



Management of Artavakshaya (w.s.t.Oligohypomenorrhea) with Gudvyoshadi Churna

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ABSTRACT

The term "Artavakshaya" consists of two words viz. "Artava" and "Kshaya". The Artava is one of the essential factors to produce Garbha in the females and it makes its appearance only when the woman has attained adulthood. The word "Kshaya" has been derived from "Kshi" dhatu, which means "to cease" or to get reduced. Artavakshaya is one of the Artava Dushti, it is most common disease in women nowadays. It may be due to altered lifestyle with increased stress, restlessness, nutritional deficiency, eating disorders, decreased in Rasa & Rakta dhatu and up dhatu (Raja/Artava) and hormonal deficiency. Artavakshaya is Vata-Kaphatmak vyadhi in which Artava chakra of females get disturbed in terms of –

- Yathochit Kaldarshan
- Alpata (Quantity as well as duration)
- Yonivedana

According to modern, Oligomenorrhea is infrequent or, in occasional usage, very light menstruation. More strictly, it is menstrual periods occurring at intervals of greater than 35 days, with only four to nine periods in a year. Menstrual periods should have been regularly established before the development of infrequent flow. The duration of such events may vary. Hypomenorrhea or hypomenorrhoea, also known as short or scanty periods, is extremely light menstrual blood flow.

Keywords: Artavakshaya, Gudvyoshadi Churna, Oligohypomenorrhea.

METHODOLOGY:

A total 60 women were registered with Oligohypomenorrhoea symptoms. Out of 60 registered patients, 30 patients treated with Gudvyoshadi Churna (GROUP A) and 30 patients

treated with (GROUP B) standard control drug (Desogestral 0.15mg and Ethinyl estradiol 0.02 mg). Follow up on 5th day of menses for 3 months.

RESULT:

Total 60 patients completed the treatment. In group A, 16 patients (53%) was observed with marked improvement, 5 patients (17%) were with moderate improvement, 5 patients (17%) were seen with mild improvement while 4 patients (13 %) were seen with no improvement at all. In group B, 24 patients (80%) was observed with marked improvement, 2 patients (7%) were with moderate improvement, 2 patients (7%) were seen with mild improvement while 2 patients (7 %) were seen with no improvement at all.

CONCLUSION:

Both the drugs have proved significant relief in symptoms of Artavakshaya, but Gudvyoshadi churna is proved to be safe formulation without having any side effects compared OC pills. According to this clinical study, the BMI of patients taken for Trial Group also get reduced.

Women is not a creature; she is the creator. God gifted women a unique quality, which is to give birth a new life through her. To fulfill above words, nature has delivered exclusive anatomical and physiological characteristics in the women, menstruation is one of them the most important physiology. The menstruation is the hormonal process a woman's body goes through each month to prepare for a possible pregnancy.

The contemporary world anticipates Ayurveda as a unique, indispensable branch of medicine that helps to preserve health by keeping the individual's body, mind and spirit in perfect equipoise with nature. It has eight branches, the Ashtangas of Ayurveda, but there is no direct reference of Prasuti Tantra and StreeRoga. Instead it is included by Acharya Haritha under Kaumarabhritya, which deals with the management of a pregnant lady, care after delivery, and management of diseases of new born and defects of breastmilk.

स्त्री प्रहर्षिणी तत् क्षेत्र श्रेष्ठ वाजिकरणमिती।

(C.Chi.2:1:4:Chakra)

Woman being wife is the source of sexual ecstasy and ascribed as best aphrodisiac and a stree with diseased genital organs was described unfit for sexual life and impregnation³

न हि मातुर्विना गभौत्पत्ति स्यात् ॥

(C. Sha.3:6)

Without mother there is no possibility of conception. Perfect femininity leads to healthy and safe motherhood⁴.

The word "StreeRoga" describes about pathological conditions of stree, a female who is in menstrual phase. It is clearly denoting the genital and peri genital problems specially limited to woman starting from menarche to menopause. The specification of StreeRoga rules out all general medical and surgical problems which are common to both the sexes.

Ayurvedic classics describe deeply thousands of years ago regarding almost all the disorders affecting mankind, including menstrual disorders of woman. Among menstrual disorders of female "Artavakshaya" is the most common disorder.

According to Shushruta,

आर्तवशयेयथोचिकालदशतनल्पर्वावायोननवेदना।

सु. सं. सु. १५/१२

In the event of deficiency or loss of artava, the menstruation does not appear in its appropriate time OR is delayed (intermenstrual Period is prolonged) is scanty & does not last for 3 days.⁵

According to Chakrapani,

आर्तवशयइत्यादौयोननवेदनार्द्धशाभिपुरकार्तवशयकुपपर्नेनवायुना।

सु. सं. सु. १५/१२क्रि.टीका

In Artavakshaya, there is also a pain in vagina, chakrapani opines that this pain is due to aggravation of vayu caused by loss of artava which fills this region.⁶

It may be due to altered lifestyle with increased stress, restlessness, nutritional deficiency, eating disorders, decreased in Rasa & Rakta dhatu and updhatu (Raja/Artava) and hormonal deficiency Artavakshaya is Vata- Kaphatmakvyadhi in which Artava chakra of females get disturbed in terms of –

1. YathochitKaldarshan
2. Alpata (Quantity as well as duration)
3. Yonivedana

In modern science it is group of symptoms observed in disease of female reproductive system together or separately. Caused by hormonal imbalance and they are –

1. Irregular menstruation
2. Hypomenorrhea
3. Dysmenorrhea

So, here the word “Artavakshaya “can be compared with Oligohypomenorrhoea⁷ in which patients having symptoms of both oligomenorrhoea and hypomenorrhea i.e. decreased frequency of menstruation, as well as a reduced amount of blood loss with each menstrual episode. According to the Article of Epidemiology of menstrual disorders in developing countries: a systematics review published on 15th Dec, 2003 by Sioban D. Harlow & Oona M.R. Campbell the prevalence rate of oligohypomenorrhoea is 8 – 22 %. The mean rate is 15 %⁸.

RATIONALE OF STUDY:

Artavakshaya is a common entity encountered by Gynecologists in today’s practice. Oligohypomenorrhoea lead to infertility and PCOD.

- 1) The standard modern adequate treatment of Oligohypomenorrhoea is Hormonal Replacement Therapy. In today’s scenario the hormonal therapy which has good therapeutic utility, it has side effects & patients’ needs many times withdrawal bleeding with progesterone. Rather than hormonal therapy from contemporary science Ayurvedic herb-mineral, non – hormonal, non-toxic preparation mentioned in Ayurveda classics.

- 2) As per classical text it is clearly mentioned by Rasaratnasamuchhay, that “GudvyoshadiChurna” has Artavajanan properties. The word Artavajanan need to be evaluated systematically and efficacy of the drug in the correction of the pathology leading to oligohypomenorrhea also to be evaluated.

AIMS & OBJECTIVES

AIM:

To study the effect of Gudvyoshadi Churna on Artavakshaya W.S.R. to Oligohypomenorrhoea.

OBJECTIVES:

1. To achieve improvement in Artavakshaya condition i.e. decreasing intermenstrual duration & increasing the quality of menstrual bleeding.
2. To assess the improvement by comparing the changes in Pictorial Blood Chart & ultrasonography before and after treatment.
3. To achieve the improvement in a span of 120 days.
4. To study in detail, the Nidana Samprapti of Artavakshaya and etiopathology of Oligohypomenorrhoea.

MATERIALS AND METHODS

Materials Center and selection of patient:

Total 60 patients Clinically Diagnosed of Artavakshaya was selected as per inclusion criteria randomly from OPD/ IPD of Prasuti tantra AvumStriroga depart of our hospital.

Informed Consent – The subject undergoing this study was informed about the nature and purpose of the study and written consent for each patient in both groups was taken. Essential pathological investigation was done and studied accordingly.

The clinical research study was conducted as follows

1. Clinical trial
2. Inclusion and Exclusion criteria
3. Method of Preparation of drug
4. Method of administration of the drug
5. A clinical parameter for the assessment of result

CLINICAL TRIAL

- **Study Design** – Randomised prospective Open Controlled Clinical Study
- **Sample Setting** - Patients having symptoms of Artavakshaya in which blood loss less than 30 ml and intermenstrual Period more than 35 days will be registered from O.P.D. of our Hospital
- **Study Population** - All Female Patients having age in between 18-35 years' old.
- **Sample size** –

Group A – Trial group – Gudvyoshadi churna

Group B – Control Group – Combination of Desogesterol 0.15 mg and Ethinyl Estradiol 0.02 mg.

30 patients in each group

- **Sample technique** - 60 patients of Artavakshaya will be selected by Simple Randomized Sampling technique from OPD & camps
- **Selection of patient criteria**

I) INCLUSION CRITERIA:

- All female Patient who are Signed consent form of participation clinically study Female patients irrespective of caste, income group and any occupation will be selected.
- Age group 18-35 years' woman's (married, unmarried, nulliparous, parous, multiparous)
- Oligohypomenorrhoea, intermenstrual duration more than 35 days and menstrual bleeding flow less than 2 days.
- BMI – 18-30
- The duration of menses flow is less than 2 days and interval between two cycles exceeds than 35 days.
- PCOD without metabolic syndrome.

II) EXCLUSION CRITERIA:

- Major systemic disease likely to influence menstrual cycle like HTN, DM, TB, HIV
- Thyroid Kidney
- Known Patients of malignancy, cervical erosion, polyp, adenomyosis, pelvic endometriosis, tubo-ovarian mass
- Bacterial infection
- Premature Ovarian Failure
- Patients undergoing treatment for any other serious illness.
- Those having Intermenstrual bleeding
- K/c/o CA cervix and endometrial CA
- Severe Anemia (HB < 7%)
- Pregnant woman, Lactating woman
- Woman having IUCD
- PCOS metabolic syndrome

III) CRITERIA FOR WITHDRAWAL OF PATIENT:

- Patient unable to tolerate the therapy any adverse drug reaction.
- Decreasing levels of HB% <7gram %.
- Patients fail to report for follow up or irregular medication.
- Patients not willing to continue further treatment.

OPERATIONAL DEFINITIONS –

1. Pictorial Blood Assessment Chart⁹- The Pictorial Blood Assessment Chart is a semi-quantitative method for evaluation of Menstrual blood loss [MBL]. The ability of PBAC to

predict significant represent primary outcome. It was first published by Higham & Shaw in 1990 & improved & validated by Janssen & colleagues in 1995.

2. Pelvis Ultrasound¹⁰ - In PCOD, USG S/O enlarged ovaries measuring >10 cm OR >follicles measuring 2-9 mm in diameter

METHODS OF MEASUREMENTS

1. Subjective Parameters

2. Objective Parameters

A) SUBJECTIVE CRITERIA:

- 1) ArtavastravaKalaavdhi (Duration of Menstrual Flow)
- 2) Duration of Artavadarshan (Interval between two cycles)
- 3) Yonivedana (Pain during menses)
- 4) GranthibhutaArtava (Character of Bleeding)

ARTAVASTRAVAKALAAVDHI (DURATION OF BLEEDING)

| Duration | Score | Grade | -- |
|-------------------------|-------|----------|-----|
| 3-5 days | 0 | Nil | + |
| 2-4 days | 1 | Mild | ++ |
| 1-3 days | 2 | Moderate | +++ |
| 1 day & less than 1 day | 3 | Severe | |

DURATION BETWEEN TWO ARTAVADARSHAN (INTERVAL BETWEEN TWO CYCLES)

| During Menstruation | Score | Grade | Severity |
|---------------------|-------|----------|----------|
| 27-35 days | 0 | Nil | -- |
| 35-40 days | 1 | Mild | + |
| 40-45 days | 2 | Moderate | ++ |
| >45 | 3 | Severe | +++ |

YONIVEDANA (PAIN DURING MENSES)

| During Menstruation | Score | Grade | Severity |
|---------------------|-------|----------|----------|
| No Pain | 0 | Nil | -- |
| Mild Pain | 1 | Mild | + |
| Moderate | 2 | Moderate | ++ |
| Severe | 3 | Severe | +++ |

CHARACTER OF BLEEDING 11

- Clotted (granthibhuta) Absent / Present
- Clotted 3
- No clotted 0

OBJECTIVE PARAMETERS

- 1) Ultrasonography before and after treatment
- 2) Pictorial chart before and after treatment

ULTRASONOGRAPHY

- a) Normal USG
- b) PCOD – Evidence of multiple follicle

ASSESSMENT OF AMOUNT OF BLEEDING

| Menstrual bleeding in ML | Grade |
|--------------------------|----------|
| < 30 ml | Severe |
| 40-60 ml | Moderate |
| 60-80ml | Mild |
| 80-100ml | Normal |

TREATMENT DETAILS: All patients who will be selected for the clinical study will be derived into two groups randomly.

•**Group A** – Clinical Trial Group) - 30 Patients will be treated with the trial drugs i.e.Gudvyoshiyadi Churna is 2 Tola i.e. 20gms

•**Group B** – (Control Group) - 30 Patients will be treated with control drug i.e OC pills.

METHOD OF ADMINISTRATION OF DRUG

| | GROUP (A) | GROUP (B) |
|-----------------------|---|---|
| Drug Name | 1.Trial Drug GUDVYOSHADI Churna (Granules) | 2. Control Drug – Combination foDesogesterol 0.15 mg &Ethinylestradiol 0.02 mg will be taken in control group |
| No of patients | 30 | 30 |
| Dose | 20gms twice in day14 | 1tab once a day |
| Kala | Before meal15 | After meal |
| Route | Oral | Oral |
| Anupana | Jal | - |

| | | |
|-------------------------------|-------------------|-------------------|
| Duration | 3months | 3 months |
| Follow up during study | 5th day of menses | 5th day of menses |

Treatment period: 3 Months.

Follow up during Study – monthly once after the menses stops (5th day of menses)

Follow up after Treatment – 5th day menses for one cycle

FOLLOW UP

| Visit | Day of cycle |
|-----------|------------------|
| 1st cycle | 5th day of cycle |
| 2nd cycle | 5th day of cycle |
| 3rd cycle | 5th day of cycle |
| 4th cycle | 5th day of cycle |

DURATION OF WORK

Duration of Treatment- 3 months

Follow up after Treatment- 1month.

Total Duration of Work- 4 months

ASSESSMENT OF SIDE EFFECT OF TREATMENT

Present/Absent

1. Nausea & Vomiting
2. Headache & Dizziness
3. Mastalgia
4. Muscle cramps in the legs
5. Increase in weight
6. Loss of appetite
7. Break through bleeding
8. Acne – oily skin
9. Psychological troubles
10. If any other side effect

OVERALL ASSESSMENT OF AMOUNT OF BLEEDING (Before and after treatment)

| Menstrual bleeding in ml | In Percentage | In Grade |
|--------------------------|---------------|----------------------|
| <30ml | 0% | No Improvement |
| 40-60 ml | 50% | Mild Improvement |
| 60-80 ml | 80% | Moderate Improvement |
| 80-100ml | 100% | Good Improvement |

OVERALL ASSESSMENT OF YONIVEDANA (Before and after treatment)

| During Menstruation | In Percentage | In Grade |
|---------------------|---------------|----------------------|
| Severe Pain | 0% | No Improvement |
| Moderate Pain | 50% | Mild Improvement |
| Mild | 80% | Moderate Improvement |
| No Pain | 100% | Good Improvement |

OVERALL ASSESSMENT OF CLOTTED BLEEDING (Before and After treatment)

| Clotted Bleeding | In Percentage | In Grade |
|------------------|---------------|------------------|
| Present | 0% | No Improvement |
| Absent | 100% | Good Improvement |

OBSERVATION AND RESULTS**OBSERVATION****1. Incidence of Age:**

| Sr. No | Age Group | Group A | | Group B | | Grand Total | |
|--------------------|-----------|-----------|-------------|-----------|-------------|-------------|-------------|
| | | Count | Percent | Count | Percent | Count | Percent |
| 1 | 18-22 | 7 | 23% | 10 | 33% | 17 | 28% |
| 2 | 22-26 | 6 | 20% | 6 | 20% | 12 | 20% |
| 3 | 26-30 | 13 | 43% | 10 | 33% | 23 | 38% |
| 4 | 30-35 | 4 | 13% | 4 | 13% | 8 | 13% |
| Grand Total | | 30 | 100% | 30 | 100% | 60 | 100% |

In group A, out of 30 patients studied, 7 patients (23%) were from age group 18 – 22 years, 6 patients (20%) were with age between 22 – 26 years, 13 patients (43%) were with age between 26 – 30 years while 4 patients (13%) were between age group 30 – 35 years.

In group B, out of 30 patients studied, 10 patients (33%) were from age group 18 – 22 years, 6 patients (20%) were with age between 22 – 26 years, 10 patients (33%) were with age between 26 – 30 years while 4 patients (13%) were between age group 30 – 35 years.

1. Amount of blood flow (in pads) by PBAC

| Group | Mean score | | | Median diff. | IQR of diff. Q3 – Q1 | Sample size | Wilcoxon signed rank test (T+) | P Value |
|----------------|------------|------|------|--------------|-------------------------|-------------|--------------------------------|---------|
| | B.T | A.T | Diff | | | | | |
| Group A | 2.2 | 0.57 | 1.63 | 2.00 | 1.0 (2.0 - 1.0) | 30 | 435.00 | < 0.001 |
| Group B | 2.2 | 0.53 | 1.67 | 2.00 | 1.0 (3.0 - 2.0) | 30 | 435.00 | < 0.001 |

Using one tailed Wilcoxon signed rank test, to test the hypothesis –

H₀: Median reduction in AOBL by PBAC score after treatment is zero.

H₁: Median reduction in AOBL by PBAC score after treatment is greater than zero.

For group A, the median reduction in AOBL by PBAC score after treatment is significant (P-value < 0.001) at 5% level of significance. **i.e. treatment A is efficacious in reducing AOBL by PBAC.** For group B, the median reduction in AOBL by PBAC score after treatment is significant (P-value < 0.001) at 5% level of significance. **i.e. treatment B is efficacious in reducing AOBL by PBAC.**

Comparative Analysis of Groups:

Using Mann-Whitney U test, to test the hypothesis –

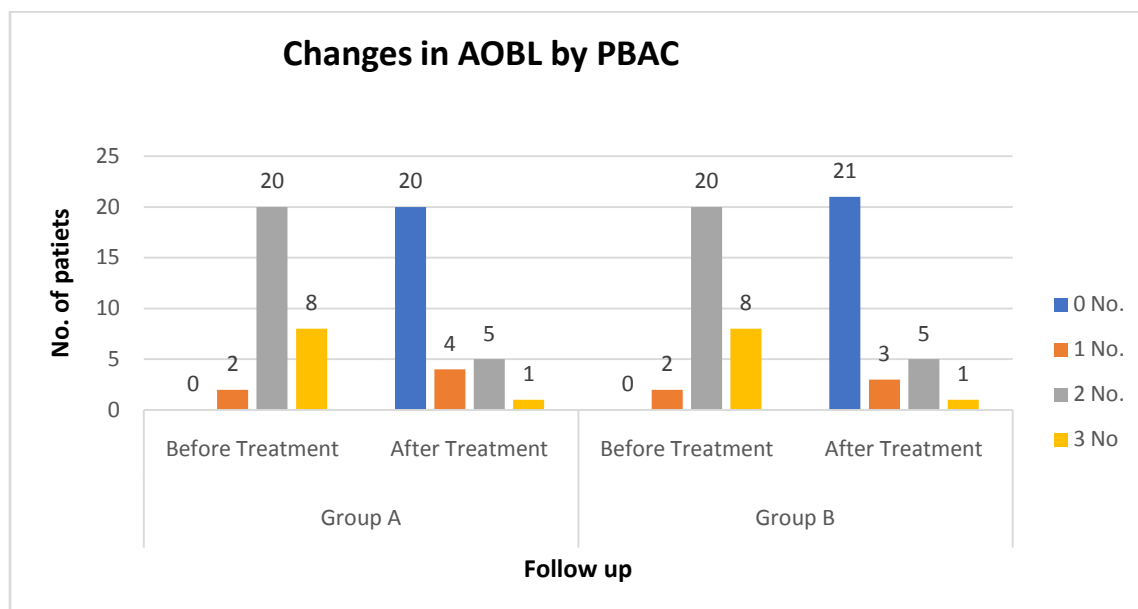
H₀: Reduction in AOBL by PBAC score for group A and group B are equal (equally distributed)

H₁: Reduction in AOBL by PBAC score for group A and group B are not equal (not equally distributed)

| Group | Median difference (bef-aft) | Mean of difference (bef-aft) | S.D. of difference (bef-aft) | Mann-Whitney U statistic | P- Value |
|---------|-----------------------------|------------------------------|------------------------------|--------------------------|----------|
| Group A | 2.00 | 1.63 | 0.62 | 408 | 0.481 |
| Group B | 2.00 | 1.67 | 0.61 | | |

Reduction in AOBL by PBAC score for group A and group B were not significantly different (p –value = 0.481) at 5% level of significance. Thus, **both treatment A and treatment B can be considered as equally efficacious in reducing AOBL by PBAC.**

| AOBL by PBAC | | 0 | | 1 | | 2 | | 3 | |
|--------------|----|-----|-----|-----|-----|-----|-----|----|-----|
| | | No. | % | No. | % | No. | % | No | % |
| Group A | BT | 0 | 0% | 2 | 7% | 20 | 67% | 8 | 27% |
| | AT | 20 | 67% | 4 | 13% | 5 | 17% | 1 | 3% |
| Group B | BT | 0 | 0% | 2 | 7% | 20 | 67% | 8 | 27% |
| | AT | 21 | 70% | 3 | 10% | 5 | 17% | 1 | 3% |



2. Symptoms of PCOD (Hirsutism, Acne, Acauthosis Nigricauce)

| Group | Mean score | | | Median diff. | IQR of diff. Q3 – Q1 | Sample size | Wilcoxon signed rank test (T+) | P Value |
|---------|------------|-----|------|--------------|----------------------|-------------|--------------------------------|---------|
| | B.T | A.T | Diff | | | | | |
| Group A | 0.6 | 0.2 | 0.4 | 0.00 | 1.0 (1.0 - .0) | 30 | 36 | < 0.001 |
| Group B | 0.8 | 0.2 | 0.6 | 0.5 | 2.0 (2.0 - 0.0) | 30 | 91 | < 0.001 |

Using one tailed Wilcoxon signed rank test, to test the hypothesis –

H0: Median reduction in PCOD score after treatment is zero.

H1: Median reduction in PCOD score after treatment is greater than zero.

For group A, the median reduction in PCOD score after treatment is significant (P-value < 0.001) at 5% level of significance. **i.e. treatment A is efficacious in reducing PCOD.** For group B, the median reduction PCOD score after treatment is significant (P-value < 0.001) at 5% level of significance. **i.e. treatment B is efficacious in reducing PCOD.**

Comparative Analysis of Groups:

Using Mann-Whitney U test, to test the hypothesis

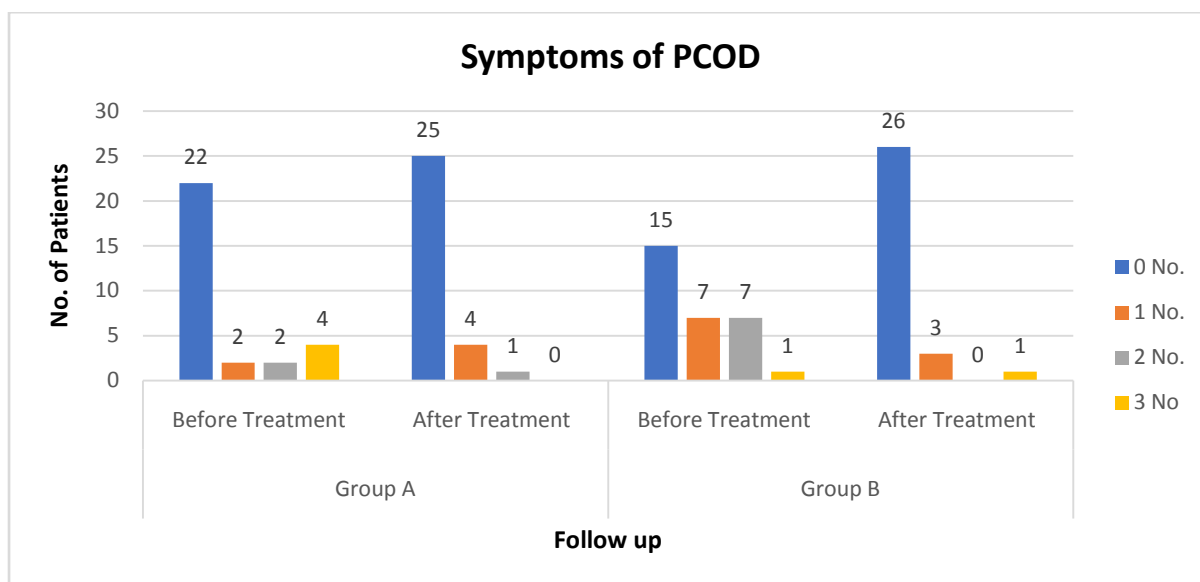
H0: Reduction in PCOD score for group A and group B are equal (equally distributed)

H1: Reduction in PCOD score for group A and group B are not equal (not equally distributed)

| Group | Median difference (bef-aft) | Mean of difference (bef-aft) | S.D. of difference (bef-aft) | Mann-Whitney U statistic | P-Value |
|---------|-----------------------------|------------------------------|------------------------------|--------------------------|---------|
| Group A | 2.00 | 1.63 | 0.77 | 402 | 0.417 |
| Group B | 2.00 | 1.67 | 0.77 | | |

Reduction in PCOD score for group A and group B were not significantly different (p –value = 0.417) at 5% level of significance. Thus, **both treatment A and treatment B can be considered as equally efficacious in reducing PCOD.**

| PCOD | | 0 | | 1 | | 2 | | 3 | |
|---------|----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | No. | % | No. | % | No. | % | No. | % |
| Group A | BT | 22 | 73% | 2 | 7% | 2 | 7% | 4 | 13% |
| | AT | 25 | 83% | 4 | 13% | 1 | 3% | 0 | 0% |
| Group B | BT | 15 | 50% | 7 | 23% | 7 | 23% | 1 | 3% |
| | AT | 26 | 87% | 3 | 10% | 0 | 0% | 1 | 3% |



3. Body Mass Index (BMI):

| Group | Mean score | | | Median diff. | IQR of diff. Q3 – Q1 | Sample size | Wilcoxon signed rank test (T+) | P Value |
|---------|------------|------|------|--------------|------------------------|-------------|--------------------------------|---------|
| | B.T | A.T | Diff | | | | | |
| Group A | 25.5 | 24.9 | 0.6 | 0.6 | 0.26 (3.56 – 3.3) | 30 | 170 | < 0.001 |
| Group B | 24.5 | 24.4 | 0.1 | 0.25 | 0.125 (4.2 – 4.075) | 30 | 14 | < 0.001 |

Using one tailed Wilcoxon signed rank test, to test the hypothesis –

H₀ : Median reduction in BMI score after treatment is zero.

H₁ : Median reduction in BMI score after treatment is greater than zero.

For group A, the median reduction in BMI score after treatment is significant (P-value < 0.001) at 5% level of significance. **i.e. treatment A is efficacious in reducing BMI.** For group B, the median reduction in BMI score after treatment is not significant (P-value < 0.001) at 5% level of significance. **i.e. treatment B is not efficacious in reducing BMI.**

Comparative Analysis of Groups:

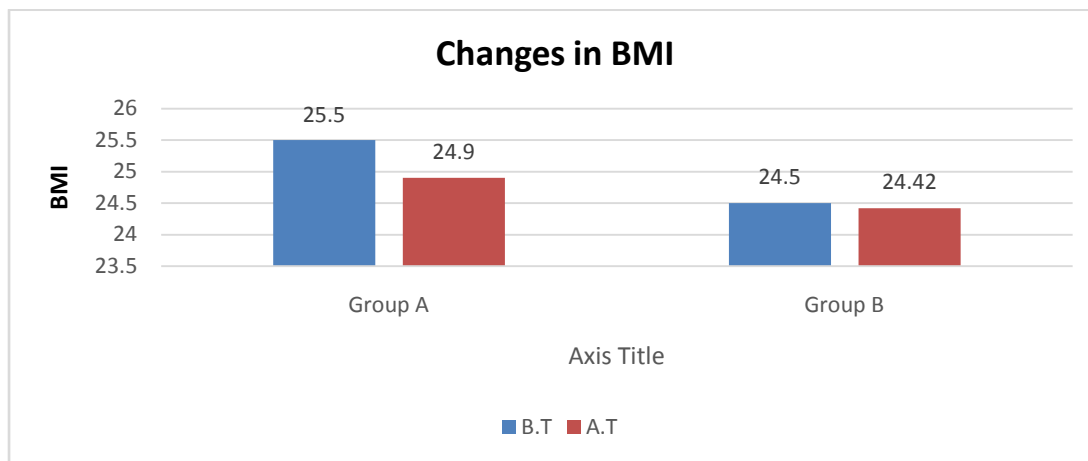
Using Mann-Whitney U test, to test the hypothesis –

H₀ : Reduction in BMI score for group A and group B are equal (equally distributed)

H₁ : Reduction in BMI score for group A and group B are not equal(not equally distributed)

| Group | Median difference (bef-aft) | Mean difference of (bef-aft) | S.D. of difference of (bef-aft) | Mann-Whitney U statistic | P-Value |
|---------|-----------------------------|------------------------------|---------------------------------|--------------------------|---------|
| Group A | 0.6 | 0.6 | 0.68 | 658 | 0.999 |
| Group B | 0.25 | 0.1 | 0.21 | | |

Reduction in BMI score for group A was significantly higher (p –value = 0.99) than that for group B at 5% level of significance. Thus, **treatment A can be considered as more efficacious in reducing BMI as compared to treatment B.**



Effect of therapy:

| Parameter | Group A | Group B | Comparative efficacy |
|---|-------------|---------------|---|
| Aartavakalavadhi (Duration of bleeding) | Significant | Significant | Insignificant Equally effective |
| Character Of Bleeding | Significant | Significant | Insignificant Equally effective |
| Aartavadarshan | Significant | Significant | Insignificant Equally effective |
| Yonivedana (Pain during menses) | Significant | Significant | Insignificant Equally effective |
| AOBL By PBAC | Significant | Significant | Insignificant Equally effective |
| PCOD | Significant | Significant | Insignificant Equally effective |
| BMI | Significant | Insignificant | Group A significantly effective in reducing BMI |

| Parameter | Group A | Group B |
|---|---------|---------|
| Aartavakalavadhi (Duration of bleeding) | 83.33% | 83.10% |
| Aartavadarshan | 42.86% | 42.31% |
| Character of Bleeding | 75.00% | 66.67% |
| Yonivedana (Pain during menses) | 79.31% | 82.76% |
| AOBL by PBAC | 74.24% | 75.76% |

| | | |
|---------------------------|---------------|---------------|
| PCOD | 66.67% | 75.00% |
| BMI | 2.42% | 0.3% |
| Mean % improvement | 60.55% | 60.84% |

Distribution of patients according to relief:

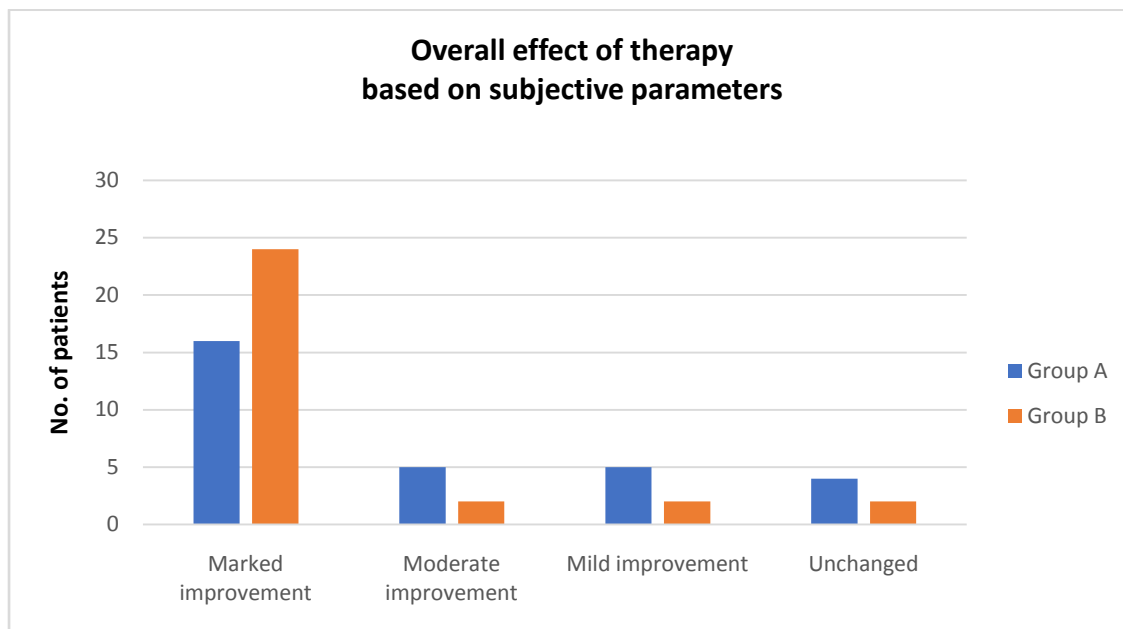
A) Based on subjective parameters

| Overall Effect (patient wise) | Percentage |
|-------------------------------|------------|
| Marked improvement | 75-100% |
| Moderate improvement | 50 -75% |
| Mild improvement | 25- 50% |
| Unchanged | >25% |

| Overall Effect (patient wise) | No. of patients | | | |
|-------------------------------|-----------------|-------------|-----------|-------------|
| | Group A | | Group B | |
| | Count | % | Count | % |
| Marked improvement | 16 | 53% | 24 | 80% |
| Moderate improvement | 5 | 17% | 2 | 7% |
| Mild improvement | 5 | 17% | 2 | 7% |
| Unchanged | 4 | 13% | 2 | 7% |
| Total | 30 | 100% | 30 | 100% |

In group A, 16 patients (53%) was observed with marked improvement, 5 patients (17%) were with moderate improvement, 5 patients (17%) were seen with mild improvement while 4 patients (13 %) were seen with no improvement at all.

In group B, 24 patients (80%) was observed with marked improvement, 2 patients (7%) were with moderate improvement, 2 patients (7%) were seen with mild improvement while 2 patients (7 %) were seen with no improvement at all.



DISCUSSION

To understand the samprapti of an Artavakshaya it is important to know about the formation of Rasa dhatu. Artava is the updhātu of Rasadhātu, the kshaya of Rasa Dhatu finally leads to kshaya of Artava. Formation of Rasa Dhatu is affected when there is jatharagnimandya along with the vitiation of Apana, Vyana vata, Pachaka pitta & kledakakapha. This mandagni with vitiation doshas hamper the formation of ahara rasa by producing ama. Hence upatti of Rasa dhatu is affected as it is formed from ahara rasa.

Main characteristic features of Artavakshaya are presence irregular menstruation, hypomenorrhea, oligomenorrhea, dysmenorrhea. Considering all clinical features in totality the condition appears to be resembling with Oligohypomenorrhea.

The drugs used in GudvyoshadiChurna are mainly Tikta and Katu Rasa predominant, Ushna virya, Katu Madhur vipak predominant and having Artavajanan, RajstravRajvrudhi, AsrugPrasadan, Vrishya properties so it is considered to be very much effective in the treatment of Artavakshaya.

Acharya Charaka states that, certain drugs act through Rasa; some through Veerya; some through their Gunas; some through their Vipaka and some through their Prabhava.

Action of Gudvyoshadi churna:

The 'Sampraptivighatana' is the main aim for the proper Artavautpatti, which can be achieved by maintaining the normalcy of the agni. The drugs used in GudvyoshadiChurna helps in Sampraptivighatana with its rasa, virya, vipaka&prabhava.

Normalcy of apanavata helps in expulsion of Artava. Garbhashaya&artavavahinidhamani are mula ofartavavahstrotas. If there is any injury to this, leads to nastartava. Artavavahastrotas are obstructed by the vikruti of apanavata&kapha, results in Artavakshya.

Guduchyadichurna is Tikta Madhur Rasa predominant and having Ushna Virya which does the Aampachana, and due to Ushna Virya with Tikta, Katu Rasa it helps in Kapha Vata shaman and picchilguna of Kapha.

All drugs having karma of Vrishya, Artavjanan, Asrugprasadana, Raj shrav Rajo vridhhi so the amount of bleeding during menses get increased.

DISCUSSION ON OVERALL EFFECT OF THERAPY

In group A, 16 patients (53%) was observed with marked improvement, 5 patients (17%) were with moderate improvement, 5 patients (17%) were seen with mild improvement while 4 patients (13 %) were seen with no improvement at all.

In group B, 24 patients (80%) was observed with marked improvement, 2 patients (7%) were with moderate improvement, 2 patients (7%) were seen with mild improvement while 2 patients (7 %) were seen with no improvement at all.

CONCLUSION:

A clinical study has been done for – **“A RANDOMIZED OPEN PROSPECTIVE CONTROLLED CLINICAL TRIAL OF GUDVYOSHADI CHURNA IN ARTAVAKSHAYA W.S.R. TO OLIGOHYPOMENORRHOEA.”**

This chapter includes the conclusion drawn from the study. From observations we can conclude that

1. Both the drugs that is Trial Drug (Gudvyoshadi Churna) & Control Drug (OC pills) are effective in the management of ArtavaKshaya is concluded based on Statistical Analysis.
2. Both the drugs have proved significant relief in symptoms of Artavakshaya, but Gudvyoshadi churna is proved to be safe formulation without having any side effects compared OC pills.
3. According to this clinical study, the BMI of patients taken for Trial Group also get reduced.
4. From the above observations obtained in this study it can be conclude that ArtavaKshaya is more common in women who is
 - Age between 18-35
 - Middle class
 - Both married and unmarried
 - Students
 - Having mixed type diet
 - Kapha vat Praktiti
 - BMI 18-30
 - This study was carried out on small sample size that is 60 patients, in each group 30 patients and it shows equally significant results.

The Bibliography section includes references of all books referred for the present study.

The Annexure includes Master Charts & Abbreviation.

Various observations made in this clinical study are concluded as:

Out of 60 patients studied

23 patients (38%) showed marked improvement

17 patients (28%) showed moderate improvement

13 patients (22%) were mildly improved

7 patients (12%) were unchanged

The drug i.e. “**Gudvyoshadichurna**” is cost effective, easy to prepare & easy to take. No adverse effects were seen by administrator during the period of study,

From above observations we can conclude that Gudvyoshadichurna is equally significantly effective with oc pills in Artavakshaya.

GROUP A i.e GUDVYOSHADI CHURNA shows zero percentage of side effects while GROUP B i.e. OC pills shows side effects of therapy in 87% in grade wise.

Hence from above observation we can conclude that Gudvyoshadichurna is significantly effective than OC pills in Artavakshaya.

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