujam</td>
<td>Vataja artava dushti</td>
<td>A.S.Sha.1/13</td>
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</table>

- **Ashtanga Hridaya\textsuperscript{[23]}**

<table>
<thead>
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<tbody>
<tr>
<td>Rajah krichchha</td>
<td>Udavarta yoni vyapad</td>
<td>A.H.Utt.33/33</td>
</tr>
<tr>
<td>Sarujam</td>
<td>Vataja artava dushti</td>
<td>A.H.Sha.1/10</td>
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</table>
• **Hatita samhita**[24]

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<tr>
<td>Saruja</td>
<td>Vataja artava dushti</td>
<td>H.S.Tri.48/13</td>
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• **Madhava nidana**[25], **Bhavprakash**[26], **Yogaratnakara**[27]

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<tbody>
<tr>
<td>Rajah krichchha</td>
<td>Udvarta yoni vyapad</td>
<td>M.N.62/2, B.P.Chi.70/7, Y.R.Yoni rog</td>
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**Etiological factors of Dysmenorrhea**

As we know kashtartava is found as a symptom in some yonivyapad and artava vyapad, so general etiological factors of all the yonivyapad and vata prakopaka hetus can be taken here.

These are following mentioned by different acharyas-

<table>
<thead>
<tr>
<th>Charaka</th>
<th>Mithyachara, Pradushtartava, Beeja dosha, Daiva</th>
</tr>
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<tbody>
<tr>
<td>Sushruta</td>
<td>Mithyachara, Pradushtartava, Beeja dosha, Daiva, Pravruddha</td>
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<td></td>
<td>linga purusha atisevana by ruksha durbhala stree</td>
</tr>
<tr>
<td>Vagbhatta</td>
<td>Dushta bhojana, Vishamanga shayana, Bhrisha maithuna sevana, Dushtartava, Apadravya sevana into yoni, Beeja dosha, Darivatah</td>
</tr>
</tbody>
</table>

**Ayurvedic concept of pain related to kashtartava**

Kashtartava is a disease of reproductive tract situated in the pelvic region and this region is considered as the one of the main place of Vata dosha.[28] All the gynecological diseases arise with affliction of aggravated Vata.[29] It shows strong relationship of Kashtartava with Vata dosha by its origin and the system belongs to it. It is also well known that without association of Vata there cannot be pain.[30] Vata is the main responsible factor though other dosha only be present as anubandhi to it. So pain is produced due to vitiation of only Vata dosha or in combination with other doshas.

**Samprapti ghataka**[31]

- **Dosha**- Vata Pradhana Tridosha (Vata- Vyana, Apana; Pitta- Ranjaka, Pachaka; Kapha- as Anubandhita dosha)
- **Dushya**- Rasa, Rakta, Artava
- **Agni**- Jatharagni, Rasagni, Raktagni
- **Srotasa**- Rasa, Rakta, Artavavaha
- **Sroodushi**- Sanga, Vimargagamana
- **Udbhavasthana**- Amapakvashaya
- **Roga marga-** Abyantra
- **Sthana Samshraya-** Garbhashaya
- **Vyakti Sthana-** Garbhashaya

**Management as per Ayurveda**[^32]

As Kashtartava can be considered as a type of artava dushti and a symptom of various yoni and artava vyapad. So **general principles of treatment** given by all acharyas can be drawn as follows-

- All five purifying measures should be used after proper oleation and sudation.
- The purifying measures should be used in proper sequence and in soft (*Mridu*) form and drugs used in these procedures should be according to vitiation of *doshas*.
- After proper cleansing or oleation other measures i.e. Uttarbasti (considered as best among all *shodhana chikitsa*. In this procedure medicines are administered inside uterus, which helps in removal of blockages of channels and provide nutrition to uterus), *anuvasan basti* (oil enema) and *abhyanga* (massage)(both are beneficial in normalizing the flow and direction of *apana vayu*), *parisheka* (irrigation), *pralepa* (ointments) and *pichu* (tampons) etc. should be used.
- The treatment prescribed for disorders of *Vata* should be used.
- Because it do not occurs without vitiation of *Vata*, thus first of all *Vata* should be normalized and then other *doshas*.
- Use of milk and *Virechana* (purgatives) is beneficial.

**Internal medicines**

- *Pushyanuga churna* along with *madhu* (honey) and *tandulodaka* (rice water). (*Ch.Chi.30/90-96*)
- *Vrushakadi churna* (*Ch.Chi.30/56*)
- *Kashmaryadi ghrit* (*Ch.Chi.30/52-53*)
- *Brihat Shtavari ghrita* (*ch.chi.30/64-67*)
- *Bala tail* (*Ch.Chi30/49-51*)
- *Phalaghrita or phalasarpi* (*A.S.Utt.39/81*)
- *Laghuphalaghrita or Triphaladi ghrita* (*Sh.Sam.Madh.9/88-91, B.P.Chi.70/52-53*)
- *Nyogrodhadi kwatha* (*Sh.Sam.Madh.2/113-116*)
- *Maharasnadi kwatha* (*Sh.Sam.Madh.2/90-96*)

[^32]: Reference number
External medicines

- **Pichu** (tampons) soaked with *Mooshaka taila* (oil prepared with juice of meat of rat) (B.P.Chi.70/51)
- **Saindhavadi tail pichu** and **Guduchyadi tail pichu** (tampon) (Ch.Chi30/58-60)
- **Dhatakyadi tail pichu** (Ch.Chi.30/78-82)
- **Palasha niruha basti** (Ch.Si.3/44,45)
- **Shtavaryadi anuvasan basti** (Ch.Si.12/19)
- **Guduchyadi rasayanika basti** (Bhel.Sam.Si.8/39-50)
- **Baladiyamaka anuvasan basti** (Ch.Si.12/19)
- **Shatavaryadi rasayana basti**

Yogasanas[^33]

Yogic practices i.e. *asanas*, *pranayamas*, relaxation and meditation is very beneficial in the treatment of dysmenorrhea. It increases the circulation and flow of vital energy to the reproductive organs and establishes balance among hormones regulating menstruation. Asanas beneficial for this condition are *halasana*, *sarvangasana*, *bhujangasana*, *ardhamatsyendrasana* and *pranayama* like *nadishodhan* and relaxation techniques like *shavasana*.

**DISCUSSION AND CONCLUSION**

Dysmenorrhea or painful menstruation is most commonly reported menstrual disorder and one of the most important causes of interferes with everyday activities of woman’s life. In ayurveda it can be considered as *Kashtartava*, condition occurred due to unbalancing of *Vata dosha* mainly of *Apana vayu* and regulation of *vayu* plays a key role in treatment of this condition. Ayurvedic therapies mainly aiming at balancing of *doshas* through appropriate diet, purification therapies, herbal supplements, yogic activities, meditation as well as nourishing inputs through all five senses.
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