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Shatpushpa a ‘Nectar’ for Multiple Female Reproductive Ailments and a Probable Cure for *Pushpaghni Jataharini* (PCOS)

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ABSTRACT

The functions of female reproductive system as well as its sufferings are comprehensive and should always be concerned with rhythm of whole-body, mind and soul. The endocrine system of female body takes roller coaster ride starting from puberty to end at menopause. Diet, life style and if needful medicinal support plays a very important role for stabilizing this rhythm. Any disorder in dietary habits and life style would ensue or evolve *tridosaprakopa* (abnormality in *vata*, *pitta* and *kapha*). Only those disorders are left for divine help which are not expressing clear interrelation among *hetu* (aetiology), *ling* (sign and symptoms) and *samprapti* (pathophysiology) and lead to an intricate task to decide the *upshaya* (therapeutic effects) and *chikitsa* (treatment) of any particular disorder. *Pushpaghni Jataharini* which now be compared with PCOD/PCOS may be understood as divine wrath. In both cases the aetiology and pathophysiology are still not very clear. Scholars have emphasised on environmental factors (e.g., diet, nutrition, socioeconomic status and geography) which can exacerbate the pathology of PCOS even in cases of genetic origin of PCOS; on the other hand, toxicants evolve from infectious agents and autoimmunity may also play a role. Thus, the cause of polycystic ovarian syndrome is unknown, but studies suggest that a strong genetic component that is either affected by gestational environment, lifestyle factors or both. The age of prevalence of PCOS is 15-40 years i.e., from puberty to reproductive phase of woman.

Key Words *Shatpushpa*, *Pushpaghni jataharini*, PCOS, *Avarana*, *Artava*, *Shukradhatu*

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INTRODUCTION

Acharya Kashyapa while describing *shatpushpa* and *shatavari kalpas* (formulations) in *kalpasthana*, chapter 5 emphasises the effect of both *kalpas* (formulations) equally, not only for all range of *artavavyapada* (menstrual

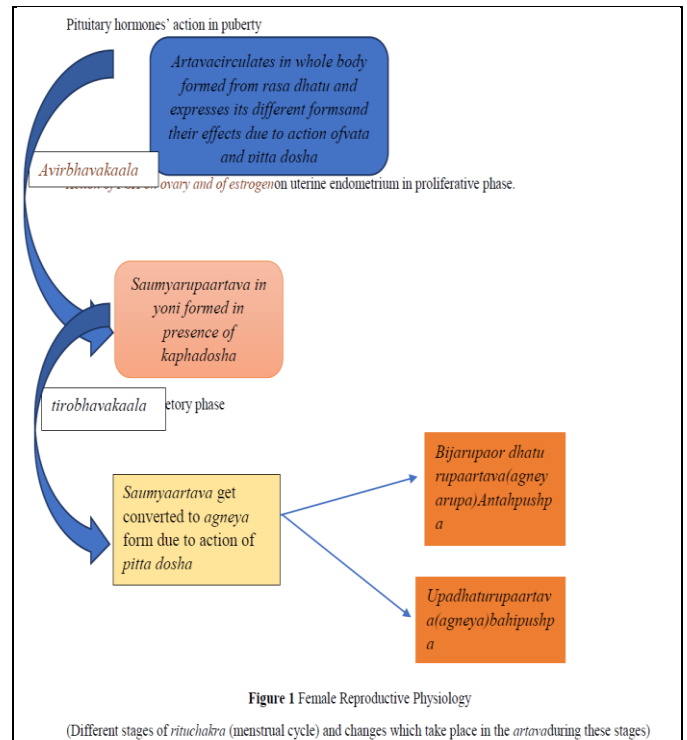
disorders) but also on *bandhyatva* (fertility disorders), along with the females having bad outcome of pregnancy. Further he has also advised these *kalpas* (formulations) to the women whose children born are weak, unstable with emaciated body¹. Just after this chapter, *Acharya*

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explains chapter 6 of *kalpasthana* i.e., *revatikalpaadhyaya* where he explains the disorders named *jataharinis* which affect not only the *artava* (menstruation) but can also make a woman *bandhya* (infertile) moreover they are responsible for death of intrauterine foetus and for still births also². *Pushpaghniyataharini* (can be considered as PCOS now) is one of them. Earlier polycystic ovarian syndrome (PCOS) was observed reported in modern medical literature by Stein and Leventhal in 1935. He described the symptoms then in seven women, suffering from amenorrhea, hirsutism, and enlarged ovaries having many premature follicular cysts³.

Acharya Kashyapa introduces this disease with symptomatology like “*vrithapushpama* (futile menstruation) *tuyanariya thakalam prapashyati* (regular anovulatory cycle), *sthulaloma shaganda* (hirsute, and shaggy cheeks or obesity also)”⁴. The disease exhibits some disparate features i.e., presence of unwanted hair on shaggy cheeks (which shows presence of a male hormone) with regular menstruation but without ovulation, a female having these features is categorised as curable by *Acharya Kashyapa*, but he does not explain *tridosha* status of *Jataharinis* rather he advised *sadvritta* (to follow ethics and morals for diet and life style) and to avoid *nidana* (aetiological factors) i.e., not following righteousness of *aahara*, *vihara* (congenial diet and life style as per *desha* and *kaala*), *rajaswala* and *ritukalparicharya* (mode of life in menstrual phase and proliferative

phase)⁵. Many *Ayurveda* scholars explicate the pathology of *pushpaghniyataharini* on the basis of *artavakshaya*, *kaphavritavata*, *granthibhutaartavadusti* i.e., *vatakaphajartavadushti*, *bandhya* and *shandiyonivyapada*.



ROLE OF TRIDOSHA IN DHATU-POSHANA AND FEMALE REPRODUCTIVE PHYSIOLOGY (As explained in figure no. 1)

As per the presentation of patients all the above interpretations were found true; *vata* dosha controls *pitta* and *kaphadosha*. In the presence of imbalanced *vata* neither *pitta* (agni) nor *kapha* (*jala* and *Prithvi*) will show their normal functions. *Kapha* in pure form helps to assemble the constructive material for *dhatu nirmana* (formation) and *poshana* (nutrition); *Pitta* is responsible for final transformation of all nutrients for *dhatu sposhana* along with their

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upadhatus e.g., *artava* (term used for menstrual blood and ovarian hormones) is *upadhatu* of *rasa dhatu*. *Shukradhatu* (term used for discharges from genital organs during coitus, male hormones and for germinal tissue with stem cells) gets nutrition from *majja dhatu* (bone marrow tissue) ⁶. *Acharya Bhavamisra* contributes the idea of eight *dhatu*s in female i.e., *artava* is seventh and *sukra* is eighth *dhatu*. Commentator *Chakrapani* has included *artava* in the list of *dhatu*s because of its capabilities of getting vitiated. *Shukra dhatu* is responsible for *bala*, *varnaupchaya*, *p riti*, *harsh* and it is also counted in *dash-pranayatana*s. *Shukra* (germinal tissue), is also pervaded all over the body in both male and female as per *Acharya Susruta* and *vagbhata* “*Saptami shukradhara kala ----- sarvaprani nam sarvashariravyapini*”

The functional neuroendocrinology is compared with *vata* and *pitta dosha karma*. *Vatadosha* play an important role for all movements and secretory processes in body and *pitta dosha* is responsible for all chemical processes required to complete a neuroendocrinological functions. According to *Chakrapani*, *artava* is formed in embryonic stage of life & explicit at twelve years of age ⁷. *Acharya Chakrapani* has clarified the point that during the process of formation, *Artava* is *Saumya* (*kaphaguna Pradhan*) in nature due to influence of *Rasa* while at the time of excretion it is *Agneya* (*pitta gunapradhana*) in nature due to some specific changes. This alteration is due to change in character caused by *Doshas* ⁸. The *Avirbhava kala* of *Artava* can be accepted as the changes that occur in *Yoni* (especially endometrial

proliferation) and formation of *Rajovaha* and *Bijavahasira* of *Yoni* for acceptance of *Bija*. *Yoni* here includes complete reproductive tract including *Garbhasaya*. Commentator *Vishwamitra* also opines that minute *Beeja-raktavahasiras* prepares the *Garbhasaya* whole month to receive *Beeja* ⁹. *Artava* which is accepted as *Dhaturupa* is responsible for this change. Later on, when the *Beeja* (ovum) has been formed, it is called as *Tirobhava kala* (secretion stage). As during this phase of *Ritukala* where *Artava* changes its nature to *Agneyatva*, may be accepted as *Saumya dhatu Rupa* *Artava* ends in *Beejarupa Artava* i.e., *Stribeeja*.

This accumulated *Artava* looks like collected blood. This *Shonitarupa Artava* can now be called as *Updhaturupa Artava* which is excreted during *Rajasrava kala* (menstrual phase).

There may be an intimate relation between different forms of *Artava* as described in *Samhitas* like *Dhaturupa Artava*, *Beejarupa Artava* and *Updhaturupa Artava*.

Latin name-Anethum sowakurz.

Family-umbelliferae

English-dill

Important chemical component-

Essential oil (1-4%), fatty acid, Protein (15.68%), carbohydrates (36%), Fibre (4.8%), vit. A, Niacin, calcium, Magnesium phosphorus, Sodium carvone, Limonin, trans-anethole, Kaempferol vicenin

Tannin phytoestrogen

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Table 1 Properties of *Shatapushpa* and Useful Parts after Observing Above Mentioned References

DRUG	PART USED	GUNA	RASA	VIRYA	VIPAKA	DOSHA KARMA	PRABHAVA
<i>SHATAPUSHPA</i>	<i>Phala or bija</i>	<i>Snigdha Laghu tikshna</i>	<i>Katu tikta</i>	<i>ushna</i>	<i>katu</i>	<i>Kapha vatahara</i>	<i>Found according to Madhura rasa</i>

GENERAL PRINCIPLES

Before going into details for mode of action of *shatapushpa*, here are some rules of action of *Ayurvedic* drugs-

1. generally, drug of *Madhura rasa* have *vipakashitavirya* →

Amla rasa → *amlavipakaushnavirya* →

Katu rasa → *katuvipakaushna virya* →

Tikta and Kashaya rasa

→ *katuvipakashitavirya* →

Lavana rasa → *Madhura vipakaushnavirya*

2. Naturally when *rasa* etc. are of in equal strength, *rasa* is dominated by *vipaka* and both *rasa* and *vipaka* are dominated by *virya* and all by *prabhava*.

3. In case the *rasa* etc. are of unequal strength, the potent overcomes the weaker one, which is governed by the rule of nature as the stronger over powers the weaker in case of incompatible combination.

4. Even in case of inequality of strength *rasa* etc. performs their own action due to their inherent property.

Rasa (Taste of Substance) *Guna* (Properties) *Vipaka* (Final Transformation) *Virya* (Active Principle) and *Prabhava* are properties which reside in *dravya*, and it exerts action on the basis of this *rasa panchaka*. While exploiting the drug action one has to keep in mind all these factors

considering their relative strength. *Rasa* is the basic thing which is overpowered by *Vipaka* which again is subdued by *virya* and *prabhava* stands above all.

The various drugs and diets act by virtue of their own nature or qualities or both on a proper occasion, in a given location, in appropriate condition and situations; the effect so produced is considered to be their action (*Karma*); the factor responsible for the manifestation of the effect is known as *Virya*; where they act is the *Adhithana* (location); when they act is the time, how they act is the *Upaya* or mode of action; what they accomplish is the achievement or therapeutic effect⁴⁵.

Acharya Kashyapa and *Acharya Bhava Prakash* have named *shatapushpa* ‘*madhura*’ even *Acharya Charak* has included it in *Madhura skandhas*. This is because that *shatapushpa* is one of those 25 drugs which neither contain *Madhura rasa* nor foster *Madhura vipaka* but they are included in *Madhura skandhas* as they all bring into action according to *Madhura rasa* or *Madhura vipaka* like *jivaniya*, *brihmaniya*, *saptadhatu poshaka*, *rasayana vrishyashukrala karma* which can be interpreted under *Madhura prabhava*⁴⁶. **Prabhava** is specific power, based on the specific nature (*bhautika* composition) and exert specific action as said by January 10th 2022 Volume 16, Issue 1 **Page 130**

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Vridhha Vagbhata that *prabhava* is *Svabhava* (nature) exceeding all⁴⁷. According to some *Acharya prabhava* can't be elucidated like *virya* (power or potency by which drug acts like an instrument) for which commentator Shivadas Sen in his commentary on *Dravyagunasaid* that *virya* is power which is in the form of the concentrated essence of five *bhutas*⁴⁸. On the other hand, *Acharya Charaka* elucidates that 'where there is similarity of *rasa*, *virya* and *vipaka* but specific difference in action it may be taken as caused by *prabhava*, *Vagbhata* also follows the same line – 'The specific action in spite of similarity in *rasa* etc., is caused by *prabhava*'. So, on the basis of above-mentioned facts *virya* can be stated general action and *prabhava* may be the specific action not inexplicable (as stated by some scholars).

Guna (property or quality) is defined as which is inherent existence in substance and is non inherent cause (of its effect). According to *gunashatapushpa* shows *vatashamaka* property.

Ras is object of gustatory sense organ and it is perceived through contact with gustatory sense organ. *rasa* is manifested by permutation and *bhautik* combination in *dravya* and as such it depends on it. According to *Acharya Charakajala* and *Prithvi* are material cause of *rasa* in its origin while other three *bhutas* serve as instrumental cause in their variations. Some *Acharyas* believe in that *jala* and *Prithvi* too act in variation and others three *bhutas* also in origin. As per principles of drug action ascribed to inherent quality *katu*, *tikta rasas* of *shatapushpa*

show *pitta vardhaka* and *srotoshodaka* action because *tiktarasa* absorbs *skleda* from *srotas* (clears the channels).

Vipaka is the term for final transformed state of drugs after digestion. In most cases, the *rasas* pass on as such and there is no change in their nature but in certain cases there is a definite change with consequent different *vipaka* which determines the future course and action of the drug. For instance, *Shunthi* (dry ginger) is pungent (*katu*) in taste but is transformed in *madhuravipaka* which determines its action on that basis. *Shatapushpa* due to *katuvipaka* again intensify the function of *pitta dosha*.

Karma- Like *guna*, *karma* is also located in *dravya*. *Charaka* defines *karma* as follows – 'karma is that which is the cause of conjunction and disjunction, is located in *dravya* and does not require any other factor as its cause⁴⁹. *Shatpushpa* shows *doshakarma* as per its *rasaguna* etc., i.e., *vatakaphashamaka*.

Treatment of *avarana* consists of *srotoshodhana* and *rasayan* therapy and drugs having properties like *anabhishyandi*, *snigdha*, *kaphapitta-avirudhama* and *vatanulomaka* property are conceived for this purpose⁵⁰. Being *snigdha*, *laghu*, *tikshna* (*srotoshodhaka* and *vatanulomaka*) with *katu* (*pittaviridhi*), *tikta rasa* (*anabhishyandi*), *ushnavirya* (*pitta-avirodhi*) and finally it also exerts *prabhavalike Madhura rasa* (produces effects of *rasayana* therapy, *kapha-avirodhi*). Recent researches show that such drugs having certain phytochemical constituents due to which they possess significant

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antioxidant, hepatoprotective, immunomodulator, cytoprotective and cardioprotective which can be analogous to *Madhura rasa karma*⁵¹. Further phytoestrogens are chemical component of *Shatapushpa* which is responsible for effects of it in both hypoestrogenic and hyper estrogenic conditions as they act like serm^{52,53} (serum estrogen receptor modulators). All of these make *shatapushpa* a different drug which is enriched with such attributes that make it a complete drug for different female disorders.

ShatpushpaKalpa-

चूर्णितायाःपलशतनवेभाण्डेनिधापयेतातच्चूर्णशतपुष्पायप्रारूत्थायजीर्णवानाप
लार्धपलार्धेवापलवासर्पिषालिहेताशक्त्यावतस्यजीर्णतिभुंजीतपयसोदनमौ॥
(का. क. 5/14-17)

Acharya Kashyapa states that 100 *palaShatpushpa* in powdered form should be stored in a new pot. In the morning, after digestion of previous taken meal, this powder should be taken in accordance with one's capacity in amount $\frac{1}{4}$ *pala* (12 gm), $\frac{1}{2}$ *pala* (24 gm) or 1 *pala* (48 gm) with *Sarpi* (*ghrita*). Rice mixed with milk to be taken after its digestion. If one consumes 100 *pala* of *Shatpushpa*, conception will occur.

PLAN OF 'DOSE SCHEDULE' OF SHATAPUSHPA KALPA

If a woman takes 12 gm per day, then she will consume 100 *palashatapushpa* in 400 days or one year 35 day. If she will start with 24 gm then it will take 200 days or about 6 months 2 days. With doses of 48 gm per day, it will be completed in 100 days. But for every patient it may be a

typical task to take 24, or 48 gm in a single dose. So according to duration of study digestive power of patient this *kalpa* of *shatapushpa* can be modified as increasing or decreasing schedule with proper duration of doses. Drug can be administered in a gradually increasing dose and tapered in the inverse order of the increased dose to the level of initial dose. In this method, patient's adaptability to the drug improves slowly during its gradual increase and a peak dose in adequate concentration is tolerated by the patient; this dose is continued for a period. Gradual decline in the dose prevents the rebound phenomenon and withdrawal effect.

The diet regimen during treatment period is specific and depends on *Agni bala*, *Prakriti* and *Kala* of treatment. Also, it depends on the nature of disease and system involved. Selection of drug and diet should be suitably selected for the respective disease to avoid complications.

For example, for 6 months therapy- minimum 6 gm dose for 5 days, and for next 5 days i.e., from 6th to 10th day 12 gm dose.....and further it can be increased up to 90th day and then decreasing schedule should be followed.

CONCLUSION

Pushpaghni jataharini (PCOS) is a disorder which is having a complex aetiopathogenesis including genetic, environmental and lifestyle factors of woman. It affects her reproductive system so far as resulting into infertility. many times, it remains hidden and left untreated. Symptoms of *PJ* (PCOS) also create social stigma
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for woman due to spoiling her femininity. Its anticipatory effects must be unpredictable and prolonged treatment leads to morbidities also. That's why it is a needful task to explore a safe and effective management which always promises for a beneficial outcome although its doses may be in large amount. After analytic study of *Shatpushpa*, may be the choice of drug for *PJ* (PCOS). It is having all those qualities which are required to break the *samprapti* (pathogenesis) of *PJ* (PCOS). Before prescription of *shatpushpa* for suffering patient, *prakriti*, *desh*, *kaal*, etc., should be precisely examined. *Shatpushpa* works not only with its *rasa*, *guna*, *virya*, *vipaka* but also with its *prabhava*. All these functional entities augment each other and also, they are necessary as *shatpushpa* is allowed to consume for upto 100 *pala* means 4800 gm. This amount could be finished in good period of time.

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