

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.084

Volume 11, Issue 4, 792-798.

Review Article

ISSN 2277-7105

RELATION OF OVULATION WITH DAIHIK PRAKRITI A REVIEW **STUDY**

Dr. Deepshikha Petwal*¹, Dr. Shaveta Sawhnev² and Dr. Privanka³

¹MD Department of Kriya Sharir.

²Associate Professor, Department of Kriya Sharir.

³MD Department of Panchkarma.

Article Received on 13 Feb. 2022,

Revised on 06 March 2022, Accepted on 27 March 2022

DOI: 10.20959/wjpr20224-23626

*Corresponding Author Dr. Deepshikha Petwal MD Department of Kriya Sharir.

ABSTRACT

Prakriti is the natural make-up of the three Doshas with which an individual is born. It is inherited by each and every human being right from the time of fusion of gametes. These three Doshas and their predominance forming Prakriti may interfere with the normal human physiology. Ovulation is also a physiological process dependent on the predominance of these *Doshas*. The exact day of ovulation may have a direct or indirect relation with the *Prakriti* of a female. In this modern world many females suffer with irregular menstruation, anovulation, irregular ovulation etc. which may lead to infertility and other

reproductive issues. Thus an attempt is made to review the literatures to find out an exact relation between *Daihik Prakriti* and ovulation as per various *Ayurvedic* scriptures.

KEYWORDS: Prakriti, Ovulation, Aartava, Ritukala, Rajahstrava Kala, Ritumati lakshanas.

INTRODUCTION

The importance of *Prakriti* examination in patient as well as in healthy has been emphasized in Ayurveda. Charaka has mentioned that person should follow different regime according to Prakriti.[1] Shushruta and Kashyapa have suggested that patient should be treated by the physician according to individual Prakriti. [2]

The Prakriti is determined by heredity, family, age, climate, season, time factor and idiosyncrasy. These factors are responsible for individual variation among persons.^[3]

Prakriti Pariksha and Satva Pariksha are the components of Dashvidha Pariksha. [4] The clinical and therapeutic utility of the knowledge of *Prakriti* has been vibrantly described by Charaka where the detailed regime that is to be followed by different Doshaja Prakriti individuals and treatment according predominance of *Doshas* is mentioned.^[5]

CONCEPT OF PRAKRITI

The term *Prakriti* means *Swabhava* or the nature of the individual. Each and every individual in the universe born with some or other physical and mental peculiarities which remain with him throughout the life. Such peculiarities that are acquired by birth are called *Prakriti* or temperament of an individual. [6]

Life begins as a fertilized ovum i.e. by fertilization of ovum by the sperm. Prakriti or temperament is primarily genetic in origin. Sperm and ovum carry with them the constitutions of both the parents. At the time of conjugation, the dominant Dosha of both sperm and ovum constitute the origin of *Prakriti* of an individual.^[7]

CONCEPT OF OVULATION

Prakriti has major role in many physiological variations among the different individuals. In females Aartava or menstrual flow is such an entity which may have association with Prakriti.

According to Ayurveda, Ritumati shows some Lakshanas (physiological and behavioral changes) by which one can identify the women during peak fertility and plan for conception. Woman looks bright, healthy, tendency to have sexual relations, happy and excited during Ritu Kala. These physiological and behavioral changes can be seen in Ritumati according to Ayurveda. Recent research has shown that normally cycling females change physically, behaviorally when they are more fertile. Ovulation is not hidden in humans, there are both physical and behavioral changes in ovulating females which can be detected. The present article explores the Ritumati Lakshanas explained in classical Ayurvedic texts in a scientific way with the help of modern research.

In Ancient Ayurveda Acharya Shushruta has explained about the Ritumati Lakshanas. According to Shushruta Samhita Peena Vadana, Prasanna Vadana, Praklina Atma, Mukha, Nara Kama, Priya Katha, Srasta Akshi, Kukshi Moordhajaam, Sphuratibhya, Shroni, Nabhi, Uru, Jaghana and Sphicaam, Harsha and Autsukya are considered as Ritumati Lakshanas. [8]

In Ashtanga Samgraha also similar views were expressed. The description of similarity between the *Ritumati Lakshanas*^[9] and the functions of estrogen hormone or follicular phase is as follows:

PEENA PRASANA VADANA

The word *Peena* denotes happy/cheerful face. During *Ritu Kala* the women's face becomes attractive according to Ayurveda female facial attractiveness increases during the fertile phase of menstrual cycle. Female face become most attractive to males when the females are most fertile. In young women, estradiol and progesterone affect fluid regulation also along with reproductive functions. Estradiol lowers the operating point for osmoregulation of arginine vasopressin and thirst and increases plasma volume. The cheerful, attractive, symmetrical, fleshy face is one of the signs of follicular phase in females and it may be due to estrogen hormone abundance during that period.

PRAKLINA MUKHA

The oral cavity/gums are moist and healthy during Ritu Kala. [10] Sex hormones are responsible for the healthy periodontium. Sex hormone receptors have been detected in the oral mucosa and salivary glands. There are estrogen receptors in osteoblast and fibroblasts of periodontal tissues which respond to the varying levels of hormones in different stages of reproductive life and thus affect the health of periodontium.

NARA KAMA

In many species females are more sexually attractive to males near ovulation period. Some evidence suggests a similar pattern in humans also. [11] Women appear to be more sexually attracted to men during mid cycle, report more extra pain sexual interest and behaviours at this time.

PRIYA KATHAAM

This particular Lakshana denotes positive/ cheerful/ happy mood during Ritu Kala. According to research work, during ovulatory phase or mid cycle the mood becomes cheerful and pleasant. Positive moods peaked during the ovulatory phase of the menstrual cycle. Priya *Kathaam* denotes the joyful mood of *Ritumati*. [12]

SRASTA KUKSHI, AKSHI MOORDHAJAM

The word 'Srasta' denotes subluxation or laxity or flaccidity or downward displacement. Srasta Kukshi, Akshi Moordhajaam means flaccidity or laxity of the muscles of trunk, eye and head. The menstrual cycle is composed of follicular, ovulatory and luteal phases, each of which has markedly different hormonal profiles. Estrogen, one of the primary female sex hormones, peaks during ovulation and has been specifically studied regarding its relationship to human connective tissue such as tendons, muscles and ligaments are composed of collagen fibers which are packed closely together. The closer the collagen fibers are packed together, the greater the mechanical strength, which influences the strength of the muscles and ligaments.

SPHURATI BHUJA, KUCHA, SHRONI, NAABHI, URU, JAGHANA AND SPICHAAM

The word 'Sphurana' denotes quivering or expansion or shining. Various body parts show Sphurana during Ritukala like Bhuja, Kucha, Shroni, Naabhi. Interestingly all these body parts contains subcutaneous fat depots during fertility period. Due to the underlying excessive subcutaneous fat in the above mentioned body parts shows Sphurana. It has been known that estrogen is a major regulator of adipose tissue development and deposition in males as well as females. Fat accumulation in different depots is sexually dimorphic. Men accumulate more visceral fat, whereas women accumulate more subcutaneous fat and women possess a higher percentage of body fat.

Estrogen promotes the accumulation of subcutaneous fat. Estrogen regulates body fat distribution and facilitates fat mobilization in the visceral depot and fat deposition in the subcutaneous depot.

HARSHA and AUTSUKYA

Both Harsha and Autsukya denotes positive, cheerful mood and also explains sexual receptivity and proceptivity. Positive mood peaks during ovulation period and women showed more interest in men, displayed more flirting, sexually provocative behaviours. Near ovulation, it was found that women walked slower and their gait was rated as sexier. Such behaviours were interpreted as unconscious desires of women near ovulation to reinforce their attractiveness in order to attract more men and to increase their choice of a partner. [13]

DISCUSSION

Prakriti is a unique concept of Ayurveda pertaining to homogenous combination of Shukra and Shonita at the time of conception. The difference of opinion regarding duration of Rajastrav seen in various compendia may be due to Prakriti of female. Doshas are absolute factors for the formation of Prakriti whose prominence changes according to age. Present generation females are facing many problems related to their menstruation like painful menstruation, irregular cycles and irregularity in bleeding patterns etc. in their adolescent age without any specific pathology in their reproductive system which causes many diseases in females.

Prakriti indicates the predominance of natural *Doshas* which may interfere with the normal body physiology. The nature and pattern of all the physiological and psychological processes are dependent on it.

Aartava refers to ovum by some Acharya while Arundatta assumed it as only menstrual flow. Vatsayana clearly mentioned concept of Bahirpushpa and Antahapushpa which means menstrual flow and ovum respectively, in general Aartava is meant for menstrual flow because the appearance Shudha and Dushta Aartava described by many compendia reveals its resemblance with it. Though ancient Ayurveda compendia described Aartava mostly in terms of menstrual flow, they were known about the association of this menstrual flow with normal and abnormal functioning of ovary or reproductive health of a women.

Biological variability is the greatest variability found in universe. The duration of menstrual flow ranges between three to seven days according to different *Acharyas*. Many physiological parameters have influence of *Desha Kala* and environment. Whatever the variations observed in duration of menstrual flow may be because of various geographic and other variations like *Kaal*. The individuals *Prakriti* has major role in many physiological variations among the subjects. *Aartava* or menstrual flow is such an entity which may have association with *Prakriti*.

CONCLUSION

- *Prakriti* and ovulation both are natural phenomena as well as occur essentially.
- All the physiological processes are directly controlled by *Tridosha*.
- Menstrual cycle is physiological periodic process occurring in women for most part of their lifetime.

During Rituchakra in Rajahstrava Kala women display profuse intensity of low back and abdominal pain due to inherent predominance of Vata Dosha, Ritukala period is the most productive phase due to inherent predominance of Kapha Dosha and during Rituvyateeta Kala there is predominance of Pitta Dosha which resulted in anxiety, malaise, sleep disturbance etc.

REFERENCES

- 1. Agnivesha, Charak Samhita, Sutrasthana, Varanasi; Chaukhamba Bharti Academy, Vidyotini Hindi Commentary by Pt. Kashinath Shastri and Dr. Gorakhnath Chaturvedi, 2009; 7: 166.
- 2. Sushruta, Sushruta Samhita, Sharirshtana, Varanasi; Chaukhamba Sanskrit sansthana; Ayurvedatatva Sandipika, Hindi Commentry by Kaviraj Dr. Ambikadutta Sashtri, 2014; 4: 53.
- 3. Agnivesha, Charak Samhita, *Indriyasthana*, Varanasi; Chaukhamba Bharti Academy; Vidyotini Hindi Commentary by Pt. Kashinath Shastri and Dr. Gorakhnath Chaturvedi, 2009; 7: 968.
- 4. Agnivesha, Charak Samhita, Vimansthana, Varanasi; Chaukhamba Bharti Academy; Vidyotini Hindi Commentary by Pt. Kashinath Shastri and Dr. Gorakhnath Chaturvedi, 2009; 8: 765.
- 5. Agnivesha, Charak Samhita, Vimansthana, Varanasi; Chaukhamba Bharti Academy; Vidyotini Hindi Commentary by Pt. Kashinath Shastri and Dr. Gorakhnath Chaturvedi, 2009; 8: 721.
- 6. Agnivesha, Charak Samhita, Vimansthana, Varanasi; Chaukhamba Bharti Academy; Vidyotini Hindi Commentary by Pt. Kashinath Shastri and Dr. Gorakhnath Chaturvedi, 2009; 8: 772.
- 7. Sushruta, Sushruta Samhita, Sharirshtana, Varanasi; Chaukhamba Sanskrit sansthana; Ayurvedatatva Sandipika, Hindi Commentry by Kaviraj Dr. Ambikadutta Sashtri, 2014; 4: 49.
- 8. Sushruta, Sushruta Samhita, Sharirshtana, Garbhavakranti (In Jadavjitrikamji), Chaukhamba Orientalia, 350-351.
- 9. Vridha Vagbhata; Asthanga Samgraha, commentary by indu, Sharirasthana, Putrakamiya adhyaya in Shuvprasad sharma, Chaukhamba Orientalia, 270.
- 10. Suri V, suri V. Menopause and oral health. J Midlife Health., 2014; 5(3): 115-120.

- 11. Haselton MG, Mortezaie M, Pillsworth EG, Bleske-Rechek A, Frederik DA Ovulatory shifts in human female ornamentation: near ovulation, women dress to impress. Hormones and Behaviour, 2007; 51(1): 40-45.
- 12. Rossi AS, Rossi PE Body time and social time: Mood patterns by menstrual cycle phase and Day of the week. Social Science Reesearch, 1977; 6(4): 273-308.
- 13. Tiwari P. text book of Prasuti-Tantra, Ayurvediya Prasuti Tantra evam Stree Roga, Varanasi, Chaukhamba Orientalia publication, 1998; 60-64.