STUDY THE EFFICACY OF PIPPALYADI CHURNA WITH GUDODAK IN SUTIKA AWASTHA (PUERPERIUM)

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ABSTRACT

Puerperium is the period following childbirth during which the body tissue, specially the pelvic organs revert back approximately to the pre-pregnant state both anatomically and physiologically. There is chances of infections if proper care has not been taken in puerperium. According to ayurveda this period is called ‘Sutika awastha’ and ayurvedic management fruitful in this period. Pippalyadi churna with Gudodak gives better result in sutika awastha.

KEYWORDS: Puerperium, Sutika awastha, Pippalyadi churna (powdered form), Gudodak.

INTRODUCTION

Puerperium has traditionally been defined as period from delivery up to six weeks postpartum. Puerperium is dynamic period when the physiological changes that occur during pregnancy resolve and body system returns to their prepregnant state. Therefore women need considerable medical attention and psychological support during this period for quick and complete recovery. A clear understanding of these changes is essential to appriciate the disease processes that can treaten the women during puerperium.[1] Puerperium is devided in 3 parts 1. Immediate (within 24 hours) 2. Early (up to 7 days) 3. Remote (up to 6 weeks).[2]

Anatomical and Physiological changes during puerperium

1. Involution of the Uterus and Pelvic structures

Immediately following delivery the uterus becomes firm and retracted with alternate
hardening and softning. At the end of 6 weeks it's similar to the prepregnant state. Lower uterine segment takes few weeks to revert back and cervix contracts slowly. Vagina takes long time to involute. Pelvic floor and pelvic fascia take long time to involute from streching effect during parturation.

2. Lochia

It is the vaginal discharge for first fortnight during puerperium. 1. Lochia Rubra (Red)-(1-4 days) 2. Lochia Serosa (Yellowish-pale brown)-(5-9 days) 3. Lochia Alba (Pale white)-(10-15 days). Normal duration of lochia is 3 weeks. Character of the lochial discharge gives useful information about the abnormal puerperal state. The vulval pads are to be inspected daily to get information.

3. General Physiological changes

After delivery for few hours pulse rate is likely to be raised which setteles down to normal during the second day. Slight rise in temperature following delivery. On third day slight rise in temperature because of engorgement of breasts. Stagnation of the urine along with a devitalised bladder wall contribute to the urinary tract infection in puerperium. Increased thirst in early puerperium is due to loss of fluid during labour in lochia ,diuresis and perspiration. Slight intestinal paresis leads to constipation .Weight loss due to expulsion of uterine contents, further loss due to diuresis . Fluid loss due to dehydration and blood loss during labour. The secretion of breasts called colostrum which start during pregnancy becomes more abundant during this period.

Management of normal puerperium

1. To give all attention to restore the health status of mother.
2. To prevent infection.
3. To take care of breasts, including promotion of lactation and nursing child.
4. To motivate the mother for contraception.

Ayurveda is science of life having objectives of maintaining health that is prevention and treating the diseased if it occurs. According to ayurveda puerperium period is called ‘Sutika awastha’. As old and dirty cloth washed very carefully ,the same way sutika is very delicate and exhausted condition physically and mentally due to labour stress so precautions should be taken before treating her. On the other hand because of weak resistance power if sutika suffers from any disease it is very difficult to treat and cure her.
So I have chosen this subject for the study in which I have given ‘Pippalyadi churna 500 mg’ twice a day with Gudodak for first 3 days of puerperium. Result based on following criteria,

1. *Yonigat raktastrav* (Per vaginal bleeding/Lochia).
5. *Malpravrutti* (Motion).

**MATERIAL & METHODS**

1) Patients are selected randomly.
2) Total 100 patients are selected for the study. They are divided into 2 groups, Group A & Group B.
   
   Group A – *Pippalyadi Churna* with *Gudodak*. 
   
   Group B – Routine sutika paricharya (Puerperal management).
3) Authentification and standardization of drug done in standard laboratory. 
4) Symptoms have categorized in mild, moderate, severe.
5) Data collected with the help of observations & assessment criteria.
6) Discussion made scientifically in detail after result.
7) Results drawn on the basis of observations and discussion.

**Method of preparation of drug**

All individual contents (*Pippali,Gajapippali,Pippalimul,Chitrak,Shunthi*) are mixed in *khal* (pot) in equal proportions and mixed thoroughly.

10 gm of *guda*(Jaggery) mixed with hot water and used as *anupan*(Drink with medicine for better effect)

**Group A** – (Experimental Group)

Drug - *Pippalyadi Churna*

Dose – 500mg 2 times a day.

*Anupan – Gudodak*

**Group B** – (Control Group)

Routine *Sutika Paricharya*.(Puerperal management)
Study Design

Information about Sutika Awastha (Puerperium) From Ayurvedic and Modern Literature

Identification of Patients by inclusion & Exclusion criteria

Clinical Diagnosis

Screening

Informed Consent

Randomization

Treatment

Group A (50 Patients)  Group B (50 Patients)

Pippalyadi Churna 500 mg  Routine Sutika Paricharya (Puerperal management)
twice a day with gudodak

for first 3 days of Sutika Awastha.

Follow up on seventh day.  Follow up on seventh day.

observed finding classified and discussed

Statistical tests applied

Analysis

Result Report
INCLUSION CRITERIA
1) Written informed consent & voluntarily willing patients taken for this study.
2) The patient of any caste, parity, income group & any occupation selected.
3) Only normal delivered women selected.

EXCLUSION CRITERIA
1) Not willing for this trial study.
2) Caesarean sections.
3) Twins pregnancy, polyhydramnios.
4) Fibroid, severe anaemia.
5) Immune-compromised patients.
6) Diabetes mellitus.

ASSESSMENT CRITERIA
The effect of Pippalyadi Churna with gudodak is evaluated with help of following observations.

1) Yonigat Raktastrav (Per vaginal bleeding/Lochia) - Size of sterile pad 28x7x3cm
   Actual soaked area of pad=14x7cm. 1 soaked pad=40ml.
   Mild- 1 pad/ day
   Moderate- 2-3 pad/day
   Severe- 4 or more pad/day

2) Garbhashay rhas (Involution of uterus) – Garbhashay rhas can be assessed clinically by noting the height of fundus in relation to symphysis pubis. Measurement should be taken carefully at fixed time everyday. Bladder must be emptied beforehand. Uterus is to be centralized and with measuring tape, fundal height is measured above pubis symphysis. Following delivery, fundus lies about 13.5 cm above the pubis. During first 24 hrs, the level remains constant thereafter there is steady decrease in height by 1.25 cm in 24 hrs. So we consider,
   > 1 cm - ‘0’
   0.5 cm - 1 cm - ‘+’
   <0.5 cm - ‘++’
3) Adhoudarshool (Pain in abdomen)
Nil-'0’
Mild-‘+’
Moderate –‘++’
Severe-‘++++’

4) Agnimandya (Appetite) -
Normal Diet - '0'
Once in a day - ' +'
No appetite - '+ +'

5) Malpravruti (Motion) -
Samyak malpravruti (satisfactory) – ‘0’
Sakashta malpravruti (not satisfactory) – ‘+’
Malpravruti nasti (constipation) – ‘ + +’

OBSERVATION
To test whether the pippalyadi churna with gudodak is effective in sutika awastha i.e. whether the median of experimental group (the group with pippalyadi churna 500 mg twice a day with gudodak) is less than the median of the control group (Routine sutika parichary). The hypotheses under study are:

The null hypothesis, H0
The median of experimental group (the group with pippalyadi churna 500 mg twice a day with gudodak) is equal to the median of the control group (the group with Routine sutika paricharya).

Vs.

The alternative hypothesis, Ha
The median of experimental group (the group with pippalyadichurna 500 mg twice a day with gudodak) is less than the median of the control group (the group with Routine sutikap aricharya).
Test Statistic

Test statistic is a count of values from experimental group which exceeds the corresponding median of control group.

CALCULATION TABLE

<table>
<thead>
<tr>
<th></th>
<th>No of Day</th>
<th>Median of Experimental Group</th>
<th>Median of Control Group</th>
<th>Test Statistic (If test statistic &lt; 18; Reject H )</th>
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<tr>
<td><strong>Yonigat Raktuastav</strong></td>
<td>Day 1</td>
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<tr>
<td></td>
<td>Day 2</td>
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<td>1</td>
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<tr>
<td></td>
<td>Day 3</td>
<td>0</td>
<td>1</td>
<td>0</td>
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<tr>
<td></td>
<td>Day 7</td>
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<td>0</td>
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<td><strong>Garbhashay Rhas</strong></td>
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<td>2</td>
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<tr>
<td></td>
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<td></td>
<td>Day 7</td>
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<td><strong>Adho Udar Shul</strong></td>
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<tr>
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<tr>
<td><strong>Agnimandya</strong></td>
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<td><strong>MalaPravrutti</strong></td>
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<td><strong>Total Score</strong></td>
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<td></td>
<td>Day 7</td>
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</tbody>
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Rejection criteria

The null hypothesis is rejected if the test statistic is less than the critical value of the test statistic.

The critical value of test statistic = 18 at 1% level of significance.

RESULT AND DISCUSSION

Total score of median of experimental group is 6, 3, 1, 0 and median on control group is 9, 5, 3, 0 respectively. On analysis of mode of action of combination of the durg given to the patients was of Tikt Katu Rasa, Ushna Virya and Laghu, Ruksha guna. Considering all
rasa, virya, vipak and gun the combination has worked to remove Garbhashayashaithila, Vranaropana, vedanasthapan, stanyashodhan, Treedoshahara, Garbhashaya shodhan, stanya Vrudhikar, malamutrasarak and Adho Udar Shul shamak. Majority of the drug has the effect of Deepan pachan, which is necessary in sutika. As she has Dhatukshayajanya agnimandya. Due to Ushna Virya it acts as Kaphaghna and helps to remove Kledadhikya. The drug also has Krumighna property, which might prevent yoni dushti. All these properties combined together seem to be responsible for the beneficial action in the study.

CONCLUSION
Since all values of test statistic are less than 18 which is the critical value of the test statistic; the null hypothesis is rejected in all cases Yonigat Raktastrav, Garbhashay Rhas, Adho Udar Shul, Agnimandya, MalaPravrutti, Total Score. Hence the median of experimental group (the group with pippalyadi churna 500 mg twice a day with gudodak) is less than the median of the control group (the group with Routine sutika paricharya) in all cases Yonigat Raktastrav, Garbhashay Rhas, Adho Udar Shul, Agnimandya, MalaPravrutti, Total Score.

Hence the pippalyadi churna with gudodak is effective in all cases Yonigat Raktastrav, Garbhashay Rhas, Adho Udar Shul, Agnimandya, MalaPravrutti, Total Score and for all days under study.

REFERENCES