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A REVIEW ON UDAVARTA YONI VYAPADA WITH SPECIAL REFERENCE TO DYSMENORRHEA

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ABSTRACT

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Menstruation, a complex cyclic phenomenon, is an inevitable natural occurrence in any girl's life. Menstrual disorders form a significant proportion of the adult female population. Discomfort during menstruation ranges from mild to severe pain that incapacitate the patient. Mild discomfort occurs in majority of women. A review of studies in developing countries performed by Harlow and Campbell (2002) has explored that about 25-50% of adult women and about 75% of adolescents experience pain during menstruation, with 05-20% reporting severe dysmenorrhoe.^[1] But, only 5–8% seek medical advice. Dysmenorrhoea and pre-menstrual syndrome are the commonest gynecological disorders causing great distress to women every month but still are the least reported symptoms. These are the common

symptoms of cyclic pain and discomfort to the patient. In the 19th century, dysmenorrhoea was believed to be always due to some mechanical obstruction. "Udavarta" is derived from "Vrit" Dhatu by adding two prefixes 'Ut' and 'Aa' meaning a disease characterized by inability to pass Mala, Mutra and Vayu. Hence, it means a disease which has upward circular motion of Mala, Mutra and Vayu which are not eliminated through their natural passages. Thus, *Udavarta* is a disease where vitiated *Vayu* moves in upward direction in circular motion causing symptoms in the female reproductive tract. The disease characterized by painful and frothy menstrual discharge is known as *Udavarta Yoni Vyapada*. Dysmenorrhoea literally means painful menstruation. But, a more realistic and practical definition means painful menstruation of sufficient magnitude so as to incapacitate day to day activities. It is the most common type of cyclic pain.

EYWORDS: Udavartani, Dysmenorrhoea, Painful Contractions.

INTRODUCTION

Menstruation, a complex cyclic phenomenon, is an inevitable natural occurrence in any girl's life. Although symptomless, it can occur with physical, mental and emotional problems. Menstrual disorders form a significant proportion of the adult female population. Dysmenorrhoea and pre-menstrual syndrome are the commonest gynecological disorders causing great distress to women every month but still are the least reported symptoms. These are the common symptoms of cyclic pain and discomfort to the patient. Dysmenorrhoea (Greek) -dis-men-o-rea Dys/Dis-Difficult, bad, painful, disordered, men-month, Rhein- to flow. [2] Thus, dysmenorrhoea means pain or difficulty with menstruation. Dysmenorrhoea literally means painful menstruation. But, a more realistic and practical definition means painful menstruation of sufficient magnitude so as to incapacitate day to day activities. In other words, it may be defined as pain and cramping during menstruation that interferes with normal routine and requires over the counter or prescription medication. It is the most common type of cyclic pain. "Udavarta" is derived from "Vrit" Dhatu by adding two prefixes 'Ut' and 'Aa' meaning a disease characterized by inability to pass Mala, Mutra and Vayu. Here 'Ut' means upward movement, 'Aa' means complete, 'Vrit' means circular movement. Hence, it means a disease which has upward circular motion of Mala, Mutra and Vayu which are not eliminated through their natural passages. 'Ut' + "Avarta" means the upward movement of circle of Vayu i.e. the circular movement of Vayu is upward direction is known as *Udavarta*. Vega vidharana causes the Vayu to move in opposite direction causing Udavart.[3]

Thus, *Udavarta* is a disease where vitiated *Vayu* moves in upward direction in circular motion causing symptoms in the female reproductive tract. The etymology of *Udavarta* is given in *Madhukosha* commentary only. *Udavritta*, *Udavartini*. The disease characterized by painful and frothy menstrual discharge is known as *Udavarta Yoni Vyapada*.

Udavarta yoni vyapada with special reference to dysmenorrhea

The results of epidemiological studies performed over the last 50 years give a variable incidence for dysmenorrhoea. This is due to the fact that pain is a subjective symptom and cannot be assessed accurately by an outsider. Different women react to same pain in different ways. Discomfort during menstruation ranges from mild to severe pain that incapacitate the patient. Mild discomfort occurs in majority of women. 5–10% of girls in late teens and early twenties suffer from severe dysmenorrhoea. 50% of menstruating women suffer from dysmenorrhoea, and 10% are incapacitated for 1 to 3 days each month. But, only 5–8% seek medical advice.

Factors influencing pain

Age:- It affects younger women (18–30 years), but may persist into the 40's.

Occupation:- Groups of students (school girls, college students—who have to do mental work), house wives and women in jobs provide different statistics.

Family history:- A dysmenorrheic mother usually has a dysmenorrheic daughter. There is positive family history in most of the cases.

Marital status:- Marriage may cure dysmenorrhoea by providing happiness and security. It is mostly prevalent in young single women leading sedentary lives.

Psychological factors:- The following factors are implicated:

- Attitude towards menstruation learned from mothers, sisters and friends.
- Unhappiness at home or at work.
- Fear or loss of employment.
- Anxiety over examinations.
- Unsatisfied sexual urge.
- A disharmonious marriage.
- As an excuse to avoid doing something which is disliked.

Social status: High incidence in women of higher social status than in low income group because of varying tolerance to pain. The poor women may have higher pain threshold describing her pain as moderate and tolerable which the rich women may call severe and intolerable.

Acharya Charaka has mentioned that Hetu, Lakshana and Aushadha are the pre-requisites for the diagnosis and treatment of the disease. He further said that the physician must have the prior knowledge of *Hetu/Nidana* of a disease symptoms so as to be able to cure it and do the detailed examination, and be able to prevent its recurrence.^[4]

In this context, *Acharya Vijayrakshita* defined the principle of *Pancha Nidana* which includes *Nidana*, *Purva rupa*, *Rupa*, *Upshaya* and *Samprapti* and helps in the proper diagnosis of the disease.

i) Nidana-Samanya

The different classics have mentioned the vitiation of *Vayu* as the main cause of *Yoni Vyapada* along with other factors. Since, *Udavarta* is also one of these, the factors are also related.

- Charaka has opined that Mithya-achara, Pradusta Artava, Bija dosha and Daiva are the causes of these twenty Yoni Vyapada.
- Chakrapani comments that Mithya-achara includes Mithya-ahara (Abnormal dietetics) and Mithya-vihara, abnormalities of Artava and Bija i.e. either ovum or sperm or both and Daiva (result of wrong done in past life or curses of God. In the absence of any apparent cause, the diseases are said to develop due to curses of God) are the causes of Yoni Vyapada.
- Acharya Susruta says that besides these, a very young woman or a woman having dry body does excessive coitus with Pravriddha linga, then her Vayu gets aggravated and reaches the Yoni causing Yoni Vyapada.
- *Dalhana* adds that *Vayu* here withholds the *Pitta* and *Kapha* already aggravated by their own etiological factors to cause various disorders.
- *Bhela* has included the diseases of *Yoni*, *Garbhashaya* and *Kati* in the diseases caused by vitiated *Vata* in one organ of body (*Ekanga Roga*).
- *Madhukosha* says *Dushta Artava* includes *Raja v*itiated *by Vatadi Doshas a*nd *Bija Dosha* means the *Garbharambhaka* i.e. the defects in the *Bija* (sperm and ovum) of the parents.
- Vagbhata says Bija Dosha refers to the Yoni Arambhaka Bija Dosha of the female at the time of her birth. Considering the description of all the classics collectively the following eitiological factors emerge out.

Factors

- i) Mithya-achara
- ii) Pradushta artava
- iii) Bija Dosha

iv) Daiva

1. Mithya-achara

It includes the *Mithya-ahara* (abnormal or improper dietary habits), *Mithya-vihara* (abnormal made of life or improper life style). Various environmental factors operating either during the embryonic life of the girl also come under this heading.

a) Mithya- ahara

Ruksha, Sheeta dravya, Alpa, Laghu ahara sevana, Asatmya, Atyadhika, Vishama ahara sevana, Adhyashana, Abhojana etc.

b) Mithya-vihara

Abnormal coitus positions, *Pravriddha linga*, use of artificial metal organs (*Apadravya*), *Ativyavaya*, *Atiprajagarana*, *Vishama upchara* (*Shodhan chikitsa*), *Atilanghana*, *Plavana*, *Ati-vyayama*, *Chirkari roga*, *Adharniya vegavarodha*, *Kashtashayana*, *Divashayana*, *Abhighata etc*.

c) Mansika

Chinta, Shoka, Krodha, Bhaya, Lobha, Harsha, Irshya, Tanava etc.

2. Pradushta artava

Pradushta artava here refers to one vitiated by *Vatadi Doshas*, which is expelled abnormally having the features of these *Doshas*.

3. Bija dosha

Various chromosomal and genetic abnormalities come in this group.

4. Daiva

It implies the effect of the single acts of the previous life. It is the common cause of all the diseases. When a specific etiological factor of the disease is not found, then from effect (i.e. manifested disease) one can infer its being caused by *Daiva* or *Karma*. Unknown or idiopathic eitiological factors come in this category.

II) Vishista nidana

The specific cause of *Udavarta Yoni vyapada* is *Vega udavartana*. *Vega* means "to flow". When the natural urges of *Mala*, *Mutra* and *Vayu* are suppressed, they move in the reverse direction causing vitiated *Vayu* to move upwards and fill the *Yoni* causing *Udavarta*. There is *Pratiloma Gamana* of the *Vayu*.

Primary/spasmodic/idiopathic dysmenorrhoea -Primary dysmenorrhoea means menstrual pain without any pelvic pathology.

Patient profile

- Mostly confined to adolescents.
- ❖ It appears within 1-2 years of menarche, when ovulatory cycles are established.
- ❖ Almost always confined to ovulatory cycles.
- Mother or sister may be dysmenorrheic.
- More common amongst girls from affluent society.

General

- i) **Psychogenic causes:-** Women having low threshold for pain, those predisposed to undue fears, tension and anxiety are most susceptible to these psychogenic causes during adolescence. This may explain the disappearance of pain with advancing age.
- **ii) General ill health:-** General ill health like malnutrition, chronic illness may be associated with dysmenorrhoea. It may cause low threshold for pain perception.

Abnormal anatomical and functional aspects of uterus. [5,6]

1. Anatomical

- i) Cervical obstruction:- The pin-point os (stenosis at internal os) and narrow cervical canal commonly associated with acutely ante-verted or retro-verted uterus may cause delay in the passage of menstrual blood and clots.
- **ii) Uterine hypoplasia:-** The condition where uterus remains underdeveloped. Here, the expulsive force is inadequate. Also, the myometrium contains excessive amount of fibrous tissue leading to irrhythmic painful contractions.
- iii) Uterine anomalies:- Unequal development of Mullerian ducts can also cause dysmenorrhoea due to unequal muscular contractions.

2. Functional

i) Uterine hyperactivity:- There is significance of uterine hyperactivity in women with dysmenorrhoea. The women with dysmenorrhoea have increased uterine activity during menstruation and describe the pain as "labour-like". During the reproductive years, the myometrium is structurally and functionally polarized into outer myometrium and a junctional zone (the sub-endometrial layer). Dysmenorrhoeic patients have been found to exhibit profound structural changes is the junctional zone including irregular thickening, smooth muscle hyperplasia which is less vascular than the smooth muscle of normal inner

- myometrium. Thus, dysperistalsis and hyperactivity of the uterine junctional zone are important mechanisms of primary dysmenorrhoea.
- ii) Muscular Inco-ordination:- Spasmodic dysmenorrhoea could be due to inco-ordinate muscle action of the uterus as a whole. There is hypertonus of the circular fibres of the isthmus and the internal os, leading to dysmenorrhoea.
- iii) Inappropriate law of polarity:- Polarity means the co-ordination between the uterus and the cervix. When uterus contracts, the cervix normally dilates. But as there is inappropriate polarity, the cervix fails to dilate when the uterus contracts to expel the menstrual blood. It leads to difficult menstrual discharge.
- iv) Myometrial ischaemia (Angina):- Rapid distension or stimulation of the uterus, increases muscular activity and the blood supply to the myometrium is reduced. Thus, ischaemia of the myometrium and hypoxia produces pain.
- v) Inadequate liquefication of the menstrual blood:- Coagulation occurs in the distal endometrium so as to facilitate hemostasis and prevents excess blood loss. The active fibrinolytic system fibrinolytic agents in the endometrium quickly dissolve the clots to prevent uterine adhesions. Thus, due to deficiency of the fibrinolytic agents, the blood becomes clotted and obstructs the cervical canal. The uterus contracts vigorously to expel out these clots and thus there is severe pain which is relieved with the passage of clot.

3. Endocrine factors^[7,8]

- i. Progesterone:- Dysmenorrhoea is invariably associated with ovulatory cycles. Spasmodic dysmenorrhoea has some connection with progesterone stimulus to the uterus. Progesterone stimulates contraction of the smooth muscle of the cervix and causes narrowing of the cervical canal. It induces high tone in the isthmus and upper cervix which may be the basis of inco-ordinate action of the uterus. Progesterone stimulates the production of prostaglandin (PGF_{2a}) which in turn accentuates pain.
- ii. **Vasopressin:-** In the past, it was shown that vasopressin concentration were higher in women with dysmenorrhoea. A potent vasoconstrictor, Vasopressin, increased prostaglandin synthesis and also myometrial activity directly. It causes uterine hyperactivity, ischaemia and pain. However, a more recent study did not show vasopressin elevations.
- **4.** Nerve pathways:- It has been suggested that muscle spasm in the uterus may be a result of an imbalance of the autonomic nervous control of muscles. An overactive sympathetic

system leads to hypertonus of the circular fibres of the isthmus and internal os. These patients also have other manifestations of autonomic upset—such as bowel and bladder tenesmus.

5. **Prostaglandins:-** Dysmenorrheic women have increased endometrial synthesis of $PGF_{2\alpha}$ and enhanced concentrations of $PGF_{2\alpha}$ and PGE_2 in the menstrual blood. It is associated with an excess of $PGF_{2\alpha}$ in the uterus. The secretory endometrium contains more prostaglandins than proliferative endometrium.

The decline of progesterone levels in the late luteal phase triggers lytic enzymatic action, resulting in a release of prostaglandins. It results in higher uterine tone and high-amplitude contractions causing dysmenorrhoea. Women suffering from dysmenorrhoea have upregulated COX enzyme activity and prostanoid synthatase activity. $PGF_{2\alpha}$ is a potent oxytocic and vasoconstrictor. It increases myometrial contractions and constricts small endometrial vessels to produce ischemia and breakdown of endometrium. Its concentration in menstrual fluid correlates with uterine work in dysmenorrhoea. PGE_2 may increase the sensitivity of nerve endings to pain. The reason for abnormal prostaglandin levels is unknown, although steroid hormones affect its concentration and myometrial contractility.

- **6. Endothelins:-** Endothelins are potent uterotonins in the non-pregnant uterus. They are thought to be involved in the induction of myometrial smooth muscle contraction. Local ischaemia could further increase the expression of endothelins and prostaglandins which further aggravate uterine dysperistalsis.
- **7. Other factors:-** Platelet activating factor (PAF), leukotrienes, Intra-uterine contraceptive device may induce dysmenorrhoea.

Purva rupa:- The symptoms which are present even before the complete appearance of the disease are known as *Purva rupa*.

There is no description of *Purva rupa* of *Udavarta Yoni vyapada*, but if we consider it as a disease caused by vitiated *Vayu*, then it has *Avyakta* or *Aspashta* (undefinable) *Purva rupa*. As, when no *Purva rupa* are mentioned, weak manifestation of *Rupa* are considered *Purva rupa*.

Rupa

The symptoms which are present at the complete appearance of a disease are known as *Rupa*. It is third component of *Pancha nidana*. This is the *Vyaktavastha* of *Shada Kriyakaala*. The *Rupa* or signs and symptoms of *Udavarta* can be described in two groups:-

- i. Pratyatma lakshana Cardinal symptoms
- ii. Samanya lakshana General symptoms
- i. *Pratyatma lakshana:* The features specific to a disease are known as *Pratyatma lakshana*. These are as follows:-
- i. The *Yoni* seized by pain (*Ruka*), initially throws the menstrual blood (*Raja*) upwards, then discharges it with great difficulty.
- ii. The lady feels immediate relief following the discharge of menstrual blood
- iii. Since, in this condition the *Raja* moves upwards or in reverse direction, it is termed as *Udavartini*.
- iv. Acharya Susruta says that the lady has very painful, difficult and frothy menstruation.
- v. *Indu* has added the discharge of clotted blood.
- vi. Yoga Ratnakara has added that difficult discharge of frothy menstrual blood is associated with Kapha.
- ii. Samanya Lakshana Acharya Susruta has mentioned that there are other pains and features of vitiated Vata Dosha. [105]
- i. Vyadha
- ii. Swaapa
- iii. Saada
- iv. Ruka
- v. Toda
- vi. Bhedana
- vii. Sanga
- viii. Angabhanga
- ix. Varta
- x. Tarshana
- xi. Kampa
- xii. Veshtana
- xiii. Kashaayarasta
- xiv. Shoola
- xv. Karshya

- xvi. Karshnya
- xvii. Ushnakamita
- xviii. Nidranasha
 - xix. Alpabala
 - xx. Bhrama

Clinical features

In primary dysmenorrhoea, the pain sensation arises in the uterus and is related to muscle contractions. The cutaneous areas of pain reference are innervated by T_{12} – L_2 nerves which supply abdomen, body and thighs.

Symptoms

- **1.** *Onset:* The pain usually begins a few hours before or just after the onset of menstruation and may last for 48 to 72 hrs.
- **2.** *Nature:* The pain is colicky in type (Similar to labour)
- **3.** *Site*: The pain is confined mainly to the lower abdomen (Hypogastrium).
- **4.** *Radiation:* It is radiated to inner and anterior aspect of thighs and back.

There is low backache which never extends below the knee and back of leg.

Associated features:-

During an acute attack, the patient looks drawn, pale, may sweat and faint. Patient may have nausea, vomiting, diarrhoea, and bladder tenesmus.

History

- ❖ Initial cycles after menarche are painless.
- \diamond Dysmenorrhoea appears 2 4 years after menarche.
- Menstrual cycle is a little irregular.
- ❖ The amount lost during each period is less than the average.
- Occasionally, patients give a history that the severe pain is relieved by the passage of a clot.

Signs

- 1. On examination, the vital signs are normal.
- 2. There is no upper abdominal and rebound tenderness.
- 3. There might be tenderness in the hypogastrium during acute attack.

- 4. Bowel sounds are normal.
- 5. Pelvic organs are normal.

Diagnosis

- 1. Primary dysmenorrhoea is diagnosed on the basis of history and presence of a normal pelvic examination.
- 2. Confirm the cyclic nature of pain.
- 3. It is necessary to rule out any underlying pelvic pathology.
- 4. Cervical studies and a complete blood count with an ESR may be helpful to rule out pelvic diseases.

CONCLUSION

Dysmenorrhoea is the commonly found gynaecological condition which affects the quality of life in many young girls and women during luteal phase of mensturation. Dysmenorrhoea when present as a complaint without association of any other pathology is called as a Spasmodic or Primary dysmenorrhoea. In Ayurveda the condition in which Artava leaves the body with great difficulty and the pain is termed as 'Udavarta'. According to etiological factors and the clinical features given for Udavarta (painful menstruation), it can be classified into primary (spasmodic) and secondary dysmenorrhoea. Nidana Poorva rupa and Rupa of Udavartha yonivyapat can be well explained as causative factors, etiopathogenesis and clinical features of Spasmodic dysmenorrhoea. Charaka while describing Udavartha says that "arthavesa vimukthe tu tat kshanam labhate sukham" which means an immediate relief of pain following the discharge of menstrual blood, this is the characteristic feature of spasmodic dysmenorrhoea. Other description by Acharyas like Udavartha, Rajaso gamanadurdwam, Badha raja, Samanthath varthanam vayo (irregular uterine contractions) establishes between the similarity Udavartha and spasmodic dysmenorrhoea. Vegodavarthana, which leads to Pratiloma gati of Apana vata and Rajas which is the reason behind Udavartha yonivyapath. All Acharyas has same opinion that, every Yonirogas occur due to vitiation of Vata, and thus correction of Vata should be delt first. This review suggests that painful menstruation find its role as a sole symptom in Udavarta yoni vyapat. "Arthave sa vimukthe tu tat kshanam labhate sukham" mentioned by Charaka acharya which means an immediate relief of pain following the discharge of menstrual blood, denotes spasmodic type of dysmenorrhoea.

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