“A Clinical Study – “Shatpushpa in Artavnirmiti” (Anovulatory Cycle)”

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Abstract: Infertility is the major concern around the cross section of the world, in India it is not only medical problem, but it brings along many social, psychological & high pollution & stress. Each & every woman has to become a mother, when she can’t become mother it is commonly described as infertility. Percentage of infertility in increasing day by day although there are tremendous revolutionary upgrades in this field. Among many causes of infertility are the irregular menstrual periods with Anovulation is very common problem of female infertility since large number of patients suffering from this disorder are unsatisfied with existing management of modern drugs (hormonal therapy) therefore it is essential to treat the irregular menses that tends towards infertility in later stages with such a remedy, which would bring back the light of fragrance in life of women.

Keywords: Infertility, Shatpushpa, Artavnirmiti, Anovulatory Cycle

I. Introduction

Woman’s body is wonderfully complex and delicate. In fact Ayurveda is more sensitive to women’s special health needs. Ayurveda can provide life cycle approach in women’s health. Women are far more sensitive to the rhythms and cycles of nature[1] while Ayurveda is bases on a deep understanding of eternal truths about the human body, mind and spirit. And most importantly founded on the principals of keeping the body toned in tune with nature. MaharshiVagbhhatadescibed that the health of family, society and culture depends largely on health of women.MaharshiSushrutadescibed the four major components[2] for achieving conception, that is Rutu (Rutukala), Kshetra (Female reproductive system), Ambu (Aaharrasa) and Bija (Ovum or sperm) if these four components assemble together the conception will be definitely occur. In many ways conception occurs on successive days of Rutukala.

II. Need of Topic

Women have risk of some distinctly female disorders. In modern days one of the most commondisorders is anovulatory cycle. Large numbers of patient suffering from this disorder are unsatisfied with the existing management of modern drug (Hormonal therapy). Therefore it is essential to treat the irregular menses that tends towards infertility in later stages with such a remedy, which would bring back the light of fragrance in life of women.

Taking into consideration of high percentage of women suffering from irregular menstruation and infertility therefore this topic was selected for clinical study[3].

III. Aim and Objective

Aim: To study the efficacy of Shatpushpa[4] on Artavnirmiti To study the effect on Artavnirmiti by Shatpushpa kashayNasya and Yogbasti[5] To study the efficacy of drugs

Objectives: To study the efficacy of Shatpushpa on Artavnirmiti reassessment of this ancient mode of treatment recommended in KashayapSamhita.

IV. Material & Methods

Literature: All available Ayurvedic classics and Modern available texts, magazines, journals, post graduate dissertations, research papers and internet were referred for complete review of literature.

Method: Total 60 patients were registered from OPD of the Streeroga&Prasutitantra Department of Govt. Ayurvedic College & Hospital Nanded fulfilling the criteria of selection were induced into study. 60 patients were completed clinical trial. 30 patients in Group A treated Shatpushpa KashayNasya&Yogbasti along withShatpushpa Vati and 30 patient Group in B treated with the Shatpushpa Vati only for three month. The subjective and objective parameters were measured before and of after treatment in each group. Group A and Group B showed induced timely ovulation increases endometrial thickness.
Inclusion criteria: A woman who is married Age group 18-40 years A woman having regular/irregular menstrual cycle Anovulatory cycle PCOD Delayed ovulation

Exclusion criteria: Unmarried woman Cervical tumor, Polyps, CA Cervix Uterine fibroid Congenital anomalies of female genital tract Tubercularendometriosis HIV/VDRL Positive

Grouping of patients: It was an open comparative randomized study in which patients were divided randomly in two groups. 30 patients were selected in each group.

Group A (Trial group) – 30 patients with Shatpushpa KashayNasya&Yogbastialong withShatpushpa Vati.
Group B (Control group) – 30 patients with Shatpushpa Vati orally.

Dosage
Shatpushpa Vati 5 gm twice in a day started from 5th day of menstrual cycle for next 3 months i.e. for next 3 consecutive menstrual cycles. Shatpushpa KashayNasya – the causes of nasyartha drug was given from 5th day of menstrual cycle upto 7th day of it. Shatpushpa KashayYogbasti – Yogbasti including 3 Niruhabasti of Shatpushpa Kwath with Madhu, Tiltaila, Saidhav and 5 Anuvasanbasti of Tiltaila with Saidhav, on alternate day, starting with 1st Anuvasan and lasting with 2 Anuvasanbasti are given it is started from 8th day of menstrual cycle for continuous 7 day for 3 consecutive menstrual cycles. ShatpushpaVati orally 5 gm twice in a day in Apanakada for 3 consecutive cycles. Raw Materials were purchased directly from market. The drugs were checked for authenticity. Kashay was prepared by standard method given in SharangdharSamhita.

Investigation –
Hematological investigations
CBC
ESR
Platelet count
Blood group
BT, CT
HIV I/ II
VDRL
HBS AG
BSL
Urine Routine
USG pelvis
Follicular study, PH (vagina)
Fem test

A) Subjective criteria –
Rajapraman – (quantity of bleeding)
Spotting bleeding –
Scanty (1 pad/day)
Moderate (2-3 pads/day)
Heavy menses (> 4 pads/day)
Menstrual cycle
Regular
Irregular

B) Objective Criteria –
1) Scoring pattern of cervical mucus (Ferning) –
0 No crystallization
1 A typical fern formation
2 Primary/Secondary
3 Tertiary

2) Thread Test (Spinnabarkheit)
0 < 1 cm
1 1 to 4 cm
2 5 to 8 cm
3 > 9 cm
3) Scoring pattern of follicle –
0  < 10 to 10 mm
1  11 to 14 mm
2  14 to 16 mm
3  16 to 20 mm & ovulated

4) Endometrial thickness –
0  < 5 mm
1  5 – 7 mm
2  7 – 9 mm
3  > 9 mm

Total effect of therapy –
The overall effect will be graded it as fallows
Complete remission – Ovulation occurred with the follicular size 16-20 mm.
Improved - Ovulation not occurred but only improved in the size of follicles around 11 to 13 mm
Unchanged – No improvement

V. Observations
The data collected from clinical study was analyzed under the two headings.
Demo graphic analysis
Clinical efficacy of therapy under study

<table>
<thead>
<tr>
<th>Observations –</th>
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</thead>
</table>

Distribution of patients by Age

<table>
<thead>
<tr>
<th>Age group</th>
<th>Group – A</th>
<th>Group – B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 28</td>
<td>24</td>
<td>80%</td>
<td>28</td>
</tr>
<tr>
<td>29 – 40</td>
<td>6</td>
<td>20%</td>
<td>2</td>
</tr>
</tbody>
</table>

Distribution of pt. by menses

<table>
<thead>
<tr>
<th>Menses</th>
<th>Group – A</th>
<th>Group – B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>5</td>
<td>16.6%</td>
<td>1</td>
</tr>
<tr>
<td>Irregular</td>
<td>25</td>
<td>83.3%</td>
<td>29</td>
</tr>
</tbody>
</table>

Effect of treatment fern test in Both groups

<table>
<thead>
<tr>
<th>Fern test</th>
<th>Positive</th>
<th>Negative</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial I mth</td>
<td>14 (46.6%)</td>
<td>16 (53.3%)</td>
<td>30</td>
</tr>
<tr>
<td>Trial III mth</td>
<td>26 (86.6%)</td>
<td>1 (3.33%)</td>
<td>27 + 3 conc</td>
</tr>
<tr>
<td>Control I mth</td>
<td>6 (20.0%)</td>
<td>24 (80.0%)</td>
<td>30</td>
</tr>
<tr>
<td>Control III mth</td>
<td>28 (93.3%)</td>
<td>0 (0.00%)</td>
<td>28 + 2 conc</td>
</tr>
</tbody>
</table>

Trial group – x² = 230.0 > p = 3.84 &
Control group – x² = 12.37 > p = 3.84

Effect of treatment on Mucus length in Both group

<table>
<thead>
<tr>
<th>Mucus length</th>
<th>4 – 7 cm</th>
<th>8 – 11 cm</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial I mth</td>
<td>23 (76.6%)</td>
<td>7 (23.3%)</td>
<td>30</td>
</tr>
<tr>
<td>Trial III mth</td>
<td>7 (23.3%)</td>
<td>20 (66.6%)</td>
<td>27 + 3 conc</td>
</tr>
<tr>
<td>Control I mth</td>
<td>26 (86.6%)</td>
<td>4 (13.3%)</td>
<td>30</td>
</tr>
<tr>
<td>Control III mth</td>
<td>8 (26.6%)</td>
<td>20 (66.6%)</td>
<td>28 + 2 conc</td>
</tr>
</tbody>
</table>

Trial group x² = 45.02 > p = 3.84 &
Control group x² = 53.3 > p = 3.84

Effect of treatment on Endometrial thickness in Both group

<table>
<thead>
<tr>
<th>ET in mm</th>
<th>4 - 9 mm</th>
<th>10 – 14 mm</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial I mth (12D)</td>
<td>19 (63.3%)</td>
<td>11 (36.6%)</td>
<td>30</td>
</tr>
<tr>
<td>Trial III mth (12D)</td>
<td>15 (50.0%)</td>
<td>12 (40.0%)</td>
<td>27 + 3 conc</td>
</tr>
<tr>
<td>Control I mth (12D)</td>
<td>29 (96.6%)</td>
<td>1 (3.33%)</td>
<td>30</td>
</tr>
<tr>
<td>Control III mth (12D)</td>
<td>27 (90.0%)</td>
<td>1 (3.33%)</td>
<td>28 + 2 conc</td>
</tr>
</tbody>
</table>

Trial group x² = 1.14 < p = 3.84 &
Control group x² = 1.14 < p = 3.84
Effect of treatment on Follicular rupture in Both group

<table>
<thead>
<tr>
<th>Rupture result</th>
<th>Positive</th>
<th>Negative</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial I mth</td>
<td>10 (33.3%)</td>
<td>20 (66.6%)</td>
<td>30</td>
</tr>
<tr>
<td>Trial III mth</td>
<td>21 (70.0%)</td>
<td>6 (20.0%)</td>
<td>27 + 3 conc</td>
</tr>
<tr>
<td>Control I mth</td>
<td>1 (3.33%)</td>
<td>29 (96.6%)</td>
<td>30</td>
</tr>
<tr>
<td>Control III mth</td>
<td>9 (30.0%)</td>
<td>19 (63.3%)</td>
<td>28 + 2 conc</td>
</tr>
</tbody>
</table>

Trial group x 2 = 38.42 > p = 3.84 &
Control group x 2 = 17.2> p = 3.84

Chi square value of this table is 20.25>P4.99, which is significant, that means there is significant result of treatment in both group comparatively effective of treatment in trial group is highly significant than in control group.
Overall effect of treatment is around 60% - 70% that is significant one.

Probable mode of Action of Shatpushpa –
Anovulation is vatakaphaphradhanvyadhi. In case of avaranatmakasamprapti it is vata pitta pradhanvyadhi. In case of kshayatmakasamprapti it is vikruti of vatadosha occurs. Hence the treatment of vatakaphashamak, agnidipanpachak, vatanulomaka andbrihun.Artava is classified with agneyaunaand for the reason we consider the agneyaganatmakdhavya for all the disorders of Artava. Agneya is one of the most important tatva responsible for the development of women hormones.
Pachak pitta is responsible for agneyatativa obviously the menstrual cycle will stay in routine if agneyatata is normal. Kashyap described that the use of Shatpushpa is beneficial in all the disorders of Artava (Streebija) By oral, Rectal and Nasal route one can obtain the best result of this remedy.
Shatpushpa had a best and well known therapeutic potential on female reproductive system and very effective on related problems it helps in minimizing the women’s complaints related to menstrual cycle and balancing the female hormonal system.
Shatpushpa has katu rasa, katuvipaka andushnavirya it stimulates agni by oral route and also produces proper ahara rasa andusdra rasa dhatu, which regulates the liver functions.
Shatpushpa nasya correct the hypothalamus pituitary ovarian axis uterus has two controls hormonal & nerve control ultimately for any vataj disorder Basti chikitsa is very effective. Shatpushpakashayyogbsti regulates the apanavyu with best results.
Shatpushpa is a phytoestrogen it exerts both estrogenic andandrogen estrogenic activity it acts in both high estrogenic& Law estrogenic condition. Thus increases the endometrial thickness.
Endometrial thickness and ovulation is statistically significant in both group. The formation proves to be a cost effective, Herbal, safe treatment for Anovulatory menstrual cycle.

VI. Conclusion
Almost 80% patients of trial group had a positive result whereas 40% patients of control group had a positive result of treatment overall effect of treatment is around 60% - 75% that is significant one. At other way overall 15 patients of trial group and 3 patients of control group get conceived after treatment.

References
“A Clinical Study – “Shatpushpa In Artavnimiti” (Anovulatory Cycle)”

[8]. AshtangRhidaya With SarwangaSundra commentary of Arunadatta and Ayurvedarasayana commentary of Hemadri (Choukhamba Orientalia, Varanasi, 1982 (VIIth Ed))

[9]. AyurvediyaPrasutitantra&StrirogaBy Prof. PremvatiTiwari (Choukhamba Orientalia, Varanasi Vol I & Vol II 2005 (IInd Ed))

[10]. GarbhavkrantiBy Dr. DinkarBhakare&ShamsundarBhakare (Kai RamBhauBhakare Charitable Trust, SomarPeth, Satara 2006 (Ist Ed))


[12]. Text book of Obstetrics& GynecologyBy D. C. Datta (New Central Book Agency Ltd, Chintamani Das Lane, Calcutta 2004 (VIthEd))


[14]. Handbook of Research Methods By Dr. Ranade& Dr. Patwardhan (AnmolPrakashana, BudhwarPeth, Pune 1999 (Ist Ed))