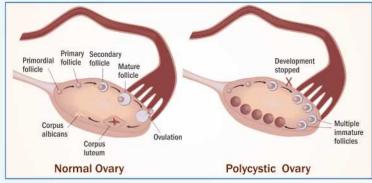


February 2021

AROGYACHINTAN PATRIKA

Ayurved Perspective on Polycystic Ovary Syndrome (PCOS)

Polycystic Ovary Syndrome (PCOS) is one of the leading causes of infertility in women. In India, experts claim 10% of the women to be affected by PCOS. The exact cause is unknown, but many factors are involved which include genetics, hormonal imbalance, obesity and insulin resistance. The ovaries in PCOS affected females make more androgen (male hormone) than normal, which prevents ovulation, imbalances female hormones, leading to irregular periods. Ovulation does not occur, and multiple small cysts (immature follicles) tend to develop in the ovaries.



Insulin Resistance is also strongly linked to PCOS. Body does not respond to insulin as in cases of normal people and the sugar level increases, leading to production of more insulin. Excessive insulin increases the production of androgens, which leads to acne, excessive hair growth, weight gain and issues with ovulation.

PCOS can be understood on the basis of principles of Anuktavyadhi stated by Charakacharya which will not only help in understanding the pathogenesis but also give direction to think in terms of effective management regimen. After mentioning the treatment of various diseases in Chikitsa Sthana, Charakacharya has mentioned about Anukta-vyadhi.

> रोगा येऽप्यत्र नोद्दिष्टा बहुत्वान्नामरूपतः। तेषामप्येतदेव स्याददोषादीन वीक्ष्य भेषजम्।।

दोषदूष्यनिदानानां विपरीतं हितं ध्रुवम। उक्तानुक्तान् गदान् सर्वान् सम्यग्युक्तं नियच्छति।।

- चरक चिकित्सा ३०/ २९१-२९२

In the diseases which cannot be labelled with a specific name, the clinical presentations should be treated according to the dominance of Dosha, Dushya, etc. factors. The treatment that is opposite to Dosha, Dushya and Nidana (causative factors) is always beneficial.

त एवापरिसंख्येया भिद्यमाना भवन्ति हि। रुजावर्णसमृत्थानस्थानसंस्थाननामभिः।। व्यवस्थाकरणं तेषां यथास्थूलेषु संग्रहः। तथा प्रकृतिसामान्यं विकारेषूपदिश्यते।।

- चरक सूत्रस्थान १८/४२-४३

Acharya Charaka has mentioned in Sootra Sthana that there are Aparisankheya (innumerable) diseases on the basis of Ruja (pain / discomfort), Varna (colour), Samutthana (etiology), Sthana (site) and Sansthana (symptoms/features). It is not necessary all the time that a disease will have all symptoms, so one should not hesitate to consider and treat the unnamed disease.

Although, PCOS does not correlate to any single disease entity or syndrome, its clinical features bear resemblance to the description of the Yonivyapad mentioned in major Ayurved texts. Some of these Yonivyapad are as follows:

- Arajaska (Oligomenorrhoea due to vitiation of Vata-Pitta Dosha)
- Lohitakshaya (Oligomenorrhoea due to vitiation of Vata Pitta Dosha)
- Shushka (Dryness of vagina and pain due to vitiation of Vata
- Shandhi (Oligomenorrhoea and beej dushti due to vitiated Vata Dosha)
- Vandhya (Amenorrhoea and Infertility)
- Putraghni (Repeated loss of pregnancy)

Rajodushti (menstrual flow disorder due to vitiation of Dosha) and Anartava (Amenorrhoea) mentioned in classical text also resemble the features of PCOS.

Kashyapa Samhita describes Jataharini Yonivyapad in the chapter Revati Kalpa in Kalpa Sthana. It leads to infertility, various abnormalities in offspring by afflicting the mother at various stages of reproductive cycle. It adversely affects and destroys the ovum,





embryo, fetus or neonate in ante-partum, intra-partum or postpartum stages. It is said to invade those women who are nonreligious and do not follow norms of physical, mental and social conduct.

Pushpaghni is a type of curable **Jataharini Yonivyapad**, wherein the woman has menstrual cycles but remains infertile. She has features like thick maxilla and hairy face. This may be attributed to disorders like PCOS and factors causing anovulatory menstruation.

मिथ्याचारेण ताः स्रीणां प्रदुष्टेनार्तवेन च। जायन्ते बीजदोषाच दैवाच श्रृणु ताः पृथक्।। चरक चिकित्सा ३०/८

The general etiological factors for **Yonivyapad** are faulty lifestyle habits leading to vitiation in menstrual blood, defects in ovum (Beeja) [hereditary or congenital defects] and the destiny. Due to the etiological factors, Vata and Kapha Dosha get aggravated which mainly vitiates Rasa Dhatu and Meda Dhatu, leading to **Rajodushti** as well as vitiation of **Artavavaha Srotas** resulting to manifestation of symptoms.

Management of PCOS:

Nidana Parivarjana (avoidance of the causative factors) is the first step towards the management of PCOS. As Agnimandya, Medovriddhi, Apana Vayu and Kapha Dushti play a significant role in the pathogenesis of this syndrome, appropriate Ahara-Vihara (dietary regimen & exercise) and Aushadhi (Medicines) should be planned.

न हि वातादृते योनिर्नारीणां संप्रदुष्यति। शमयित्वा तमन्यस्य कुर्याद्दोषस्य भेषजम्।। चरक चिकित्सा ३०/११५

Without the aggravation of Vata Dosha, the vagina does not get diseased in women; hence it should be treated before Pitta and Kapha. It is well known that Vata Dosha is the principle functional element responsible for movements in the body and both Pitta and Kapha Dosha are dependent on Vata Dosha for their mobility.

To correct **Agnimandya**, overcome **Srotovarodha** and to facilitate the **Apana-Vatanulomana**, ingredients and formulations like Haritaki Churna, Trikatu Churna, Chitrakadi Gutika, Shadushana Churna and Hingvashtaka Churna are recommended. Medovriddhi can be tackled by the use of **lekhana** dravyas and formulations along with Ahara (diet) mentioned by Acharya Charaka in Chikitsa of **Atisthaulya**. Uttar-Basti is administered to remove the **Sanga** (obstruction) in **Aartavavaha Srotas**.

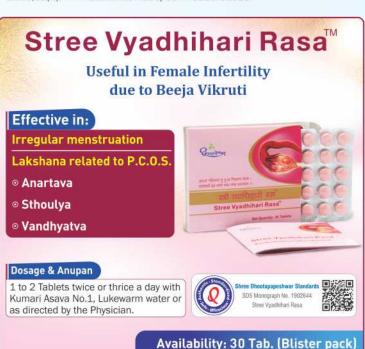
The modern management of PCOS is aimed to induce ovulation for women desiring conception, to reduce androgen levels, to reduce body weight and to reduce long-term health risks of diabetes mellitus and cardiovascular disease. These objectives can be achieved by comprehensive Ayurved approach. Ayurved management corrects Rajodushti (Raja is the upadhatu of Rasa) and Aartavavaha Srotas dushti to correct anovulation and improve fertility. It also corrects the Medovaha Srotas dushti and takes care of overweight/obesity & overcomes insulin resistance.

Stree Vyadhihari Rasa is a rational herbomineral combination to safely achieve the above-mentioned objectives. It is an effective blend of Sootikabharan Rasa (Suvarnayukta), Latakaranj Beej Ghana, Shatahva Beej, Karpasamoola, Trikatu, Lashuna swarasa and Asana kwath. These ingredients act in synergy to balance the vitiated Vata dosha especially the Apana Vayu and once the Apana vayu is regulated the functions of Apana kshetra (reproductive) organs are improved.

Ingredient	Actions / Benefits	
Sootikabharan Rasa	Tridosha nashak, ushna, teekshna, lekhan and sarva rogahara.	
Latakaranj Beej	Tridosha shamak, vedanasthapak and rakta shodhak. It is a uterine tonic and is reported to promote ovulation. ³	
Shatahva Beej	Vata-shleshmahara, shoolahara, yoni- shoolahara, pachak and hrudya. It is reported to regulate menstrual cycle, improve menstrual blood flow and relieve menstrual pain. ⁴	
Karpasamoola	Vatahara, laghu and ushna. It is medohara, mehahara as well as rajasrava vardhaka (emmenagogue).	
Trikatu	Kapha shamak, sthoulyahara, medohara and mehahara.	
Lashuna Swaras	Kapha shamak, vata-anulomaka and shula prashamana.	
Asana Kwath	Shleshmahara, mehahara (improves insulin resistance) and rasayana.	

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Role of Raktastambhak Tablets in Raktapradara

In women, an important physiological manifestation is Aartavachakra, i.e., menstrual cycle, which gives them identity of motherhood. Menstruation starts in a female with menarche and ends with menopause. The menstrual cycle involves the shedding of endometrium. A normal menstrual cycle has a frequency of 24 to 38 days, lasts 7 to 9 days, with 5 to 80 millilitres of blood loss.¹

According to Acharya Bhavaprakash, Malarupa Rudhira which makes its appearance / flows through vagina every month (menstrual blood) is called as Rajah. The presence of regular menstruation indicates the starting of reproductive life of a woman, which is described by Bhavaprakash as Stree dharma. The important factor in Stree Sharira, essential for reproduction is called as Aartava. The word Aartava is used for both Masika Rajasrava / Stree dharma and Stree beeja. Aartava is formed from Rasa Dhatu, but unlike Rasa which is soumya, the nature of Aartava is aagneya (teja mahabhuta pradhan). The terms Aartava, Rajah, Shonita, Asruka, Rakta, Lohitam, Pushpam, Rudhiram etc. are synonyms.

Characteristics of Shuddha Aartava:

मासि मासि रजः स्त्रीणां रसजं स्रवित त्र्यहम्। वत्सरात् द्वादशाद्र्ध्वं याति पञ्चाशतः क्षयम्।। – अष्टांगहृदय शारीर १/७ मासान्निष्पिच्छदाहार्ति पञ्चरात्रानुबन्धि च। नैवातिबह नात्यल्पमार्तवं शृध्दमादिशेत्।। – चरक चिकित्सा ३०/२५५

The normal Rajasrava (menstruation) mentioned in the texts has inter-menstrual period of 1 month, duration of blood loss for 3 days. It starts at the age of 12 years (menarche) and ends at the age of around 50 years (menopause). If menstrual discharge (Aartava) comes after a month without stickiness (sliminess), burning sensation and pain, persists for five days, neither too little nor excess in quantity then it is considered as normal or free from Doshas. In colour, the normal Aartava (menstrual blood) is bright red like Gunja fruit or Padma flower or Alaktaka or Indragopaka insect.

रजः प्रदीर्यते यस्मात् प्रदरस्तेन स स्मृतः।

सामान्यतः समृद्धिष्टं कारणं लिङ्गमेव च।। - चरक चिकित्सास्थान ३०/२०९

According to Acharya Charaka if the menstrual cycle turns to be abnormal due to Pradirana (excessive secretion) of Rajah, it is termed as Pradara. According to Acharya Sushruta, excessive and prolonged bleeding during menstruation or even in intermenstrual period, different from the features of normal menstrual blood is called Asrugdara. Heavy menstrual bleeding is also an important feature of Raktaja and Asruja Yonivyapad described in Charak and Sushrut Samhita respectively. Asrugdara also referred to as Raktapradara described in Ayurved texts resembles Abnormal Uterine Bleeding (AUB). AUB is a broad term that describes irregularities in the menstrual cycle involving frequency, regularity, duration, and volume of flow outside of pregnancy. AUB is reported to occur in 9 to 14% women between menarche and menopause. The prevalence varies in each country. In India, the reported prevalence of AUB is around 17.9%.

The factors responsible for **Asrugdara** as described by Acharya Charaka are mostly **Pitta-vardhaka Ahara-Vihara**. Without the influence of Vata Dosha, Yoni never gets vitiated so all the **Yonivyapad** and **Artava-vyapad**a are because of vitiated Vata Dosha.

......भजन्त्याः कृपितोऽनिलः। रक्तं प्रमाणमृत्क्रम्य गर्भाशयगताः सिराः।।

रजोवहाः समाश्रित्य रक्तमादाय तद्रजः। यस्माद्विवर्धयत्याशु रसभावाद्विमानता। तस्मादसृग्दरं प्राह्......। – चरक चिकित्सा ३०/ २०६–२०८

The Vayu after getting vitiated increases the volume of Rakta (blood), takes this Rakta to Rajovaha Siras and increases the quantity of Rajah

that flows through the Rajovaha Siras and causes **Raktapradara**. It is classified as Vataja, Pittaja, Kaphaja and Sannipataja.

Vataja Pradara	Frothy, thin, rough, dark (blackish), reddish, resembles water of Palasha flower in colour and it may or may not be associated with pain.
Pittaja Pradara	Bluish, yellow or blackish in colour, very hot profuse discharge frequently associated with pain.
Kaphaja Pradara	Greasy (slimy), pale, heavy, unctuous, cold and viscous discharge associated with mild pain.

If the different symptoms which are mentioned for Vata, Pitta and Kapha are present collectively then it is said to be Sannipataja Pradara.

Raktapradara has to be treated on the lines of Yonivyapad, Raktatisara, Raktapitta and Raktarsha. The principles of treatment for Raktapradara can be divided into following types viz. Nidanaparivarjana, Dosha-shodhana, Dosha-shamana and Raktasthapana (Raktastambhak). Use of Shodhan procedures and Uttarabasti has to be done appropriately. The drugs and formulations used to control excessive blood loss are kashaya and tikta rasatmak i.e., having Raktastambhak action. Some of the commonly used herbs and formulations include Nagakeshar, Mocharas, Laksha, Ashoka, Lodhra, Doorva, Gairika, Pushyanuga choorna, Ashokarishta, Pradarantak Loha, etc.

Raktastambhak Tablets is a unique hemostyptic formulation offering the benefits of sheeta guna and kashaya rasatmak ingredients which collectively cause vasoconstriction and thus arrest abnormal uterine bleeding.

Ingredients	Actions / Benefits	
Nagakeshar	Raktasangrahak (hemostyptic) and garbhasthapak (maintains pregnancy)	
Shodhit Laksha	Kashaya (astringent), vranaropak (wound healing agent) and raktapradarahara (anti-menorrhagic)	
Mocharasa	Grahi (styptic), sheeta (cooling) and beneficial in atyartava (excessive menstrual bleeding)	
Shodhit Gairika	Raktastambhak (hemostyptic) and raktavardhak (hematinic)	
Doorva Swarasa	Sheeta (cooling), raktaskandan (hemostyptic) and has anti-abortifacient action.	

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Sthaulya (Obesity) and its management with Guggulu

The definition of **Madhyama Purusha** or an individual with ideal body proportion given in Charaka Samhita is as follows:

सममांसप्रमाणस्तु समसंहननो नरः। दृढेन्द्रियो विकाराणां न बलेनाभिभूयते।। क्षुप्तिपासातपसहः शीतव्यायामसंसहः। समपक्ता समजरः सममांसचयो मतः।। – च. सू. २१/१८-१९

An individual with a balanced proportion of muscles, compactness of the body and firmness in sense organs is not defeated by the various disorders i.e., he remains healthy. Such individuals can tolerate hunger, thirst, heat of the sun, cold and physical exercise. Their Agni (metabolic fire) and muscle metabolism is in a state of equilibrium. The individuals who do not possess the ideal body proportion would be either Atisthula (too obese) or Atikrusha (too lean). Atisthula and Atikrusha individuals are included in the category of Ashtaunindita i.e., eight types of undesirable or unattractive individuals in context of the body (structure and appearance).

सततं व्याधितावेतावितस्थूलकृशौ नरौ। सततं चोपचर्यौ हि कर्शनबृंहणैरि।। स्थौल्यकाश्ये वरं काश्यै समोपकरणौ हि तौ। यद्युभौ व्याधिरागच्छेत् स्थूलमेवातिपीडयेत्।। – च.सू. २१/१६-१७

Both these undesirable types of individuals i.e., Atisthula or Atikrusha always suffer from some or the other disease and need to be constantly managed by Apatarpana and Santarpana chikitsa respectively. Of these two, Krushata is considered better than Sthaulya as the physical and mental sufferings in Atisthula individuals are far more in comparison to the Atikrusha individuals.

मेदोमांसातिवृद्धत्वाद्यलस्फिगुदरस्तनः। अयथोपचयोत्साहो नरोऽतिस्थूल उच्यते।। - च.सू. २१/९

A person who due to extensive growth of fat and flesh is unable to work enthusiastically and appears disfigured with pendulous buttocks, belly and chest is called **Atisthula**. The important causes of **Atisthulata** include over-nourishment as a consequence of the intake of heavy, sweet, cold and fatty diet, lack of physical exercise, abstinence from sexual intercourse, sleeping during the day, uninterrupted extreme happiness, absence of stress and hereditary/genetic defects. These factors lead to an excess of fat deposition in the body and depletion of other Dhatus. **Atisthaulya** results into reduced lifespan, lack of enthusiasm and sluggishness in daily activities, debility, impotence, foul body odour, profuse sweating, excessive hunger and thirst.

Samprapti of Atisthaulya:

मेदसाऽऽवृतमार्गत्वाद्वायुः कोष्ठे विशेषतः। चरन् सन्धुक्षयत्यग्निमाहारं शोषयत्यपि।। तस्मात् स शीघ्रं जरयत्याहारं चातिकाङ्क्षिति। विकारांश्वाश्रुते घोरान् कांश्चित्कालव्यतिक्रमात्।। एतावुपद्रवकरौ विशेषादग्निमारुतौ। एतौ हि दहतः स्थूलं वनदावो वनं यथा।।

- च.सू. २१/५-७

Due to the obstruction of body channels by Medodhatu, the movement of Vata Dosha is especially confined to Koshtha (abdominal viscera) region resulting in the stimulation of digestive power and absorption of food. Hence, the person digests food quickly and becomes a voracious eater. By not following rules of taking meals at specific times during the day, he is afflicted by

dreadful diseases. **Agni** (Pitta component responsible for digestion) and **Vata** are the two most troublesome factors from the standpoint of obesity. These factors blight an obese person as wildfire destroys a forest. As the body gains excessive fat, vitiated Dosha suddenly cause severe diseases resulting in rapid deterioration of life.

Chikitsa of Atisthaulya:

गुरु चातर्पणं चेष्टं स्थूलानां कर्शनं प्रति। कृशानां बृंहणार्थं च लघु संतर्पणं च यत्।।
- च.स. २१/२०

Guru (heavy) and Apatarpana (non-nourishing) diet and therapy are advocated for slimming in the case of Atisthula (too obese), while for promoting the bulk (nourishment) in Atikrusha (too lean) individuals Laghu (light) and Santarpana (nourishing) therapy is advocated.

The first line of treatment in Sthaulya (obesity) is to avoid the causative factors. Nitya langhana (emaciation therapy) and langhana even in Shishira rutu (winter season) is advised to the Sthula (obese) individuals by Acharya Vagbhata. According to Acharya Charaka, the langhana therapy includes Vamana, Virechana, Niruha Basti, Shirovirechana, Pipasa nigraha, Maruta sevana, Atapa sevana, Pachana, Upavasa and Vyayama. These are to be recommended as per the Vyadhibala (strength of the disease) and Dehabala (strength of the patient). Amongst Shadavidha Upakrama (six-fold therapy), Langhana and Rukshana therapies are more suitable for the management of Sthaulya (obesity). Acharya Vagbhata categorizes all therapies under two main headings i.e., Langhana (emaciation therapy) and Brimhana (nourishing therapy). Langhana, has been further divided into Samshodhana and Samshamana. One desirous of overcoming obesity should indulge more in sexual activities, being awake / vigil at night time and physical as well as mental exercises.

Some of the commonly used **aushadhi dravyas** for the management of **Sthaulya** include **Shodhit Guggulu**, Guduchi, Musta, Triphala, Loha Bhasma, Tamra Bhasma, Takrarishta, Arogyavardhini Gutika, Chandraprabha Vati and various **Guggulu Kalpa**.

Ayurved, the Indian traditional system of medicine advocates Guggulu (Commiphora wightii) for the treatment of inflammatory conditions like arthritis, metabolic disorders like obesity and skin disorders. Shodhit Guggulu and Guggulu Kalpas in majority of cases are administered for a longer duration of time and are an integral part of anti-obesity prescription. Shodhit Guggulu has rasayana and lekhana action. Ayurved advocates the Shodhan Vidhi (Purification process) for Guggulu before its usage as medicine to make it free from adverse effects and to improve its therapeutic efficacy. In Shodhan Vidhi the raw Guggulu is treated with specific Shodhan material like water, Gomutra (cow's urine), Godugdha (cow's milk), herbal juices, etc. Shodhit Guggulu is not only effective in tackling overweight / obesity but it is also beneficial in the comorbid conditions of obesity like type 2 diabetes, osteoarthritis, hyperlipidemia and hypothyroidism.

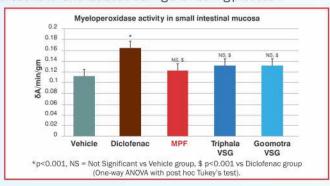
Around 39% of the global adult population was classified as overweight (BMI 25.0–29.9 kg/m²) or obese (BMI > 29.9kg/m²) in 2014.³ The prevalence of overweight and obesity in India is increasing faster than the world average. It is predicted that amongst Indian men the prevalence of overweight and obesity respectively will reach around 30% and 10%, whilst 27% and 14% of women are expected to be overweight and obese, respectively, by 2040.³ Overweight or obesity is the leading cause of type 2 diabetes, hypertension, osteoarthritis, various types of cancers in women like breast cancer and uterus cancer, menstrual disorder and infertility and many more diseases.⁴



Protective effect of Vishesha Shodhit Guggulu vis-à-vis Diclofenac on Enteropathy.

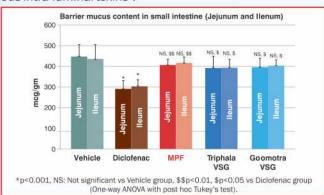
Study Centre: Department of Pharmacology and Therapeutics, Seth G S Medical College and KEM Hospital, Mumbai.

Till date no studies have reported the effect of Guggulu on small intestinal mucosa, therefore, Shodhit Guggulu was evaluated for enteropathy (small intestinal mucosal damage) causing potential. In our study Triphala Vishesha Shodhit Guggulu (1500 mg/day) and Gomutra Vishesha Shodhit Guggulu (1500 mg/day) were used. Also, a marketed proprietary formulation (MPF) offering Triphala Vishesha Shodhit Guggulu (300 mg/day) was used. These were evaluated on histopathological changes in small intestine as well as biochemical changes in small intestine. Diclofenac (150 mg/day), a commonly used anti-inflammatory drug was used as a comparator drug because it is documented for its enteropathy causing potential. 5.6 In this experimental study the human therapeutic doses mentioned above were extrapolated to animal (rat) dosage. NSAIDs like Diclofenac increase intestinal permeability which results in lowgrade intestinal inflammation resulting in enhanced neutrophil recruitment. Estimation of Myeloperoxidase (MPO) activity is considered as a biomarker of neutrophil infiltration, which measures the degree of inflammation in the gastrointestinal tissues7. MPO activity is enhanced in the ulcerated area of the intestinal wall, whereas its level is reduced during the healing process.



Our results showed that there was an inflammation induced by Diclofenac as reflected in higher MPO activity. On the other hand, both the variants of **Vishesha Shodhit Guggulu** did not induce increased MPO activity indicating no induction of inflammation.

Intestinal mucosa is viscous in nature and has gel-forming properties. It acts as a barrier and is a first line of defense against various intra-luminal toxins⁹.



Diclofenac was found to significantly reduce the barrier mucus content in small intestine (both jejunum and ileum). Both the variants of **Vishesha Shodhit Guggulu** showed values of barrier mucus comparable to vehicle, indicating preservation of mucus barrier.

The inhibition of MPO activity and preservation of barrier mucus following administration of Vishesha Shodhit Guggulu irrespective of Shodhan process (Triphala or Gomutra) and the marketed proprietary formulation (MPF) remained identical. Both the variants of Vishesha Shodhit Guggulu and MPF prevented the increase in histopathological scores when compared to Diclofenac.

This study demonstrated that **Triphala Vishesha Shodhit Guggulu** and **Gomutra Vishesha Shodhit Guggulu** prevented the damage to small intestinal mucosa as indicated by lower histopathological grades, prevention of neutrophil recruitment and preservation of the mucus barrier. One of the contributing factors for the protective effect of **Vishesha Shodhit Guggulu** on small intestinal mucosa can be contributed to the proper **Shodhan Vidhi**.

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Management of Male Infertility with Beejpushti Rasa

Infertility is defined as inability to achieve pregnancy after one year of unprotected intercourse. 80-85% of couples using no contraceptive measures conceive within 12 months. Infertility is estimated to affect 8-12% of couples worldwide.¹ Of all infertility cases, approximately 40–50% are due to male factor infertility and as many as 2% of all men exhibit suboptimal sperm parameters. One or more of the following factors viz. low sperm concentration, poor sperm motility, or abnormal morphology may be responsible for Infertility. A study indicates that the prevalence of oligospermia is extremely high in the metropolis as well as in the smaller towns of India.² Modifiable lifestyle factors like psychological stress, nutrition, physical activity, caffeine, high scrotal temperature play an important role in the development of infertility.³ Psychological stress is reported to alter seminal quality and therefore stress management also plays a major role in male infertility management.⁴

Normal Semen Analysis Parameters ⁵		
Sperm concentration Volume	At least 1.5 mL	
Sperm concentration	At least 15 million/mL	
Total sperms	At least 39 million/ejaculate	
Normal forms	At least 4%	
Live forms	At least 58%	
Progressive motility	At least 32%	
Total motility	At least 40%	

Kama or sexuality is the root of reproduction (fertility) and third pursuit of human beings i.e., Purushartha. This is possible when **Shukra Dhatu** is healthy with reference to anatomical structures and physiological functions. **Shukra Dhatu** or the reproductive tissue is the most refined product or essence of all the Dhatu. It is present all over the body. In metabolism of Shukra Dhatu, nutrients essential for **Shukra Dhatu** are processed by **Shukra Dhatwagni** to form **Shukra Dhatu** in a one-month period.

स्निग्धं घनं पिच्छिलं च मधुरं चाविदाहि च। रेतः शुद्धं विजानीयाच्छ्वेतं स्फटिकसन्निभम्।। – च. चि. ३०/१४५

Shukra which is unctuous, dense, slimy, sweet, non-irritating and white (transparent) like a crystal is considered to be pure or normal.

Brihat-trayee have described Shukravaha Srotas. Charak Samhita mentions moolasthana of Shukravaha Srotas as Vrushana (testicles) and Shepha (Penile tissue) whereas Sushrut Samhita mentions it as Stana (breast tissue) and Vrushana (testicles). According to Acharya Sushruta, Shukradhara Kala is Sarvashariravyapi (pervades throughout the entire body). Individuals having excellence of Shukra Dhatu exhibit physical and psychological characteristics such as courage, softness in the mind and strength.

Overindulgence in sexual activities, untimely and unnatural coitus or complete abstinence from sexual activity, excessive exercise, consumption of dry, bitter, astringent, salty, sour, hot food and unsuitable food, senility, stress, anxiety, improper surgical procedures, suppression of natural urges, etc. vitiate the Dhatu, Doshas individually or collectively and reach the Retovaha / Shukravaha Srotas and cause abnormalities in Shukra.

शुक्रस्य दोषात् क्लैब्यमहर्षणम्। रोगि वा क्लीबमल्पायुर्विरूपं वा प्रजायते। न चास्य जायते गर्भः पतित प्रस्रवत्यपि। शुक्रं हि दृष्टं सापत्यं सदारं बाधते नरम्।।

- च. सू. २८/१८-१८

Abnormalities in **Shukra** leads to impotence, loss of libido and may have sick, abnormal, impotent and short-lived progeny. The couple may not conceive or there can be spontaneous abortion and it causes misery for the individual as well as his family.

दौर्बल्यं मुखशोषश्च पाण्डुत्वं सदनं श्रमः। क्लैब्यं शुक्राविसर्गश्च क्षीणशुक्रस्य लक्षणम्।। च. स्. १७/६९

Symptoms of **Shukra Dhatu Ksheenata** include debility, dryness of mouth, pallor, asthenia, fatigue, impotency and absence of ejaculation.

Acharya Charak has described 8 types of Shukra Dushti viz.: Fenila (frothy), Tanu (thin), Ruksha (dry), Vivarna (discoloured), Pooti (putrid), Pichhila (sticky), Anya Dhatupasamshrushta (afflicted with other body tissues) and Avasadi (causes distress after ejaculation. Fenila, Tanu, Ruksha and Alpa-kruchhra (scanty and painful) Shukra dushti are due to Vata dominance and is incapable of fertilization. Pitta dominance causes Shukra dushti which appears bluish or yellow with putrid odour and ejaculation with burning sensation. Kapha dominated Shukra dushti appears extremely sticky and obstructs the channels of ejaculatory ducts. Ejaculation associated with blood is due to excessive coitus local injury.

Management of Shukra Dushti includes appropriate Shodhan procedures and Shaman therapy. The formulations which are Vajikara, Raktapittahara and Yonivyapadhara should be used on the basis of vitiating factors. Shukra Dosha nashak formulations include Jeevaniya Ghruta, Chyavanprasha Avaleha and Shodhit Shilajatu. Niruha Basti and Anuvasana Basti are recommended for Vataj Shukra dushti. Abhayamalakeeya Rasayana is recommended for Pittaja Shukra Dushti and for Kaphaja Shukra Dushti Pippali Rasayana, Triphala Rasayana, etc. are recommended.

Vajikarana / Vrishya medicines have an important role in the management of Male Infertility (Shukra Dushti). These include any substance or procedure i.e., Ahara, Aushadha and Vihara which helps to attain healthy progeny (improve the quality and quantity of Shukra Dhatu) and promote sexual health. These can be of 3 types:

Shukra Vriddhikara (Spermatogenic) e.g., Masha, Ksheera, Ikshu rasa, etc.

Shukra Srutikara (Improve libido) e.g., Kupilu, Akarkarabha, etc.

Shukra Srutivriddhikara (Improve libido & spermatogenic) e.g., Ashvagandha, Gokshura, Mushali, etc.

Beejpushti Rasa is a herbomineral formulation containing ingredients which are well known and established in the management of Male Infertility. **Beejpushti Rasa** offers the benefits of:

Ingredients	Actions / Benefits
Suvarna Bhasma & Ashvagandha	Rasayana and have proven anti-stress action.
Poornachandrodaya Makardhwaja	Vajikara (aphrodisiac) and shukrala (spermatogenic)
Gokshur, Salampanja (Munjatak), Atmagupta & Shweta Mushali	Vrushya (improve male sexual health) and Shukravardhak (improve sperm count, motility and viability)
Shatavari, Yashti & Amalaki	Shukrala (Spermatogenic) & Rasayana

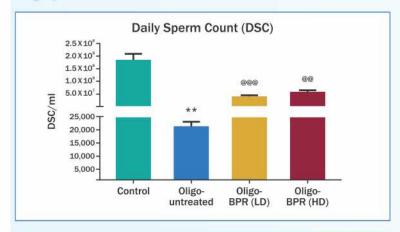
References: 1. J Hum Reprod Sci. 2015 Oct-Dec;8(4):191-6., 2. Asian J Androl. 2006 Jan;8(1):89-93., 3. Reprod Biol Endocrinol. 2018 Nov 26;16(1):115. doi: 10.1186/s12958-018-0436-9., 4. Andrologia. 2015 Apr;47(3):336-42., 5. http://www.who.int/reproductivehealth/publications/infertility/9789241547789/en/

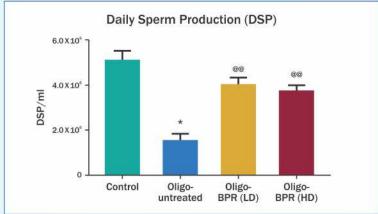


Effect of Beejpushti Rasa in experimentally induced Oligospermia in rats.

Study Centre: National Centre for Preclinical Reproductive and Genetic Toxicology, National Institute for Research in Reproductive Health (ICMR), Parel, Mumbai 400 012.

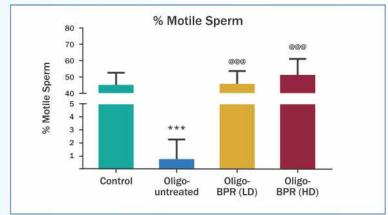
Beejpushti Rasa (BPR) effectively reversed the perturbed sperm count serum testosterone levels in 17β -estradiol induced oligospermia in rats.

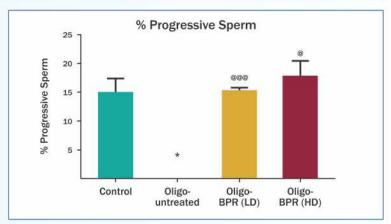




**p<0.01, *p<0.05 v/s Control Group, $^{\circ\circ}$ p<0.01, $^{\circ\circ\circ}$ p<0.001 v/s Oligospermia Untreated Group (One-way ANOVA followed by students t test).

Beejpushti Rasa (BPR) treatment significantly improved the percent motile and progressive motile sperm as compared to untreated oligospermic rats.





***p<0.001, *p<0.05 v/s Control Group, $^{\circ}$ p<0.05, $^{\circ\circ\circ}$ p<0.001 v/s Oligospermia Untreated Group (One-way ANOVA followed by students t test).

At testicular level the histomorphological perturbation observed due to 17β -estradiol was effectively treated with both low and high doses of Beejpushti Rasa.

Low Dose (LD): 279 mg/kg body weight (equivalent to 4 Tablets/day)
High Dose (HD): 419 mg/kg body weight (equivalent to 6 Tablets/day)
Duration of treatment: 54 days



Beejpushti Rasa™

An excellent Prajajanan & Vajikaran Aushadhi

अपत्यसंतानकरः बीजदोषनिवारणः। बीजपुष्ट्यै पुरुषस्य बीजपुष्टिः रसः स्मृतः।।



Dosage & Anupan:

1 to 2 Tablets once or twice a day with Godugdha or as directed by the Physician.



- Stimulate

Benefits:

Improves fertility

- Improves semen quality
- Stimulates spermatogenesis
- Improves sperm count & motility
- Control oxidative stress
- Relieves anxiety & improves sexual vigour

Effective in:

Male infertility due to

- Alpa Shukra
- Dushta Shukra
- Ksheena Shukra
- Vishushka Shukra

Availability: 30 Tab. (Blister Pack)

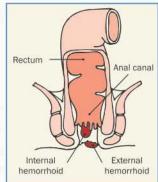


Arsha (Hemorrhoids) management with Arsha Hita Tablets and Ointment

Arsha (Hemorrhoids) is a commonly encountered anorectal disease in general practice. Hemorrhoids is the pathological term to describe

the abnormal downward displacement of the anal cushions causing venous dilatation.

Approximately 50% of individuals aged 50 years or older receive hemorrhoid treatments, and 10-20% of the treated individuals require surgery. Pain, itching, bleeding, and palpable or perceived abnormalities in the perianal region are the most common symptoms of hemorrhoids. Majority of patients can be successfully treated by conservative management.



Arsha (Hemorrhoids) management has always been the strength of Ayurved and is preferred choice amongst health care practitioners and patients. Arsha is described by all the ancient classical texts of Ayurved. Acharya Sushruta mentions this disorder under Ashta Mahagada (eight severe disease conditions).

अरिवत् प्राणान् शृणाति हिनस्तीत्यर्शः। - मा.नि. अर्श/१

Arsha pertains to a disease occurring in **Guda (anal) region** and it tortures (causes discomfort) to the patient. Guda is one of the Sadya Pranahara Marma.

... प्रकुपितो वायुरपानस्तं मलमुपचितमधोगमासाद्य गुदवलिष्वाधत्ते, ततस्तास्वर्शांसि प्रादुर्भवन्ति। – च.चि. १४/९

Some of the important etiological factors include faulty daily and dietary routine, straining during bowel movement, suppression of bowel urges, sedentary lifestyle, avoiding exercise, improper panchakarma (basti) procedure. These cause derangement in Jatharagni and vitiation of Tridosha especially Apana Vayu. This vitiated Apana Vayu puts the pressure of sanchita mala on Gudavali (anal folds / cushions) causing Arsha. Meda (adipose tissue), Mamsa (muscular tissue) and Tvak (skin and mucous membrane) are the adhishthana (involved morbid tissue elements) in all types of Arsha. These are of two types viz. Sahaja (congenital) and Uttara Kalaja (acquired). Arsha (Hemorrhoids) can be Shushka (dry or non-bleeding) or Sravi (wet or bleeding).

चतुर्विधोऽर्शसां साधनोपायः। तद्यथा - भेषजं क्षारोऽग्निःशस्त्रमिति। - स्. चि. ७/३

Ayurved recommends four types of treatment for Arsha viz.: Aushadhi Chikitsa (Medical management), Kshara Karma (Application of Kshara i.e., Caustics made of Ayurved herbs), Agni Karma (Cauterization) and Shastra Karma (Operative management). Rakta mokshana (blood-letting) is advised as one of the para-surgical procedures and in cases of vitiation of Rakta and predominance of Pitta Dosha. Ayurved also emphasizes on adoption of healthy dietary and behavioral routine to accelerate the recovery and prevent recurrence. In addition to symptomatic improvement, the oral medications are aimed to improve the deranged digestive fire.

व्यत्यासान्मधुराम्लानि शीतोष्णानि च योजयेत्। नित्यमग्निबलापेक्षी जयत्यर्शः कृतान् गदान्।। – च. चि. १४/२४३

Acharya Charak mentions that depending upon the digestive power, the patients suffering from Arsha should be given dravyas (medicines and food) having opposite attributes. Sometimes the patients should

be given cold dravyas and sometimes hot dravyas, sometimes sweet or sour tasting dravyas to keep digestive power normal.

Some of the well-known herbs and formulations for the treatment of Arsha (Hemorrhoids) include Surana, Mahanimba, Nagakesara, Arishtaka, Triphala choorna, Abhayarishta, Arshoghni Vati & Arshakuthar rasa. The formulations for local application include Tila Tel, Karanja Tel, Nimba Tel, Shodhit Sarja, etc.

Arsha Hita Tablets and Ointment are indicated in the management of anal bleeding, anal pain, anal discomfort and inflammation associated with Arsha (hemorrhoids). The important actions / benefits of the ingredients of **Arsha Hita Tablets** (T) and **Ointment** (O) are as follows:

Ingredients	Actions / Benefits	
Sooran (T)	Deepan, Pachan and Arshoghna (anti- hemorrhoidal)	
Arishtaka (T)	Tridosha pacifier, Ushna and Shothaghna (anti-inflammatory)	
Shodhit Sarja (T & 0)	Vranaropak (wound healing agent), Shothaghna (anti-inflammatory) and Vedanahara (analgesic)	
Karpoor [Bhimseni] (0)	Vedanahara (analgesic) and Kandughna (anti-pruritic)	
Tila Tel (0)	Vranaropak (wound healing agent) and Vedanahara (analgesic)	
Madhoochhishtha (0)	Raktastambhak (hemostyptic) and Vranaropak (wound healing agent)	

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