

YOGA & PRANAYAMA FOR MENSTRUAL HEALTH & INFERTILITY

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ABSTRACT

Artavachakra (menstrual cycle) is an integral part of women in her reproductive life which gives her identity of motherhood. Normal-regular menstrual cycle represents the hormonal and gynecological health of a female reproductive system. Now a days menstrual cycle irregularities are major gynecological problem among female adults in the form of Dysmenorrhoea, Polymenorrhoea, Menorrhagia, Oligomenorrhoea, Hypomenorrhoea and Premenstrual symptoms. In Ayurveda the word "*Artava*" denotes two meanings *Bahirpushpa* and *Antahpushpa*. Both *Bahirpushpa* and *Antahpushpa* are interrelated. *Bahirpushpa* is outward manifestation of appropriate work of *Antahpushpa*, which is necessary for conception. *Ahara Vihara Dosha* and *Manso Abhitap* may affect *Artavachakra*. Modern Science explained that normal and regular menstrual cycle is regulated by proper functioning of Hypothalamo-pituitary-ovarian axis and this axis may get affected by many of the factors like over stress, lack of nutrition, unhealthy lifestyles like lack of physical activities, more use of gazettes, disturbed sleep pattern etc. of our today's lifestyle. This *Artavachakra Vaishmayata* can be minimized with regular practice of *Yoga* and *Pranayama* which has beneficial effects on menstrual cycle by bringing physical and psychological well-being and by balancing neuro-endocrinal axis. *Yoga* especially which increases the blood circulation in pelvic region like *Bhadrasana*, *Gomukhasana*, *Dhanurasana*, *Bhujangasana*, *Pashchimottasana* can help in proper functioning of reproductive organ and thus helps in regulation of menstruation. *Pranayama* directly relieves stress and anxiety issue, by calming our body and mind, improves blood circulation and thus help in regulation in neuroendocrine system and there by helps in infertility.

KEYWORDS: *Bhadrasana*, *Gomukhasana*, *Dhanurasana*, *Bhujangasana*, *Pashchimottasana*.

INTRODUCTION

The physiology of reproductive system of woman is specific to perform many functions like menstruation, achievement of conception, maintenance and expulsion of foetus. These specific physiological changes make her more prone to pathological disorders. Normal-regular menstrual cycle represents the hormonal and gynecological health of a female reproductive system.

In Ayurveda the word "*Artava*" denotes two meanings *Bahirpushpa* and *Antahpushpa*. Both *Bahirpushpa* and *Antahpushpa* are interrelated. *Bahirpushpa* is outward manifestation of appropriate work of *Antahpushpa*, which is necessary for conception.

In Ayurveda, Acharyas has mentioned the *Shudha Artava lakshana* as indicator of healthy and normal reproductive organ in which inter-menstrual period is one lunar month with duration of flow is five days but not associated with pain or burning sensation. The menstrual blood is not unctuous (*Pichhila*), not very scanty or excessive in amount. The colour resembles like the *Gunjaphala*, *Padma*, *Alaktak*, *Indragopa*(an

insect)^[1], *Laksharasa* and *Shasharik*.^[2] Ayurveda has given emphasis on menstrual outflow and their close clinical observation regarding the intermenstrual period, duration of blood flow, colour, amount and various types of odor emitted in the menstrual blood denoted as normal menstruation.

Artava Chakra - The meaning of Chakra means a wheel or a cycle which works repeatedly. In *Stree Sharira* it is seen in the form of bleeding through vagina or the term menstruation, and it occurs in every month for the purpose of reproduction.

The *Artavachakra* is for one masa i.e. Chandramasa (one lunar month) - 28days.

Artavachakra includes following three phases.

1. *Rajasrava* - 3 to 5 days (Dosha pradhanta -Vata Pradhana)
2. *Ritu Kala* - 12 to 16 days (Dosha pradhanta -Kapha Pradhana)
3. *Rituvyatita Kala* -9 to 13 days after Ritu Kala (Dosha pradhanta - Pitta Pradhana)

Ritukala (fertile period) is the phase where *Artava* is formed.

Prathama Atrava Darshana & Artava Nivrutti^[3,4,5] - Acharya have mentioned the *Prathama Rajodarshana* i.e. occurrence of menarche is 12 year and age of *Artava nivrutti* i.e. menopausal age is 50 year.

Acharya Kashyap said the age of *Artava abhivyakti* as the age of *Shukra pradurbhav* i.e. 16 year of age and he further explained that the age of menarche can be influenced by *Vishesha Ahara* and *Arogya*.^[6]

In modern literature menstruation is defined as cyclic physiological uterine bleeding out of shedding of the endometrium due to invisible interplay of the hormones mainly through Hypothalamus – Pituitary – Ovarian- Uterine axis. For this phenomenon to occur in normalcy, the axis must be actively coordinated, positive response of the endometrium towards the ovarian hormones i.e estrogen and progesterone with patent outflow tract. Cyclic menstruation persists throughout the reproductive era of life with an average rhythm of 28±7 days, bleeding for 3-5 days with normal blood loss 20-80ml, average being 35ml.^[7]

Need of Menstrual Health for Conception

Acharya has mentioned there are four major factors *Garbhasambhav samagri* which are essential for *Garbhoptatti* (Conception) i.e. *Ritukala* (fertile period) where *Artava* is formed, *Kshetra* (healthy reproductive organs), *Bija* (healthy sperm & ovum i.e. *Shudhha Artava & Shukra*) and *Ambu* (proper nourishment).^[8]

Acharya Vagbhatta also mentioned “*Hridi*” i.e. normal psychological status is one of the factor for conception.

Acharya charak said “*Soumanasya Garbhadharanam*” i.e. Healthy psychological status is essential for conception.

Artavachakra-vaishamyta – Deviation from the *Shuddha aartava lakshana* is considered as *Artavachakra-vaishamyta* in the form of *Artavadusti*, *Artavakshaya*, *Artavaativrudhhi* etc.

Artava is considered as *Updhatu* of *Rasdhatu* which is made by *Ahararasa* according to *Dhatu Poshan Siddhanta* so basically *Ahara Vihara Dosha* and *Manso Abhitap* may affect *Artavachakra*.

Acharya has also explained that there are four factors which are responsible for *Yoniroga* i.e. *Mithyachara* (Unhealthy Lifestyle), *Pradushta artava* (Menstrual cycle irregularities), *Beeja Dosha* (Chromosomal/Genetic abnormalities), *Daiva prakopa* (Unknown factors).^[9]

In present era due to heavy industrialization, advance technology and urbanization human being indulging in improper food, sedentary lifestyle and stress which is not healthy for constitution of the healthy body and given rise to various lifestyle disorder in which menstrual cycle

irregularities is the most common one. H-P-O axis which regulate the normal menstrual cycle may get affected by many of the factors like overstress, lack of nutrition, unhealthy lifestyles like lack of physical activities, more use of gadgets, disturbed sleep pattern etc. of our today's sedentary lifestyle and given rise to the menstrual cycle irregularities in the form of Dysmenorrhoea, Polymenorrhoea, Menorrhagia, Oligomenorrhoea, Hypomenorrhoea and Premenstrual symptoms are common gynaecological problem which is precursor of infertility.

Stress affects Menstrual cycle & Fertility

- In various research has been demonstrated that the overstress and today's sedentary lifestyle rises the Hydrocortisone(Cortisol) level in body by stimulating the adrenal gland which affects the HPO axis by suppressing the GnRH and thus affects the menstrual cycle and fertility of women.
- Possible cause of infertility in normal reserved and normally responding ovaries is poor perifollicular blood flow throughout the development of ovum. Scanty perifollicular vascularity is responsible for low oxygen tension in follicle so there is reduced phasic oxygen supply to ovum and as a result the ovum which relies from ovary will be hypoxic. Even if such hypoxic ovum will fertilize, that would be result in either pregnancy with chromosomal anomalies or recurrent abortion. Stress causes hypoxic ovulation that ultimately affects the conception.^[10]

Role of Yoga & Pranayama

- Yoga is mind-body technique which involves relaxation, meditation and a set of physical exercises performed in sync with breathing. Being holistic, it is the best means for achieving physical, mental, social and spiritual wellbeing of the practitioners.
- It has been demonstrated in various research articles that regular practice of *Yoga* and *Pranayama* has beneficial effects on menstrual cycle by bringing physical and psychological well-being and by balancing neuro-endocrinal axis.^[11]
- *Yoga* especially which increases the blood circulation in pelvic region and improves digestion like *Bhadrasana*, *Gomukhasana*, *Dhanurasana*, *Bhujangasana*, *Pashchimottasana* can help in proper functioning of reproductive organ and thus helps in regulation of menstruation. More blood flow means more nutrient and oxygen supply to the reproductive organs. This way, constricted vessels are relieved, easing the flow of blood to the pelvic region.
- *Pranayama* directly relieves stress and anxiety issue, by calming our body and mind. Improves blood circulation and thus help in regulation in neuroendocrine system i.e H-P-O & H-P-A axis.

CONCLUSION

Ahara Vihara Dosha and *Manso Abhitap* may affects *Artavachakra* which affects the fertility of woman can be

minimised by practicing *Yoga* and *Pranayam*. The Asan which improves digestion and blood circulation to pelvic region will be helpful in formation of *Artava* and maintaining regular and healthy menstrual cycle. Yogic therapy helps in improving hormonal and biochemical changes related to H-P-O and H-P-A axis in menstrual disorder by lowering the cortisol level in body. Regular practice of *Yoga* and *Pranayam* improve the flow of blood to the lower abdominal region, there by perifollicular blood flow increses thus helps in ovulation (healthy *Beeja* can formed) for conception.

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