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A clinical study to evaluate the efficacy of *Kashmarya Kutaja Kwatha Sidha Gritha Uttarabasti* in *Vandhyatwa* w.s.r. to Anovulation

Shravani P¹, Savita S. Patil²

¹Final Year Post Graduate Scholar, Department of Prasuti Tantra & Stree Roga, Sri Sri College of Ayurvedic Science and Research, Bengaluru, Karnataka, India.

²Professor & HOD, Department of Prasuti Tantra & Stree Roga, Sri Sri College of Ayurvedic Science and Research, Bengaluru, Karnataka, India.

ABSTRACT

The topic of infertility is still utterly taboo and that's why so many women with infertility suffer silence. Infertility is defined as a failure to conceive within one or more years of regular unprotected coitus.^[1] The WHO performed a large multinational study and found that in 37% of infertility couples, female infertility was the cause and Ovulatory disorders accounts 25%.^[2] Our *Acharya's* has mentioned that Love, Strength, Happiness, Fame, Pleasure are the attributes, which are acquired by children.^[3] Our *Acharya's* has explained Infertility under *Vandhyatwa*, where in, *Acharya Charaka* has not explained *Vandhyatwa* as independent *Yoni Vyapat*, but while explaining *Asruja Yoni Vyapat*, *Arajaska Yoni Vyapat*, *Putraghni Yoni Vyapat*, it all has the outcome of *Vandhyatwa*, for which he has also explained the treatment with *Kashmarya Kutaja Kwatha Sidha Uttara Basti* and *Acharya Kashyapa* has explained *Shatapushpa* having *Rtu Pravartana* effect. As there are many side effects by using modern (contemporary) medicines for induction of ovulation. This study was intended to evaluate the efficacy of *Kashmarya Kutaja Kwatha Siddha Ghritha Uttarabasti* in the management of *Vandhyatwa* w.s.r. to Anovulation. 30 subjects fulfilling the criteria were randomly selected from OPD & IPD of SSCASR & H and were assessed before and after treatment.

Key words: Infertility, *Vandhyatwa*, *Uttarabasti*, *Kashmarya Kutaja Kwatha Sidha Gritha*, *Shatapushpa Taila*.

INTRODUCTION

Infertility is a medical condition that can cause psychological, physical, mental, spiritual, and medical detriments to the patient. Procuring the progeny depends on the fertility potential of both male and female partner. Male is directly responsible in about 30-40%, female in about 40-55%, both in about 10% of

cases and remaining 10% is unexplained. Similarly infertility also depends on both male and female partners. Therefore, Infertility is defined as a failure to conceive within one or more years of regular unprotected coitus.^[4] About one-tenth of the world's population suffer from infertility, and infertility trend has been increasing in recent years in most parts of the world.^[5] There are many causes for female infertility such as Ovarian factors, Tubal factors, Uterine factors, Cervical factors, Pelvic endometriosis, among which 30-40% are due to ovarian factors. In *Ayurveda* many explanations have been given for *Vandhyatwa* among which *Acharya Sushruta* has explained, destruction of *Artava* a *Vandhya* in turn causing *Vandhyatwa*.^[6] *Acharya Charaka* has not explained *Vandhyatwa* as independent *Yoni Vyapat*, but while explaining *Asruja Yoni Vyapat*, *Arajaska Yoni Vyapat*, *Putraghni Yoni Vyapat*,^[7] it all has the outcome of *Vandhyatwa*, for which he has also explained the treatment protocol. *Acharya Kashyapa*, while explaining the treatment of

Address for correspondence:

Dr. Shravani P.

Final Year Post Graduate Scholar, Department of Prasuti Tantra & Stree Roga, Sri Sri College of Ayurvedic Science and Research, Bengaluru, Karnataka, India.

E-mail: shravani.rao96@gmail.com

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Vandhyatwa (Alpa Pushpa, Nasta Pushpa, Nasta Artava), he has mentioned Basti as the ideal treatment.^[8] Basti is considered as the main treatment protocol in all Vataja disorders as per Acharya Charaka, whereas Acharya Sushruta opines that Basti is useful in management of diseases occurred due to Vata, Pitta, Kapha and Rakta Dosha. Uttarabasti being one among the Basti procedure, which is of different types based on the route of administration, among which Garbhashayagata Uttarabasti is mainly concerned with Yoni, Beeja, Artava Dusti.

AIMS

1. To evaluate if Kashmarya Kutaja Kwatha Siddha Gritha Uttarabasti has better effect in the management of Vandhyatwa with special reference to anovulation.
2. To reevaluate Shatapushpa Taila Uttarabasti in the management of Vandhyatwa with special reference to anovulation.

Ethical Clearance

Ethical clearance for conduction of the clinical trial involving human subjects was taken from the IEC before the commencement of trial.

Clinical Study Design

Table 1: Showing the Study Design

Study Design	Group A	Group B
Procedure	Uttarabasti with Kashmarya Kutaja Kwatha Siddha Ghritha	Uttarabasti with Shatapushpa Taila and Shatapushpa Oral administration
Time of administration of Uttarabasti	In Rutukala that is after the menstrual flow stops for 2 Consecutive cycles, in each cycle for 3 days (Total 6 times).	In Rutukala that is after the menstrual flow stops for 2 Consecutive cycles, in each cycle for 3 days (Total 6 times).
Dosage	3 - 5ml : Uttarabasti	3 - 5ml : Uttarabasti 500mg : Oral administration

Study Duration	2 Consecutive cycles	2 Consecutive cycles - Uttarabasti Twice a day for 2 cycles - Orally
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Criteria for selection of patient

Inclusion Criteria

1. Married women of age between 20-35 years.
2. Subject of Primary or Secondary Infertility.
3. Subject with the history of Anovulation.
4. Subject with the history of PCOD, Oligo menorrhea, Menorrhagia.
5. Subject with the history of Habitual or Spontaneous abortion.

Exclusion Criteria

1. Subjects with history of PID, Tuberculosis, Pelvic Endometriosis.
2. Subjects with any known cases of Systemic disorders.
3. Subjects with any known case of Benign and Malignant tumors.
4. Subjects with any known case of Polymenorrhea, Metrorrhagia, Menometrorrhagia.

Assessment Criteria

1. Follicular study performed before and after Uttarabasti.
2. Efficacy of medicine and procedure assessed on the basis of the size of follicles.
3. Efficacy of medicine and procedure assessed on the objective parameter.

Subjective Parameter

- Mid cycle discomfort in Hypogastric region or in Iliac region. (Mittelschmerz pain).

0 = Absent

1 = Present

- Mid cycle pain and tenderness in breast.

0 = Absent

1 = Present

- Mid cycle P/V slight loss of blood or of mucus tinged with blood (Mittelblut).

0 = Absent

1 = Present

1) Objective Parameter

- Assessment for folliculogenesis - Scoring pattern of follicle.

0 = < 12 mm

1 = 12-20 mm

2 = > 20 mm

3 = Ovulate

- Fluid in POD

0 = Absent

1 = Present

- Overall Assessment

0 = Unchanged: No change in the growth of follicles

1 = Improved: Ovulation not occurred but there is significant growth in the follicles

2 = Ovulated: Ovulation occurred

3 = Conceived

OBSERVATIONS AND RESULTS

Table 2: Showing the distribution of Patients based on Mittelschmerz Pain

Group A	BT	%	AT	%
Grade 0 (Absent)	12	80%	6	40%
Grade 1 (Present)	3	20%	9	60%
Group B	BT	%	AT	%
Grade 0 (Absent)	11	73.3%	11	73.3%
Grade 1 (Present)	4	26.6%	4	26.6%

Table 3: Showing the distribution of Patients based on Breast Tenderness & Pain

Group A	BT	%	AT	%
Grade 0 (Absent)	10	66.6%	4	26.6%
Grade 1 (Present)	5	33.3%	11	73.3%
Group B	BT	%	AT	%
Grade 0 (Absent)	13	86.6%	8	53.3%
Grade 1 (Present)	2	13.3%	7	46.6%

Table 4: Showing the distribution of Patients based on Mittel blut

Group A	BT	%	AT	%
Grade 0 (Absent)	9	60%	6	40%
Grade 1 (Present)	6	40%	9	60%
Group B	BT	%	AT	%
Grade 0 (Absent)	15	100%	13	86.6%
Grade 1 (Present)	0	0%	2	13.3%

Table 5: Showing the distribution of Patients based on Folliculogenesis

Group A	BT	%	AT	%
Grade 0 (<12MM)	11	73.3%	3	20%
Grade 1 (12-20MM)	3	20%	2	13.3%
Grade 2 (>20MM)	1	6.6%	2	13.3%
Grade 3 (Ovulated)	0	0%	8	53.3%
Group B	BT	%	AT	%
Grade 0 (<12MM)	9	60%	6	40%
Grade 1 (12-20MM)	6	40%	5	33.3%

Grade 2 (>20MM)	0	0%	1	6.6%
Grade 3 (Ovulated)	0	0%	3	20%

Table 6: Showing the distribution of Patients based on Fluid in Pouch of Douglas

Group A	BT	%	AT	%
Grade 0 (Absent)	15	100%	5	33.3%
Grade 1 (Present)	0	0%	10	66.6%
Group B	BT	%	AT	%
Grade 0 (Absent)	15	100%	8	53.3%
Grade 1 (Present)	0	0%	7	46.6%

Table 7: Showing the distribution of Patients based on Over All Assessment

Group A	Assessment	%
Grade 0 (Unchanged)	3	20%
Grade 1 (Improved)	2	13.3%
Grade 2 (Ovulated)	3	20%
Grade 3 (Conceived)	7	46.6%
Group B	Assessment	%
Grade 0 (Unchanged)	2	13.3%
Grade 1 (Improved)	7	46.6%
Grade 2 (Ovulated)	4	26.6%
Grade 3 (Conceived)	2	13.3%

RESULTS

Table 8: Showing the Wilcoxon Signed Rank Test & Mann-Whitney Rank Sum Test based on Mittelschmerz Pain

Mittelschmerz Pain (Data: Median, 25th & 75th percentile)		
Group	Day 0	After 2 Months
Group A	0.00(0.00 – 0.00)	1.00 (0.00 – 1.00)@
Group B	0.00 (0.00 – 1.00)	0.00 (0.00 – 1.00)@

Table 9: Showing the Wilcoxon Signed Rank Test & Mann-Whitney Rank Sum Test based on mid cycle Breast Tenderness and Pain

BTP (Data: Median, 25th & 75th percentile)		
Group	Day 0	After 2 Months
Group A	0.00(0.00 – 1.00)	1.00 (0.00 – 1.00)@
Group B	0.00(0.00 – 0.00)	0.00 (0.00 – 1.00)

Table 10: Showing the Wilcoxon Signed Rank Test & Mann-Whitney Rank Sum Test based on Mittel Blut

Mittel Blut (Data: Median, 25th & 75th percentile)		
Group	Day 0	After 2 Months
Group A	0.00(0.00 – 1.00)	1.00 (0.00 – 1.00)
Group B	0.00(0.00 – 0.00)*	0.00 (0.00 – 0.00)*

Table 11: Showing the Wilcoxon Signed Rank Test & Mann-Whitney Rank Sum Test based on Folliculogenesis

Folliculogenesis (Data: Median, 25th & 75th percentile)		
Group	Day 0	After 2 Months
Group A	0.00(0.00 – 1.00)	3.00 (1.00 – 3.00)@
Group B	0.00(0.00 – 1.00)	1.00 (0.00 – 2.00)@

Table 12: Showing the Wilcoxon Signed Rank Test & Mann-Whitney Rank Sum Test based on Fluid in POD

Fluid In POD (Data: Median, 25th & 75th percentile)		
Group	Day 0	After 2 Months
Group A	0.00(0.00 – 0.00)	1.00 (0.00 – 1.00)@
Group B	0.00(0.00 – 0.00)	0.00 (0.00 – 1.00)@

Over All Result

Among 15 patients in group A, 3(20%) had unchanged result, 2(13.3%) had improved in follicle size, 3(20%) ovulated and 7 (46.6%) conceived after the treatment & Among 15 patients in group B, 2(13.3%) had unchanged result, 7(46.6%) had improved in follicle size, 4(26.6%) ovulated and 2 (13.3%) conceived after the treatment.

DISCUSSION

Probable mode of action

1. Uttarabasti

- In *Uttarabasti*, the drug is administered into the uterine cavity.
- The epithelial tissues present in the endometrial layer has the function of Absorption and diffusion.^[9]
- Due to this action, the medicine administered based on its *Guna, Karma*, acts locally by the simple diffusion and systemically by the absorption.
- Thus, it helps in providing the proper feed mechanism, by governing the H-P-O axis, which is necessary for the regulation of Follicular phase which in turn promote the growth of follicle by correcting the hormone imbalance, which is the main cause for Anovulatory cycle leading to *Vandhyatwa*.

2. Kashmarya Kutaja Sidha Ghrita

- *Kashmarya* having *Guru Guna* has the action of *Brimhana* which helps in the growth of Follicles and *Usna Veerya* along with *Rechana Karma* helps for the follicles to rupture which is the essential factor for ovulation to occur.^[10]
- *Kutaja* having *Laghu Ruksha Guna* along with *Lekhana Karma* helps the ovum which is surrounded by corona radiata to escape out of Graafian follicle hence the process of rupture takes place.^[11]
- Due to *Dhatavagni Mandhyata*, there will be formation of *Ama* and the *Karma* like *Deepana Pachana* helps in *Ama Nirharana* and does the

Samprapti Vighatana by correcting *Dhatavagni* along with *Tridosha Hara Karma* of the drug.

- As the drug is given in the form of *Ghrita*, which has the properties like *Madhura Snigdha Guna* and *Brimhana karma* further helps in the growth of follicle, also corrects the *Vata* which is mainly involved in *Samprapti* of *Vandhyatwa* by its *Sneha Guna*.
- ### 3. Shatapushpa Taila
- *Shatapushpa* having *Teekshna Guna*^[12] helps in quick absorption and also does the stimulation which is necessary for the ovarian function and *Lekhana Guna* helps in rupture of the dominant follicle which is needed for ovulation.
 - Based on its *Vata Hara* property it helps in *Samprapti Vighatana* as *Vata* is the main *Dosha* involved in *Vandhyatwa*.
 - *Shatapushpa* also has the karma of *Rutupravartana*^[13] which indicates both *Artavajanana* and *Beejotsarga* and can be inferred as ovulatory cycles.
 - As the drug is given in the form of *Taila*, which has the properties like *Snigdha Usna Guna* and *Yoni Vishodhana Karma* helps in treating the *Vigunata* of *Apana Vayu* which is mainly involved in *Samprapti* of *Vandhyatwa*.

CONCLUSION

The action of *Kashmarya Kutaja Kwatha Siddha Ghrita* and *Shatapushpa Taila* is similar to the drugs which induce ovulation, without any side effects. In the overall assessment it is seen that there is increase in conception when associated with anovulatory cycles with this protocol. Thus, it can be concluded that *Uttara Basti* with *Kashmarya* and *Kutaja* in the form of *Gritha* and *Shatapushpa Taila* has a better effect in *Vandhyatwa*.

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REFERENCES

1. Dutta D C. Textbook of Gynecology. Edition 7, New Delhi: Jaypee Brothers; 2019. p.186.
2. 1 in 6 people globally affected by infertility: WHO. Saudi Med J (Internet). 2023 (cited 2023 Aug 7); 44(4):425. Available from: <https://www.who.int/news/item/04-04-2023-1-in-6-people-globally-affected-by-infertility>
3. Acharya J T. Agnivesha, Charaka Samhita of Acharya Charaka, Dridhabalakrit, Chikitsāsthāna, Vajikarana Adhyaya, Ver.21, Varanasi: Choukhambha Sanskrit Series Office; 2018. p.391.
4. Dutta D C. Textbook of Gynecology. Edition 7, New Delhi: Jaypee Brothers; 2019. p.186.
5. Direkvand M A, Delpisheh A, Sayehmiri K. An Investigation of the Worldwide Prevalence of Infertility as a Systematic Review. Scientific Information Database. 2016, March; vol-10. p.76-87.
6. Tewari P V. Ayurvediya Prasutitantra Evam Streeroga. Edition 2. Vol.2, Varanasi: Chaukhambha Orientalia; 2000. p.55.
7. Acharya J T. Agnivesha, Charaka Samhita of Acharya Charaka, Dridhabalakrit, Chikitsāsthāna, YoniVyapad Chikitsa, Ver.17, Varanasi: Chowkhamba Sanskrit Series Office; 2018. p.635.
8. Usha V N K. Streeroga Vignana. Delhi: Chaukhambha Sanskrit Pratishthana; 2016. p.450.
9. Epithelium [Internet]. Cleveland Clinic. [cited 2023 Aug 8]. Available from: <https://my.clevelandclinic.org/health/articles/22062-epithelium>
10. Sastry J L N. Dravya guna Vijnana, Volume 2. Varanasi: Chaukhambha Orientalia; 2012. p.429.
11. Sastry J L N. Dravya guna Vijnana, Volume 2. Varanasi: Chaukhambha Orientalia; 2012. p.333.
12. Sastry J L N. Dravya guna Vijnana, Volume 2. Varanasi: Chaukhambha Orientalia; 2012. p.245.
13. Nepal Rajaguru Pandit Hemaraja Sharma. Vriddha Jivaka, Kashyapa Samhita, Kalpasthana, Shatapushpa Shatavari Adhyaya, Edition 2. Varanasi: Chaukhambha Orientalia; 2006. p.187-210.

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