

**BASIC PRINCIPLES OF AYURVEDA IN THE MANAGEMENT OF
OBESE PCOS: A REVIEW****Dr. Ruchita Shah*¹**

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ABSTRACT

In developing countries a new concept of Chronic Diseases of Lifestyle is emerging in an alarming style. The highest on the list being obesity. These are non-communicable diseases but proving to be dangerous. India has raced to third place, after the United States of America and China in the highest number of obese people. Abdominal obesity with prevalence of 47-51% with higher rates in women (women 56%). Obesity is the complex, multifactorial type of nutritional metabolic disease. The most important harmful effect of obesity, is faulty ovulation in females due to Polycystic Ovarian Syndrome (PCOS) which further leads to infertility. These condition is similar to Artava kshaya (oligomennhorea due to life style disorders). The prevalence of

obesity along with PCOS is higher. The conventional therapy to treat PCOS includes medical treatment that includes ovulation induction. These treatment still has lacunae for it long term side effects. So, it's very necessary to find solution for it through our Ayurveda principle of Samprapti bhang by Shodhana and Shamana chikitsa. Hence the present paper highlights the treatment regimen for santharpanotta Atrava kshaya (obese PCOS) patients.

KEYWORDS: Obesity, Obese PCOS, Artava Kshaya, Ayurveda management, Ayurveda.**INTRODUCTION**

Lifestyle diseases are defined as diseases linked with the way people live their life. Diseases that impact in our lifestyle are heart disease, stroke, obesity and type II diabetes. These diseases appear to increase in frequency as countries become more industrialized.^[1] Obesity is accumulation of excess fat in the body which may lead to negative effects on Health, reduced life expectancy and/or increased health problems. Obesity is a gateway to an arena of metabolic disorders as it hampers the functions of many vital systems of the body. The most

important sequel to obesity today is faulty ovulation in females due to Polycystic Ovarian Syndrome (PCOS) which further leads to infertility. Obesity is a cause of PCOS or it is result of PCOS is unclear, but it seem that later is more likely.^[2] Hence, these paper highlights the Ayurveda perspective of obese PCOS and its treatment accordingly.

Polycystic Ovary Syndrome was originally described in 1935 by Stein and Leventhal as a syndrome manifested by amenorrhoea, hirsutism and obesity associated with enlarged polycystic ovaries.^[3] Polycystic Ovarian Syndrome (PCOS) or disease is a systemic endocrine and metabolic disorder affecting approximately 5 million women of child bearing age. Research suggest that 5-10% of females at 18-44 years of age are affected by PCOS. Hence, it most common endocrine abnormality among women of reproductive age.^[4] In India its prevalence of 9.13% in population.^[5] Obesity is a condition when body mass index $>30\text{kg/m}^2$ and waist line $>88\text{cm}$ prevails. Waist / Hip ratio >0.85 . Obesity is related to PCOS. The adipose tissue (fat) is considered an endocrine and immunomodulatory organ; it secretes leptin, adiponectin and cytokines which interfere with insulin signalling pathways in the liver and muscle resulting in insulin resistance and hyperinsulinaemia. Increase LH secretion by insulin can cause infertility or miscarriage through improper oocyte maturation.^[6]

SIGNS AND SYMPTOMS

Menstrual disturbances ranging from oligomenorrhoea to amenorrhoea in obese PCOS and episodic menometrorrhagia with anaemia, hyperandrogenism, increased muscle mass, androgenic alopecia, deepening of voice, hirsutism, acne, insulin resistance, acanthosis nigricans, infertility and miscarriage.^[7]

DIAGNOSIS

Characteristics constellation of symptoms rather than presence of cyst themselves that is important in establishing the diagnosis of PCOS.

The Rotterdam Criteria of assessment: presence of two out of the following three criteria:

1. Oligomenorrhoea and / or anovulation
2. Hyperandrogenism
3. Polycystic ovaries with exclusion of other etiologies.

Other methods

1. Ultrasonography, Laparoscopy –which shows thickened, smooth, pearl white outer surface of the ovary and hormonal assays.^[8]

AYURVEDIC PERSPECTIVE OF PCOS

In Ayurveda PCOS is not correlated to a single disease as the name implies. It as an equal involvement of the *Dosha*, *Dhattu* and *Upadhatu*. It does not correlate to a single disease or syndrome but the symptoms bears a resemblance to the terminologies defined as *Artavakshaya* –oligomenorrhoea or anovulation, *Pushpagini Jataharini- Revati-* Idiosyncratic anovulatory menstruation, *Rajodushti* and *Ashtartava Dushti-* menstrual flow disorder due to vitiation of *Dosha*, *Yonivyapad-* anatomical and physiological disorders like – *Arjaska-* due to vitiation of *vata dosha*, *Lohitakshaya-* oligomenorrhoea due to vitiation of *vata-pitta dosha*, *Vandhya-*infertility.

Lifestyle disorders can be correlated with *santarpanaja vyadhi* of Ayurveda. *Santarpanaja Vyadhi* are those which are develop due to *cheshtadveshi* (physical inactivity), *divaswapana* (excessive sleep especially in afternoon), *madhur, guru ahara* including *pishta, guda, mamsa*, (starchy, non-veg diets, etc.). The examples of *Santarpanaja vyadhi* are *Prameha, Atisthaulya, Klaibya, Aampradosh, Indriya evam srotasa lepa*, etc.^[9] Acharya Charak as described *Atisthaulya* (obesity) in *Ashtauninditiya*.^[10] According to him, obesity is such a metabolic disorder which influences the manifestation of other diseases especially related to *Vata, kapha* and *Agni*.

Vata and *Kapha doshas* as well as *vishama aahar* and *vihara* leads to reduced digestive fire and causes production of *Ama* (undigested food). This *ama* production causes improper enzymatic reactions leading to incomplete metabolism and hormonal imbalance. These causes hyperinsulinaemia and hyperandrogenism ultimately leading to anovulation and ovarian abnormalities like polycystic ovaries.^[11]

PCOS as a sequel of *Sthaulya* According to Acharya Sushruta

Nidana sevana

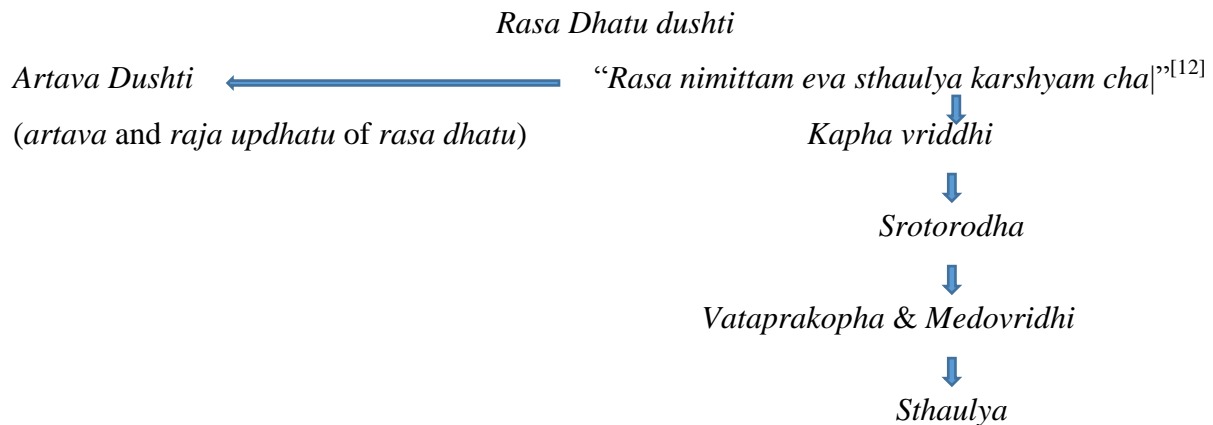


Agnimandya



Aamotpatti





MANAGEMENT

As per *Sushruta*, *nidana parivarjana* is considered to be indispensable before any treatment. Here in lays the necessity of lifestyle modification in Obesity with PCOS. Thus, the treatment mode will be classified into two aspects that is curative and preventive. Obese PCOS seems to be disorder involving *vata*, *kapha*, *ama*, *meda*, *dhatavagni*, *artava dhatu*. So these all need to be considered in treatment.

A) CURATIVE ASPECT

For *Agnimandya* and *Aampachana* use of *Trikatu churna*^[14], *Chitrakadi Gutika*^[15], *Hingwashtaka Churna*^[16] is to be done to palliate the *Srotovarodha* and to facilitate the *Apana-Vatanulomana*. *Acharya Sushruta* as given treatment for *Artavakshaya* as follow:

1) ***Dalhana* quotes that *Artava* is normally *agneya* in nature;** *Vamana* therapy decreases *saumya guna* and increases the *agneya guna*. In *Ayurveda chikitsa* is of two type *Sanshodhan* and *Sanshamana*. In obese PCOS: *Vaman therapy*^[18] is indicated as it aims at improving ailments by curbing the root cause as it is *sanshodhan chikitsa*. *Vamana karma* is basically given in *shleshmadhikyata*. Being a *santarpana vyadhi*, there is *rasadushti* in the patient which leads to *ama* formation in obese person. The deranged metabolic process further continues as a chain reaction disturbing the function of all *dhatu*s. The *mala of Rasa* is *kapha*. Herein, the *malaswarupa kapha* is increased and so the nutrition to the *upadhatu raja* is hampered leading to its imbalance.

2) ***Agneya Chikitsa: Artava* is stated to be *agneya*:** *Agneya dravyas* (sesame, alcoholic preparations, etc have been stated) are *agni mahabhuta pradhan*. The *rakta dhatu* also is *agneya*. *Pitta* and *rakta* have *ashrayashrayi sambandh*. The *mukhya sthana* is *yakrit* for *rakta dhatu*. The ayurvedic principle of formation of *rakta* from *rasa dhatu*, thus intermediate

upadhatu precursors may be correlated with these oestrogen receptors. Besides, the major lipid responsible for reproductive steroid genesis i.e. cholesterol is principally found in liver. Thus, the *Agneya chikitsa* can be considered in respect of stimulant for *bhutagni* site i.e. liver in order to correct the SHBG levels i.e. steroid hormone binding globulin levels (which are otherwise normally secreted in liver) as also facilitate normal conversion of cholesterol to androstenedione, finally into oestrogen.^[20]

3) To remove the *sanga* of *Artavavah srotas*, *Uttar basti*^[21,22] is given with *Dhanvantari Taila*.^[23]

4) PCOS can be treated with the help of *aahar*, *vihar* and *aushadh* (*sanshamana chikitsa*).

A) *Aahar*: For *Medovridhi*, use of *Takrarishta*, *Madhu* like *lekhandravyas* along with *Yava*, *yavaka*, *kulattha* etc as *aahara* is mentioned by Acharya Charaka in *Chikitsa* of *Atistula*.^[24]

B) *Vihar*^[25]

Exercising regularly would reduce insulin resistance.

- Mode of life suggested in the *ritucharya*, *dincharya* and to strictly follow *rajaswala charya*.
- Regular practice of Yoga i.e. Uttanapadasana, Sarvangasana, Halasana, Mayoorasana, Surya-namaskar, Vakrasana in amenorrhoea.^[26]

C) *Aushadh*: Some Ayurvedic formulations used are: *Kanchnar Guggulu*^[27], *Sukumara Ghrita*^[28] for reducing the size of formed ovarian cysts. *Pushpadhanva Rasa*.^[29] *Shatpushpa* and *shatavari churna*^[30] are to be used in females with deficiency or loss of *Artava*, women getting menstruation but not conceiving.

B) PREVENTIVE ASPECT

Nidan Parivarjana

- 1) *Shleshmala Aahar*- bakery products such as cakes, bread, biscuits, canned foods, beverages, processed foods, cornflakes, breakfast cereals. These food should be avoided.
- 2) Regular exercise should be included in daily routine.
- 3) Over eating should be avoided.
- 4) *Divaswapna*- should be avoided as it harms biological clock of the body.
- 5) Undergo seasonal *sanshodhan* therapy i.e *Vamana* in *Vasant rutu*, *Virechan* in *Sharad rutu* and *Basti chikitsa* in *Varsha rutu*.

DISCUSSION

- *Agnimandya* Corrected by using of *Deepana-pachana dravya* which acts by *sandukshan* of *Jathragni* and *dhatavagni*.
- To reduce the weight through *Lekhana dravyas*, *Pathya aahara-vihara* to maintain the metabolic and hormonal balance.
- Remove the *Sanga* of *Artava-vaha srotas* and *Srotoshodhana* through various *Samshodhana karmas* to balance the imbalanced *doshas* i.e. reduction of *Kapha* and *Anulomana* of *Apana Vata*.

CONCLUSION

Through these paper review it can be stated that PCOS can be cure and prevent through Ayurveda line of treatment by principle of *Samprapti Vighatana* as per *awasthabheda* and *Dosha-Dushya Sammurchhana*. These can be approached by using *Panchkarma*, *Pathya aahara* and *Shastrokta* formulations.

REFERENCES

1. Retrieved form: https://en.m.wikipedia.org/wiki/Lifestyle_disease.
2. Samuel S. Thatcher. What is polycystic ovarian syndrome (PCOS) A fact sheet from the centre for applied reproductive science, www.obgyn.net / PCOS/ articles.
3. Dutta DC; Text book of Gynecology; edited by Konar Hiralal; New central book agency (P) Ltd. Kolkatta; 6th ed., 2013; 440.
4. Anadu U, Ndefo A, Eaton A, Robinson MG. Polycystic Ovary syndrome. *Pharmacy and Therapeutics*, 2013; 38(2): 338-355.
5. Nidhi R, Padmalatha V, Nagarathna R, Amritanshu R; Prevalance of polycystic ovarian syndrome in Indian adolescent; *J Pediatr Adolesc Gynecol*, Aug. 2011; 24(4): 223-7. Doi 10.1016/j-pag.2011.03.002. Epub 2011 May 19.
6. Daftray SN, Padubidri VG, Shaw's Textbook of Gynaecology, 16th edition, Haryana, Report, 2011; 431.
7. Wonggokusuma G. The pathophysiology and treatment of Polycystic Ovary syndrome: A systematic review. *CDK-213*, 2014; 41(2): 100-103.
8. Rotterdam ESHRE/ASRM sponsored Polycystic Ovary syndrome consensus workshop. Consensus on diagnostic criteria and long term health risks related to Polycystic Ovary syndrome: fertility and sterility, 2004; 81: 19-25.
9. Charaka. Charaka Samhita (Ayurveda Dipika Vyakhya). Yadavji Trikamji, editor. 1st ed.

- Varanasi: Chaukhambha Prakashan, 2011; Sutrasthana, 23/4-6, 122.
10. Charaka. Charaka Samhita (Ayurveda Dipika Vyakhya). Yadavji Trikamji, editor. 1st ed. Varanasi: Chaukhambha Prakashan; 2011. Sutrasthana, 21/5-6. 116.
11. Raju NK, Diagnostic and Therapeutic approach to Polycystic Ovary syndrome to Ayurveda. Ayurvedaline.
12. Sushruta. Sushruta Samhita (Nibandh Sammagraha Commentary). Yadavji Trikamji, editor. 1st ed. Varanasi: Chaukhambha Sanskrit Sansthana; 2010. Sutrasthana, 15/32, 73.
13. Dr. Bramhanand Tripathi, Charak Samhita, vol 1st, Chaukhamba Surbharati Prakashan, Varanasi, Reprint 2011, Sutrasthana chapter no.30, verse no.26, 565.
14. Ibid. Sushrut Samhita, Sutrasthana 38/59; 168.
15. Shastri Pk & Chaturvedi GN; Charak Samhita, Vidyotini hindi commentary, Chikitsasthana 15/96; Chaukhamba Sanskrit Sansthana, Varanasi, reprinted ed., 2012; 467.
16. Indradeva T, Chakradatta, vaidyaprabha commentary, editor Prof. Ramanath Diwedy, Agnimandya Chikitsa 6/2, Chaukhamba Sanskrit Sansthana, Varanasi, reprinted ed., 2014; 69.
17. Dr. Sharma A.R., Sushruta Samhita, vol 1st, Chaukhamba Surbharati Prakashan, Varanasi, Reprint 2012, Sutra sthana, chapter no. 15, verse no.16, 120.
18. Ibid. Sushruta Samhita; Sutrasthana 14/7; 59.
19. Dr. Sharma A.R., Sushruta Samhita, vol 1st, Chaukhamba Surbharati Prakashan, Varanasi, Reprint, 2012; Sutra sthana, chapter no. 14, verse no.7, 101.
20. Anagha Ranade, Rabinarayan Acharya. Ayurvedic management of aartava kshaya w.s.r. polycystic ovarian syndrome – A critical review. Ayurpharm Int J Ayur Alli Sci., 2017; 6(4): 69-82.
21. Gupta KA, Astanga Hridya; Sutrasthana-19/70; Chaukhamba Sanskrit Sansthana, Varanasi, ed., 2012; 169.
22. Dalhana; Sushruta Samhita, Nibandh Sangra and Nyaya Chakrika commentary, editor Jadavji T, Sharirsthana 2/14, chaukhamba Sanskrit Sansthana, Varanasi, ed., 2014; 345.
23. Kamidi Vijaya Kumari, Naidu ML, study of Uttarbasti with Dhanvantari Taila in Female infertility. Int. J. Res. Ayurveda Pharm, 2013; 4(2): 257-261.
24. Shastri Pk & Chaturvedi GN; Charak Samhita, Vidyotini hindi commentary, Sutrasthana 21/21-27; Chaukhamba Sanskrit Sansthana, Varanasi, reprinted ed., 2012; 415.
25. Charaka. Charaka Samhita (Ayurveda Dipika Vyakhya). Yadavji Trikamji, editor. 1st ed. Varanasi: Chaukhambha Prakashan; 2011. Sutrasthana, Santarpaniya adhyaya, 25. 123.

26. Mahatyagi Shriramanadasa; Yoga Ka Vaijanika rahasya evam yaugika chikitsa by, Chaukhamba Orientalia, Varanasi; ed., 1999; 146.
27. Shrivastava Shailja, Sharangdhar Samhita; Jeevanprada commentary, Madhyma Kanda 7/95-100; Chaukhamba Sanskrit Sansthana, Varanasi; ed., 2011; 206.
28. Ibid. Astanga Hridya; Chikitsasthana-13/41-47; 415.
29. Mishra SN; Bhaishajyaratnavali, Siddhiprada commentary, Vajikaranaprakarana 70; Chaukhamba Sanskrit Sansthana, Varanasi; ed., 2012; 1131.
30. Sharma PH; Kashyapa Samhita, commentary; Kalpasthana Shatapushpashatavari-Kalpadyaya shlok no-13; Chaukhamba Sanskrit Sansthana, Varanasi; ed., 2012; 186.