



A REVIEW ARTICLE ON AARTVA AND AARTVA CHAKRA W.S.R. TO MENSTRUATION CYCLE

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ABSTRACT: -

Women are the foundation of a family's overall health. The phrase Healthy women, Healthy world signifies that women are the guardians of family health; they play an essential role in sustaining the health and wellbeing of the community. A significant physiological aspect of womanhood is Artavachakra, or the menstrual cycle, which defines her identity as a mother. The idea of Garbhotpatti is likened to the Ankurotpatti of plants. For any crop to grow and develop properly, four essential conditions must be met: Proper Rutu (Season), Proper Kshetra (cultivated land), Proper Ambu (Water supply), and Proper Beeja (Uncontaminated seeds). Among the four critical factors for Garbha—Rutu, Kshetra, Ambu, and Beeja—the woman is accountable for two vital elements: Kshetra and Beeja. The time most conducive for conception in females is referred to as Rutu Kala, also known as the fertile period. Rutu (the period of conception) lasts for 12 days when Artava is present. The term Artavachakra denotes a wheel or cycle that operates continuously. In Ayurveda, menstrual blood is regarded as an updhātu of rasa dhātu. Typically, menstruation begins around the age of twelve and concludes at fifty in women. It is a cyclical bleeding that occurs monthly for three to five days. Normal menstruation is currently characterized as cyclic bleeding that takes place from the uterine corpus between menarche and menopause. The artavachakra (menstrual cycle) is categorized into three phases: rajastravakala, ritukala, and rituvyatitkala, which correspond to menstruation, proliferation with ovulation, and the secretory phases of the endometrium. The ritukala refers to the fertile phase of a woman's endometrial cycle. It is essential to examine the various stages of the menstrual cycle in modern science alongside Ayurveda to identify any potential similarities. Numerous synonyms are used to refer to artava, including Rutu, Raja, Shonita, Lohita, Pushpa, and Bija. The unique properties of menstrual blood, along with its physiological and pathological variations, are detailed in Ayurvedic texts as Shudhartava and Artavdhushti, respectively, which aid in assessing a woman's hormonal health. Shudhartava is vital for sustaining a woman's reproductive well-being. If the characteristics of Artava deviate from the Shudhartava standards outlined in classical texts, it may indicate Artavdushti or menstrual irregularities such as dysmenorrhea, menorrhagia, amenorrhea, and uterine conditions like endometriosis,

adenomyosis, and uterine fibroids, which can contribute to infertility. Ayurvedic literature discusses various aspects of Artavdushti, including color, texture, specific odor, volume, and other related features such as the type of pain experienced.

KEYWORDS: - Artavachakra, Garbhotpatti, Artavdushti, Artava, updhatu, ritukala.

INTRODUCTION: -

Ayurveda, known as the "science of human life," focuses on an individual's physical, physiological, and psychological well-being. It encompasses all facets of human existence. This science is fundamentally materialistic, relying on philosophical and empirical truths that our ancient sages discovered and validated through their experiences, reasoning, and insights. The contemporary challenge lies in keeping it aligned with the progress of the so-called modern scientific era. In Ayurveda, holistic health signifies a condition where the dosha, agni, dhaatu, mala, and all bodily functions are in a state of balance. Life (Ayu) is understood as the union (Samyoga) of the body, senses, mind, and the reincarnating soul. Ayurveda is regarded as the most revered science of life, offering benefits to humanity in both this world and the next. The primary objective of Ayurveda is to preserve the health of individuals while also addressing any pathological issues. To effectively treat any illness, an understanding of the disease's pathology, which forms the foundation for diagnosis and treatment, is essential.

Menstruation is a natural process that occurs monthly in women. For women, maintaining menstrual health is crucial to overall well-being, as most women experience menstruation between menarche and menopause, which can significantly affect their physical, emotional, and social health. Various types of Pariksha are referenced in classical texts for diagnosing diseases, including gynecological disorders. In particular, Artava, or menstrual blood, serves as a key indicator for underlying pathologies in gynecological conditions. While the term Artava encompasses menstruation, menstrual blood, ovum, and ovarian hormones in the context of Ayurveda, Artavadushti is primarily used as a diagnostic tool for a range of menstrual disorders.

Normal menstruation is characterized as periodic bleeding from the uterine corpus occurring between menarche and menopause. It can be defined through four primary domains: frequency, regularity, duration, and the volume or heaviness of the bleeding episodes. The menstrual cycle of a woman is tightly regulated by endocrine, autocrine, and paracrine factors that influence ovarian follicular growth, ovulation, luteinization, luteolysis, and endometrial remodeling. Additionally, a psychological aspect may come into play when couples trying to conceive encounter infertility. Therefore, gaining an understanding of the menstrual cycle in women can aid in identifying the mechanisms that govern ovarian and uterine functions. The term "Artava" has two meanings: one is "Bahirpushpa" and the other is "Antahpushpa." Both Bahirpushpa and Antahpushpa are interconnected. Bahirpushpa represents the outward manifestation of the proper functioning of Antahpushpa, which is essential for conception. The Artavachakra (Menstruation Cycle) begins at the age of 12, referred to as Rajopravatti (Menarche), and the cessation of the Artavachakra (Menstruation Cycle), known as Rajonivritta (Menopause), occurs around the age of 50.

In Ayurveda, a significant physiological aspect of womanhood related to Garbhotpatti is Ritukala, which plays a crucial role in defining her identity as a mother. Therefore, it is essential for every woman to comprehend the concept of artavachakra. An irregular menstrual cycle is often linked to reduced fertility. Ayurveda elaborates on the artavachakra (menstrual cycle) through three distinct phases: Rajastrava Kala, Ritukala, and Rituvyatitkala. The artavachakra is a cyclical process that occurs monthly during a woman's reproductive years. In Ayurveda, the term aartva (menstruation) is not consistently represented by a single term; instead, it encompasses various synonyms such as Rutu, Raja, Shonita, Lohita, Pushpa, and Bija. The artavachakra is a cyclical process that recurs every month in the reproductive age of women. Classical texts utilize different terms to refer to menstrual blood and ovum, including Rutu, Raja, Shonita, Lohita, Pushpa, and Bija. Additionally, the influence of Doshas on menstruation is acknowledged, as menstruation is regulated by three Doshas: Vata, Pitta,

and Kapha. Shuddha Artava is crucial for conception. Ayurveda is an empirical science grounded in functional understanding, necessitating the interpretation of Ayurvedic terminology in the context of modern science.

MATERIAL AND METHODS: -

Artava: -

Artava is formed from Rasa (Dhatu), with the Rakta referred to as Raja. The term Artava describes the blood that reaches the uterus and is expelled for three days each month, developing in two stages. Hormones travel from the hypothalamus to the pituitary gland, then to the ovaries, and finally to their target organ, the endometrium, via Rasa, which is the plasma. In the endometrium, blood accumulates and is subsequently released during menstruation. Chakrapani elucidates this process using the terms Avirbhava (formation) and Tirobhava (discharge). Initially, Rasa provides nourishment to the endocrine glands, uterus, and endometrium, while also facilitating the transport of hormones to their target organs. The blood that gathers in the fine branches of the Artavavimocini Dhamani (uterine artery) is expelled during menstruation. Artava is considered Agneya, possesses the qualities of Rakta (blood), contributes to the formation of Garbha (fetus), and is vital for life. The predominant Mahabhuta in this context is Tejas. Ayurveda describes the characteristics of Shudha Artava (pure menstrual blood). According to various Acharyas, the color of Shudha Artava (pure menstrual blood) is described as follows - Gunjaphala Sannibham - Blackish Red, Padma - Pinkish Red, Aalaksannibham - Brownish Red, Indergopsankasm - Bright Red, Shasakasruk Partimam - Red, Ishatkrushna - Slightly Blackish.

Nirukti of Artava: -

The term Artava refers to the cyclical reproductive changes occurring in the female body, known as Stree Sharir. This phenomenon, which takes place at regular intervals, is termed Artava. The term itself encompasses the entire cycle of changes related to female reproductive functions.

Synonyms of Artava: -

In Ayurveda, a single term can have multiple meanings based on its context. The term Artava is applicable to both Masika Rajasrava and Streebeeja. Synonyms include Artava, Raja, Shonita, Asruka, Rakta, Lohitam, Pushpam, and Rudhiram, among others.

- Artava as Streebeeja
- Artava as Masik Rajasrava
- Shonita as Streebeeja
- Shonit as Rajasrava
- Raja as Streebeeja
- Raja as Masik Rajasrava .

Rajasrava: -

Artava is derived from Rasa; however, its nature is not gentle like Rasa, but rather it is characterized by Teja Mahabhuta Pradhan, meaning it is of Agneya nature. Vagbhatta notes that Artava occurs periodically and can be measured in two (Dwi) or three (Tri) Bindu Pramana. In his commentary on the combination of Shukra and Artava, Dalhana describes the nature of Artava as Alpa, Styani bhuta, Sukshma, and Asanchari.

Characteristics of Shuddha: -

The standard Rajasrava described in the text has an inter-menstrual interval of one month, a blood loss duration of five days, and is not accompanied by pain or burning sensations. The expelled blood is neither oily nor excessively scanty or abundant. Its color is akin to the red juice of lac, the red lotus flower, the fruit of jequirity,

or resembles rabbit's blood. Fabric stained with it does not hold the stain after washing; such Artava is termed Shudha.

Varna (Color)-

- Gunjaphala
- Rakta Kamal
- Alaktaka
- Indragopa
- Sashasrika
- Laksha Rasa
- Ishat Krishna

Gandha (Odor)-

- Madhugandhi
- Visrata Amagandhitva

Acharya Sushruta states that the Rakta possesses Visragandha due to Prithivi Mahabhoota, which can similarly be applied to Artava.

Matra (Quantity)-

As per Vagbhata, it is four Anjali. This is why Acharya Charaka has elaborated on the ideal characteristic features. He mentions that the ideal amount is one that neither produces less nor more, is suitable for conception, and does not lead to any pathology during or after each cycle.

Sparsa (Feel)- Anushnasheetam.

Samgathana (Constitution)-

The composition of Artava is also Panchabhautik, predominantly consisting of Prithvi, Jala, and Teja Mahabhootas. Vayu aids in its regular production and flow, while Akasha Mahabhoota provides the necessary space and lightness.

Artavadushti: -

The classics describe eight types of Aartavdushti. The Acharyas have not specifically addressed the causes of these eight menstrual disorders. Kashyap states that undergoing Nasya during menstruation, consuming excessively hot foods, and administering too many medications to Mridukostha patients after Snehana and Swedana can disturb Artava, leading to menstrual issues. Therefore, it can be concluded that Aartavdushti arises from certain factors that lead to Dosha vitiation, along with predisposing elements. The eight types of Artavadoshas are as follows-

1. Vataja

2. Pittaja

3. Shleshmaja

4. Raktaja - Kunapganthi

5. Vatapittaja - Kshina

6. Pittakaphaja - Putipuya**7. Vatakaphaja - Granthibhuta****8. Tridoshaja - Mutrapurishaganthi**

The disturbed Artava lacks Beeja, and its clinical features—such as color and discomfort—correspond with the involved Doshas. Dalhana notes that the clinical features of Artava are similar to those of Shukra. Harita has elaborated on the clinical characteristics and treatment of Vataja, Pittaja, and Kaphaja Aratavadushti in relation to Bandhyatva, but he has not provided details on Aartavadushti. Ayurvedic texts utilize the concepts of Tridosha and Panchmahabhuta, or the 'five great elements.' Everything is made up of Panchmahabhuta, including menstrual blood or Artava, which is also considered Panchmahabhautik, with Tejas being the predominant Mahabhuta. In Ayurveda, Tridosha refers to Vata, Pitta, and Kapha.

According to the imbalanced Dosha, the color and consistency of menstrual blood, or Artava, varies. In the absence of advanced laboratory techniques in earlier times, the patient, referred to as Rogi, was assessed through the following methods -

1. Dashvidha Pariksha (Ten-fold examination)**2. Ashtvidha Pariksha (8-fold examination)****3. Shadvidha Pariksha (6-fold examination)****4. Trividha Pariksha (3-fold examination)**

The examination of Artava (menstrual blood) can be conducted using Shadvidha Pariksha (6-fold examination). We understand the variations in the color, texture, and scent of menstrual blood according to Dosha, under the concept of Artava Dushti (menstrual disorder). Menstrual blood, or Artava, can be perceived and analyzed through the Panchendriya (five senses) framework of Ayurveda. Below is a list of changes in Artava or menstrual blood, resulting from different conditions affecting the female reproductive system.

Vataj Artavadusti -

In Vataja Artava Dushti, the menstrual blood appears reddish, blackish-red, or dark violet. The Artava or menstrual blood becomes thin, dry, frothy, and dispersed (with very small clots mixed in a liquid), excreting slowly and irregularly, accompanied by pain, particularly sharp or piercing pain.

Pittaj Artava Dushti-

In this condition, the color and distress associated with Pitta are evident. The Artava (menstrual blood) affected by Pitta appears yellowish or bluish, lacks oiliness, and emits odors reminiscent of pus, fungus, blood, or a foul smell; the expelled blood is warm and accompanied by a strong burning sensation and heat during its release. Harita has included Dysuria as a symptom and categorized the color as similar to that of the Japa flower, saffron, or blood.

Kaphaja Artava Dushti-

Menstrual blood or Artava becomes disturbed by Kapha, resulting in a white or yellowish discharge that is overly thick, slippery, and oily in consistency. It sinks when placed in water. Harita also notes increased fatigue, drowsiness, stiffness or lack of movement, and urine retention.

Kunapagandhi Artavadusti (smelling like a corpse)-

Rakta or blood is the underlying cause of this menstrual disorder known as Artavadusti. In this state, there is an increased amount of red blood released during menstruation, resembling fresh blood. Furthermore, it is associated with sensations of burning and heat.

Granthibhuta Artavadusti (incomplete liquefaction)-

This condition arises from the disturbance of Vata combined with Sleshma and exhibits characteristics of both Doshas, such as pain from Vata and sluggishness from Kapha.

Putipuya Artavadusti (putrid and purulent)-

The condition known as Putipuya, or Puya Artavadusti, is characterized by putrid and purulent qualities and is caused by Pitta and Kapha. Susruta and Vagbhata assert that Dosas arise from Rakta (blood) with Pitta, although Vagbhata holds a differing view. This menstrual disorder also displays other traits of Pitta and Kapha, including heaviness, fever, and heat from Pitta, along with burning sensations, etc.

Kshina Artavadusti (oligozoospermia)-

This condition is caused by the combination of Pitta and Vayu. The menstrual blood is scant, menstruation is delayed, and there is vaginal pain associated with this ailment. It also exhibits characteristics of both the Pitta and Vata Doshas.

Mutrapurisagandhi Artavadusti (smell like urine and faeces)-

It has characteristics of all three Dosas because it is the result of their vitiation.

Artavachakra-

The term Chakra refers to a wheel or cycle that operates repeatedly. In Stree Sharira, it manifests as vaginal bleeding, commonly known as menstruation, which occurs monthly for reproductive purposes. Artavachakra consists of three distinct phases:

- 1. Rajasrava - lasting 3 to 5 days (Vata Pradhana)**
- 2. Rutu Kala - spanning 12 to 16 days (Kapha Pradhana)**
- 3. Rutuvyatit Kala - occurring 9 to 13 days after Rutu Kala (Pitta Pradhana)**

Acharya Charak has described that purusha is analogous to loka. The specific murtimantabhava (embodiment) present in loka is also found in purusha, and vice versa. Acharyas Vagbhata noted that just as flowers and fruits do not appear in young or old plants, the fragrance is not apparent in budding or decaying flowers or fruits. Similarly, in females, menstrual flow (Raja) and milk (Stanya) are absent before the age of twelve and after fifty. The ovarian changes during the sexual cycle are entirely dependent on gonadotropic hormones FSH and LH, which are secreted by the anterior pituitary gland. During childhood, in the absence of these hormones, the ovaries remain inactive due to minimal secretion of pituitary gonadotropic hormones. Between the ages of 9 and 12, the pituitary starts to release increasing amounts of FSH and LH, leading to the initiation of normal monthly sexual cycles, which typically begin between ages 11 and 15. This transitional phase is known as puberty, and the first menstruation is referred to as menarche. Granulosa cells are thought to nourish the ovum and secrete factors that inhibit oocyte maturation, keeping the ovum in its primordial state during the prophase stage of meiotic division throughout childhood. Following puberty, when FSH and LH from the anterior pituitary gland are secreted in significant amounts, the ovaries develop, and the monthly sexual cycle commences.

Reproduction begins with the formation of ova in the ovaries. In the middle of each menstrual cycle, a single ovum is released from an ovarian follicle into the abdominal cavity, near the open fimbriated ends of the two fallopian tubes. This ovum then makes its way through one of the fallopian tubes to the uterus, where, if it is fertilized by sperm, it implants and develops into a fetus, along with a placenta and fetal membranes, eventually growing into a baby. Once the fertilized ovum implants in the uterus, the artavachakra (menstrual cycle) ceases due to a blockage in the artava srotas. This obstruction causes the artava to rise, forming the apara (placenta),

while the residual components of artava (Estrogen, Progesterone, Oxytocin, and human chorionic gonadotropic hormone) move upward to nourish the breasts and prepare for milk production. This artava plays a crucial role in maintaining conception, organogenesis, and breast development.

Rajastrava kala (menstrual phase): -

Typically, menstruation begins around the age of twelve and concludes by the age of fifty in a healthy woman. The menstrual blood, which accumulates in the endometrial layers of the uterus over the course of a month from two uterine arteries and partially from the ovarian arteries, appears slightly black and discolored, and is expelled through the vaginal opening by apana vayu. This discoloration is attributed to the onset of necrosis in the endometrium, particularly affecting the blood vessels. Normal menstruation is characterized by the absence of stickiness, burning sensations, or pain, lasting for five days, and the volume is neither too scant nor excessive. Its natural color is reminiscent of the fruits of *Abrus precatorius*, the red lotus flower, the hue of the indragopaka insect, rabbit blood, or liquid shellac, and it does not stain clothing. At the conclusion of the monthly ovarian cycle, menstruation is triggered by a decrease in estrogen and progesterone levels, particularly progesterone. This hormonal reduction leads to diminished stimulation of the endometrial cells, followed swiftly by the involution of the endometrium to approximately 65% of its former thickness. Abundant vasoconstrictor prostaglandins are secreted in the endometrium, causing the mucosal layers to become vasospastic due to the tortuous nature of the blood vessels.

Vasospasm, along with a decrease in nutrients supplied to the endometrium and a reduction in hormonal stimulation, leads to necrosis of the endometrium, especially affecting the blood vessels. Consequently, blood begins to seep into the vascular layer of the endometrium, and over time, the surface layers of the endometrium undergo desquamation. Approximately 48 hours after menstruation begins, the bleeding sites emerge where the necrotic outer layers of the endometrium detach from the uterus, at which point all surface layers of the endometrium have desquamated. Uterine contractions that help expel the uterine contents are triggered by various factors, including the presence of desquamated tissue and blood within the uterine cavity, as well as the contractile properties of prostaglandins or other substances found in the decaying desquamate. There is a range of opinions regarding the duration of the menstrual period, which can last from three to seven days; however, flows can be as brief as one day or extend up to eight days in a normal female. Blood loss can vary from minimal spotting to 80 ml, with an average loss of about 30 ml. Acharya Sushruta has advised against engaging in sexual intercourse during the first three days of menstruation, as it may lead to various complications for the fetus, ranging from incomplete development to the death of the newborn.

Ritukala (preovulatory phase)-

In a typical 28-day menstrual cycle, ritukala refers to the period from the conclusion of menstruation to the beginning of the secretory or luteal phase. The length of Ritu kala can range from twelve to sixteen days, and it may extend throughout the entire month if the Yoni, Garbhashaya, and Artava are in a healthy condition. Occasionally, Ritukala may occur without menstruation. The commentator Dalhana has noted that during the sixteen days of ritukala, the cervix of the uterus remains constricted for the first three days and the last day, making fertilization impossible during this time. Consequently, the effective duration of ritukala is twelve days. Additionally, the seeds deposited during this phase are likely to result in conception, which is why it is referred to as Ritukala. Throughout this period, the pituitary gland begins to secrete increasing amounts of FSH and LH. Both FSH and LH act on their ovarian target cells by binding to specific receptors in the cell membrane. This activation enhances the secretion of estradiol and promotes the growth and proliferation of cells. The ritukala period encompasses the Follicular Phase and Ovulation of the ovaries, as well as the proliferative phase of the uterus. Acharya Sushruta has described certain characteristics that develop in a ritumati woman during ritukala. These characteristics include a full and vibrant face, moist body, teeth, and mouth, a desire for male companionship, enjoyment of romantic tales, and drooping of the belly, eyes, and hair, along with twitching in the arms, breasts, pelvis, navel, thighs, and gluteal areas. During this time, the uterus (os) of the woman is open,

marking the optimal period for conception, also known as the fertile period. However, once ritukala concludes, the uterus (os) of the woman closes similarly to how a lotus flower closes at the end of the day.

The Follicular Phase refers to the period from the end of menstruation to ovulation. Following puberty, the anterior pituitary gland begins to secrete significant amounts of FSH and LH, which stimulate the ovaries to develop 5-12 follicles. These hormones facilitate the transformation of primordial follicles into preantral follicles, then into antral follicles, and finally into mature (preovulatory) follicles. The days that span from the end of menstruation to ovulation are collectively known as the follicular phase. After puberty, the ovaries, along with 5–12 follicles, start to mature as the anterior pituitary gland produces large quantities of FSH and LH. These hormones promote the maturation of primordial follicles into preantral and then mature (preovulatory) follicles, following the antral stage. Each month, typically only one follicle achieves full maturity, while the remaining follicles undergo atresia. This atresia occurs because the rapidly growing follicle secretes high levels of estrogen. Through a negative feedback mechanism, the elevated estrogen levels act on the hypothalamus, which in turn reduces the secretion of FSH from the anterior pituitary. The atresia phase is crucial as it generally allows only one follicle to grow sufficiently each month to ovulate, preventing multiple births from a single pregnancy. The largest follicle is given the chance to mature into a fully developed follicle due to its inherent positive feedback effects.

In a typical female sexual cycle, ovulation consistently occurs 14 days after the onset of menstruation. Although Ayurveda does not explicitly define the concept of ovulation, it can be inferred through the understanding of the time required for the conversion of rasa into subsequent tissues. Acharya Sushruta noted that the transformation period of rasadhatu into sukra dhatu is approximately one month. Within this month, rasa dhatu transforms into sukradhatu in males and into artava in females. This raja/artava, which develops over the course of a month, can be regarded as ovulation. The final stages of follicular development and ovulation are contingent upon LH. Without LH, the follicle does not progress to the ovulation stage. The anterior pituitary releases LH at a significantly increased rate during this period, elevating it by 6–10 times. LH facilitates the transformation of granulosa and theca cells into progesterone-secreting cells, while the release of estrogen begins to diminish. A preovulatory surge of LH is essential for ovulation to occur. The proliferation phase takes place within the uterus, during which the endometrium (the uterine lining) thickens. The uterus regenerates the lining that was shed during the previous menstrual period in response to the estrogen released by the follicles, while the ovaries focus on developing the egg-containing follicles. The endometrium is at its thinnest during menstruation and gradually thickens throughout this phase until ovulation takes place. This process enables the uterus to create a suitable environment for a potential fertilized egg to implant and grow.

Ritu vayatitakala: -

In a typical 28-day menstrual cycle, the rituvayatitakala refers to the period from the conclusion of ovulation to the beginning of menstruation. This phase lasts approximately 14 days. During this time, the yoni (OS) of women remains in a constricted state, preventing sperm from entering. It is akin to a lotus flower that closes at sunset. Aside from the described constriction of the yoni, no other physical or psychological changes are noted during this stage. The subsequent phase of the menstrual cycle is the luteal phase, which spans from day 14 to day 28 in a standard sexual cycle. In the initial hours of rituvayatitakala post-ovulation, the remaining cells (granulosa and theca interna) rapidly transform into lutein cells. These lutein cells accumulate lipid inclusions, giving them a yellowish hue, and are referred to as the corpus luteum. The granulosa cells within the corpus luteum produce significant quantities of the female sex hormones progesterone and estrogen, while androgens (androstenedione and testosterone) are primarily generated by the theca cells. Progesterone from the corpus luteum supports early pregnancy if an egg is fertilized. If fertilization does not occur, the corpus luteum degenerates into corpus albicans within 7 to 8 days. In the following days, it is transformed into connective tissue and gradually absorbed over months. Many individuals experience common premenstrual symptoms such

as mood swings, headaches, acne, bloating, and breast tenderness, which result from hormonal fluctuations during the luteal phase.

During this phase, the endometrium prepares to either sustain a pregnancy or break down for menstruation. After ovulation, the corpus luteum releases significant amounts of progesterone and estrogen. In this cycle phase, estrogen promotes slight additional cellular growth in the endometrium, while progesterone leads to considerable swelling and secretory development of the endometrium. Additionally, the endometrial glands become more tortuous, and secretory substances accumulate. One week post-ovulation, the endometrium measures 5 to 6 millimeters in thickness. The main goal of these endometrial changes is to create a highly secretory endometrium rich in nutrients, ensuring suitable conditions for the implantation of a fertilized ovum. The uterine secretions, referred to as 'uterine milk,' nourish the early dividing ovum. Stored substances in the endometrium supply nutrients to the early implanting embryo. Matur ahara-vihara is a prenatal factor influencing the prakriti of a progeny. If a woman engages in dosha aggravating ahara-vihara, it leads to the spread of these doshas within her body. When these doshas affect the shonita (ovum) and garbhashaya (uterus, including fallopian tubes), and if they vitiate parts of the shonita and garbhashaya (genes and chromosomes), abnormalities may arise in the corresponding organs derived from those genes and chromosomes when the woman conceives with partially vitiated shonita and garbhashaya. Similarly, if a part of the beeja (gene of a sperm) is significantly vitiated, it can result in abnormalities in the child.

DISCUSSION: -

In Ayurveda, we utilize characteristics such as color, consistency, odor, and menstrual blood (Artava) to arrive at a diagnosis. The variations in menstrual blood are distinctive to Dosha vitiation and various illnesses. Therefore, from an Ayurvedic perspective, Artava Pariksha, or menstrual blood analysis, is conducted through Panchindriya, which refers to the five senses, and is poised to become a crucial diagnostic and therapeutic instrument. We can now link menstrual disorders, such as Artavdusti, to a range of illnesses based on their prevalent symptoms. Signs of Pittaja Artava Dusti indicate a potential connection to conditions like trichomonas vaginitis, chlamydia trachomatis, chronic pelvic inflammatory disease, neoplasms, and more.

The symptoms associated with Kunapgandhi (the stench of a dead body) Artavadushti (menstrual disorder) are linked to pyometra, as they stem from infections of the genital organs and cancer. Granthi Artavadusti, which involves endometrial hyperplasia (not fully liquefying), Putipuya Artavadusti, a purulent and foul condition that occurs alongside acute endometritis and cancer potentially leading to pyometra, and Ksheena Artavadusti (oligomenorrhea) in cases of oligospermia, as well as Mutrapureeshagandhi Artavadusti, which is associated with fourth-stage cervical carcinoma. Atrophic vaginitis and hypooestrinism are seen in Vataja Yonivyapad. Pittaja Yonivyapad, a gynecological disorder, is characterized by a chronic inflammatory condition in the female genital tract. Kaphaja Yonivyapad is linked to Trichomonal or Monilial vulvovaginitis. Saannipatiki Yonivyapad is afflicted by a persistent infection in the reproductive system.

Ayurveda, known as the 'science of human life', addresses the physical, physiological, and psychological well-being of individuals, encompassing all aspects of human existence. The principles of Ayurveda are designed to prevent disease, its recurrence, and to treat it at its source based on functional understandings. Menstruation is a natural occurrence that takes place monthly in women. Ayurveda provides a comprehensive explanation of menstruation and offers guidelines for conduct during this time. The Ayurveda Samhita includes a detailed account of menstrual blood, yet it lacks descriptions of the menstrual and ovarian cycles. This article aims to bridge that gap by incorporating insights from contemporary modern physiology. The Artavachakra, or menstrual cycle, is categorized into three phases: RajastravaKala, Ritukala, and Rituvyatitkala, which correspond to menstruation, the proliferation phase with ovulation, and the secretory phase of the endometrium.

Furthermore, in Ayurvedic texts, artava (menstruation) is not consistently represented as a singular entity. In various contexts, artava is depicted through different terms, as explained. Several synonyms for artava include

Rutu, Raja, Shonita, Lohita, Pushpa, and Bija. This Artava plays a crucial role in organogenesis, breast development, and conception. Ayurveda is an empirical science grounded in functional understanding, necessitating the interpretation of Ayurvedic terminology in the context of modern science. The menstrual cycle in women is influenced by the hormone levels of the hypothalamus-pituitary-ovarian axis, which regulates ovarian follicular development, ovulation, luteinization, luteolysis, and the remodeling of the endometrium. The ovarian changes throughout the sexual cycle are dependent on the hormones FSH and LH. However, during childhood, these hormones are absent, resulting in inactive ovaries due to the lack of secretion of pituitary gonadotropic hormones. Acharyas Vagbhata also elucidated why the monthly sexual cycle does not manifest during childhood.

CONCLUSION: -

Ayurveda has given various aspects of menstruation than that of modern science which are helpful to spread awareness regarding menstruation. As menstruation is governed by Doshas, their imbalance causes abnormality. Therefore it is necessary to have balance state of Doshas. Ayurveda is a field with a wealth of research. To employ Artavapariksha (the study of menstruation disorders) as a diagnostic or therapeutic tool, additional important research is needed. The consistency, colour, smell and other characteristics of Artava (menstrual disorders) vary throughout diseases. Therefore, it is a simple source to use when diagnosing ailments that are highlighted. Ayurveda provides a comprehensive description of Artava (menstrual disorders) based on Panchindriya Pariksha (examination of senses). However, in the present era, we have much more sophisticated techniques to study the changes in menstrual blood in response to hormonal changes.

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