



A CLINICAL STUDY OF *UTTARBASTI* WITH *KAASHMARI* AND *KUTAJA KWATHA SIDDHA GHRITA* IN *YONIVYAPADA* w.s.r. TO SPONTANEOUS ABORTIONS UPTO 20 WEEKS OF PREGNANCY

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ABSTRACT

According to *Ayurveda*, spontaneous abortions occur in *Asraja/Raktyoni/Putraghni Yonivyapada*. According to *Charaka* due to excessive use of articles capable of aggravating *Rakta* and *Pitta*, the *Rakta* situated in reproductive organs of female gets vitiated by *Pitta*, and then, even after achievement of conception there is excessive bleeding per vagina. This condition is known as *Asraja/Raktyoni*. The *Vaayu* aggravated due to predominance of *Ruksha* properties in the body, repeatedly destroys the fetuses born from vitiated *Shonita*, known as *Putraghni*. The concept of *Jaatharini* and *Garbhvyapadas* also explains spontaneous abortions. Spontaneous miscarriage is clinically detectable loss of foetus occurring before 20 weeks of gestation. Recurrent pregnancy loss (RPL) is the occurrence of three or more consecutive spontaneous miscarriages before 20 weeks of gestation. Some however, consider two or more as a standard. It has been shown to be due to known etiologies like anatomic abnormalities chromosomal aberrations, infections, humoral immune factors, but 40-50% of aetiology remains 'unknown' or 'unexplained'. As prescribed by *Acharya Charaka* (Ch.Chi.30/100-101) present study aims at studying the effect of *Uttarbasti* of *Kaashmari* and *Kutaja Kwatha Siddha Ghrta* in *Asraja/Raktyoni/Putraghni Yonivyapada*. A single blind clinical study was done on 30 Patients desired to have pregnancy with History of abortions upto 20 weeks due to unknown cause, with or without alive and healthy children patients were registered from OPD and IPD of *Prasuti Tantra Evam Stree Roga*, Rishikul Campus, Haridwar. *Uttarbasti* with *Kaashmari* and *Kutaja Kwatha Siddha Ghrta* was given for 3 months(for 3 menstrual cycles). *Uttarbasti* was administered in 3 sitting of each cycle at interval of 3 days, starting with 6th day of menstrual cycle and duration of one sitting was 3 days. Follow up was made for 3 months. 4 patients (got complete cure) conceived and continued pregnancy with healthy fetus upto 20 weeks. 6 patients had inevitable abortion with reduced bleeding P/V and reduced pain. 20 patients did not conceive but showed improvement in endometrial thickness. Thus, it can be concluded that *Uttarbasti* of *Kaashmari* and *Kutaja Kwatha Siddha Ghrta* in cases of *Asraja/Raktyoni/Putraghni Yonivyapada* or spontaneous abortions upto 20 weeks was effective. Further researches could be carried out by taking large number of patients and longer duration of therapy.

KEYWORDS: *Asraja/Raktyoni/Putraghni Yonivyapada*, RPL, *Uttarbasti*.

INTRODUCTION

As to procreate is the innate desire of most of the couples-a child is a family bridge. Having one pregnancy loss itself is heart breaking and repeated ones are heart wrenching.

The process of pregnancy from conception until delivery is fraught with numerous potential complications. One such complication is spontaneous miscarriage(abortion) or clinically detectable loss of fetus occurring before 20 weeks of gestation.^[1] The incidence^[1] of early pregnancy loss post implantation can be as high as 31%. Recurrent

spontaneous miscarriage (RSM) is occurrence of three or more consecutive spontaneous miscarriages before 20 weeks of gestation.^[1] Some however, consider two or more as a standard. It has been shown to be due to known etiologies like anatomic abnormalities chromosomal aberrations, infections, humoral immune factors, but 40-50% of aetiology remains 'unknown' or 'unexplained'. This has inspired great interest in searching potential causes of spontaneous miscarriages and its probable treatment.

In *Ayurveda*, we have our own principles to diagnose and manage diseases. Regarding diseases of women ancient philosophers have put down the concept of *Yonivyapada*, mentioned in almost all *Ayurvedic* texts. There are total 20 *Yonivyapada* mentioned by all *Acharyas*. Among them spontaneous abortions occur in *Asraja/Raktyoni/Putraghni Yonivyapada*. *Acharyas* have said due to intake of *Ahita Ahaar* and *Vihara* in these *Yonivyapada* as the cause of repeated pregnancy loss. Also, another concept of *Jaatharini* in *Ayurveda* says that due to unrighteous acts of the couple the women has repeated pregnancy loss. *Sushruta* has described four essential factors like *Ritu*, *Kshetra*, *Ambu* and *Beeja* for conception. We can ensure motherhood, when these four factors are fulfilled. Otherwise *Grabha Sraava* and *Grabhaata* occurs. *Ayurveda* places great emphasis on prevention and encourage the maintenance of health of women through close attention to balance *Dosha*, performing right deeds, taking proper diet, use of herbs, therapies like *Uttarbasti* etc. Prevention of disease is encouraged among women with history of recurrent abortions by counselling for avoiding misdeeds, tender loving care, proper nutrition etc. The treatment of disease was done by *Uttarbasti* of *Kutaja* and *Kaashmari Kwatha Siddha Ghrita* for 3 days of 3 menstrual cycles. Importance of present study is as follows-

- ❖ The incidence of abortion is probably 10-20% of all clinical pregnancies. 75% abortions occur before the 16th week and of these, about 75% occur before the 8th week of pregnancy.^[2] All this data suggests to carry out research and find probable treatments to this problem.
- ❖ Nothing more vividly demonstrates the importance of fertility to the couple who do not have children. The grief of a woman who has failed to bear a live born child is no less in modern society than it was for our forefathers. Recent research has found pregnancy losses, as etiological factors of depression, loss of health, status or prestige in the couple. So, in this present era when everything is going to be superspecialized it is very necessary to provide a particular etiopathology as well as remedy for pregnancy losses.
- ❖ As recurrent abortions due to Unknown etiology can be understood according to *Ayurveda* concepts of *Dosha*, *Agni*, *Jaatharini* etc. Possible explanations of Unknown causes and their correction with the help of *Ayurvedic* herbs, therapies like *Uttarbasti* should be researched, explored, correlated and justified with authentic evidences.

MATERIALS AND METHODS

Selection of drug

Required raw drugs *Kaashmari* and *Kutaja Bark* were identified by *Dravya Guna* Department and selected. Preparation of *Kaashmari* and *Kutaja Kwatha Siddha Ghrita* was made in Hans Pharmacy of Prem Nagar Ashrama (Sidkul) Haridwar. The *Kaashmari* and *Kutaja Kwatha Siddha Ghrita* was selected due to following properties-

Kaashmari

It is *Tridoshshamaka* as well as *Garbhasthapaka*. Due to *Kashaya*, *Tikta*, *Madhura Rasa*, it is *Rakta Pittshamaka*. As *Rakta-Pitta* being the root cause of *Raktyoni*, it will help in *Shamana* of *Raktyoni/Asraja* as well as *Garbhsthan*. Due to *Ushna Veerya* it is *Vata*, *Kapha Shaamaka*. It is also *Shothhara*. As *Raktapitta* being the root cause of *Raktyoni* it will help in *Shaman* of *Raktapitta*.

Kutaja

Due to *Tikta* and *Kashaya Rasa* and *Sheeta Virya*, it is *Raktashodhaka* and *Raktstambhaka*. So it will help to stop bleeding.

Ghrita

Ghrita is *Madhura*, *Kashaya*, *Guru*, *Sheeta* helps in *Pittshamana* and *Garbhasthapana*.

Preparation of Ghrita for 30 patients: *Ghrita Siddha* with *Kaashmari* and *Kutaja Kwatha* was made with (4kg) *Murchita Ghrita*. 16 litre decoction of *Kaashmari* and 16 litre decoction of *Kutaja* (1/8 then 1/4 remaining) (शा.म.९)^[7], of 1 kg *Kalka* of *Kaashmari* and 1kg *Kalka* of *Kutaja* was taken (शा.म.९/२/८).^[7] It was heated (*Madhayam Paaka*) in low flame. *Kashmari* and *Kutaja Kwatha Siddha Ghrita* was cooled by stirring it continuously at room temperature.

Murchana Dravya for Ghrita

Amalaki, *Vibhitak*, *Haritaki*, *Nagarmotha*, *Haridra*, *Matulungnimbu swaras*.

Each content in equal amount (1tola) (भै. रत्नावली, ज्वरे) was taken for preparation of *Murchita Goghrita*.

As *Uttarbasti* procedure is best for attaining conception, present study is done on *Uttarbasti* with *Kaashmari* and *Kutaja Kwatha Siddha Ghrita*.

च.चि.३०/१००-१०१-योनिव्यापदचिकित्साअध्याय

काशमार्यकुटजकवाथसिद्धउत्तरबस्तिना |

रक्तयोन्यरजस्कानां पुत्रघ्न्याश्च हितं घृतं ||

PROCEDURE OF UTTARBASTI

Patients were admitted in IPD, 24 hours after their menstrual bleeding was stopped. *Garbhashayagata Basti* (intracervical & intrauterine *Uttarbasti*) is a major procedure and was done under aseptic conditions. The procedure was carried out in Operation Theatre of Rishikul ayurvedic college hospital.

The whole procedure is mainly divided into 3 part

- (i) *Purvakarma* (ii) *Pradhanakarma* (iii) *Pashchatakarma*

PURVAKARMA

On each night before the *Uttarbasti* administration, *Haritaki* in a dose of 3 gm. was given with warm water for cleaning the bowels. Before giving the *Uttarbasti Yoni Prakshalana* with *Panchavalka Kwatha* – 500 ml. was done with all aseptic precautions. After that, *Abhyanga (Snehan)* of *Bala Taila* for 15 minutes and *Swedana* of Hot water bag for 15 minutes was done over *Adhodara, Kati, Prishtha and Parshva Pradesha*.

PRADHANAKARMA

With all the aseptic measures, patient was kept in lithotomy position, vulva, thighs and vaginal canal were cleaned with Dettol. A routine P/V examination was done to confirm the size and shape of the uterus. Then Sim's speculum was passed through the vagina and with the help of Sim's retractor, cervix was exposed and held with Allis forceps, Uterine sound was passed through the cervix to know the position and length of uterus. The Cusco's speculum was used in many patients instead of Sim's Speculum to visualize cervix. After that, the os was dilated as per the need with Hegar's dilators upto no. 8 to 10 size. Then lubricated Intrauterine insemination cannula from the uterine end passed in the direction of uterus just to cross the internal os and 3 -5 ml of *Kaashmari* and *Kutaja Kwatha Sidhha Ghrita* was injected gently with the disposable syringe of 5 ml from the other side of IUI canula of 6 or 8 mm.

PASHCHATAKARMA

First of all, proper *Pratyavartan Kriya* of *Ghrita* was observed. As soon as *Ghrita* regurgitated, the head low position was given to patients and then all instruments were removed. A sterile pad was kept in the vaginal canal and patient was advised to put her right leg on the left leg in her dorsal position. The patient was kept in this position for 3 hours. Then patient was given hot water bag locally over lower abdomen. Patients pulse and B.P. were monitored. The same procedure was repeated for another 2 days. During these three days of the *Uttarbasti Course Shankhavati* 2 tabs twice a day was administered orally. The hospitalized patients were visited daily and their pulse, B.P. along with the change in signs and symptoms during the treatment were recorded. The patients were advised total rest and *Pathya Ahara* during the treatment.

CRITERIA FOR SELECTION OF PATIENTS**INCLUSION CRITERIA**

1. Married female of Age >18 years to 40 years.
2. Patients fulfilling the diagnostic criteria.
3. Patients who were ready for consent, necessary investigation and agreed to come for follow up regularly are selected.

EXCLUSION CRITERIA

1. Female of age group <18 years and >40 years.
2. Abnormal Semen Analysis of male partner.
3. Pregnancy cases are excluded.

4. Patient having acute and chronic pelvic inflammatory diseases.
5. Those having chromosomal abnormalities.
6. Systemic diseases- Diabetes Mellitus, Hypertension, T.B, Heart disease, Thyroid Dysfunction.
7. Patients having anatomical malformations of genital organs and abnormal placentation.
8. Patients having Immunological Disorders

DIAGNOSTIC CRITERIA**Subjective Criteria**

- Patients desired to have pregnancy with History of abortions upto 20 weeks, with or without alive and healthy children.

Examination

Full examination General and Specific P/A, P/S, P/V for patients with H/O of spontaneous abortions was done.

SAMPLE SIZE

- For present clinical study minimum 30 patients were selected on the basis of inclusion & exclusion criteria.

DOSE

For *Uttarbasti* 3-5ml of *Kaashmari* and *Kutaja Ghrita* /sitting was used with increasing dose.

METHOD OF RESEARCH**TYPE OF STUDY**

A single blind clinical study.

- **PERIOD OF STUDY:** Total duration of study was done for 3 months (for 3 menstrual cycles).

Uttarbasti was administered in 3 sittings of each cycle with interval of 3 days, starting with 6th day of menstrual cycle (ch.si. 9/69).

- 1st sitting 6th, 7th, 8th day → 3-day gap
- 2nd sitting 12th, 13th, 14th day → 3-day gap
- 3rd sitting 18th, 19th, 20th day
- As *Uttarbasti* in 2nd and 3rd sittings were not possible in some patients due to closure of cervical os, so a *Pichu* of *Kaashmari* and *Kutaja Kwatha* was administered on these sittings.

OBSERVATION

- Observation was carried out before, during & after the treatment.
- The patients were observed for three consecutive cycles in which drug was given.

Assessment of patient during and after therapy was done.

FOLLOW UP

- Follow up was done every month after treatment for next 3 months. The follow up of Patients conceived after treatment was done upto 20 weeks of gestation with routine antenatal care.

CRITERIA FOR WITHDRAWAL

- Patients having anxiety for therapy (*Uttarbasti*) and shock during therapy.
- Personal Matters
- Associated/intercurrent illness
- Other difficulties

INVESTIGATIONS**GENERAL TESTS**

- CBC, ABO Rh, BT, CT, TLC, DLC, E.S.R, RBS
- Serum Test-Thyroid profile, TORCH screening, HIV, VDRL, HbsAg.
- Urine routine and microscopic.
- USG (lower abdomen) to exclude anatomical abnormalities.

SPECIFIC TESTS

- Lupus Anticoagulant and Anticardiolipin antibodies
- HLA (Human Leukocyte Antigen) and APCA testing (antiparental cytotoxic antibody)

ASSESSMENT CRITERIA

- Assessment was done statistically.

CRITERIA FOR ASSESSMENT**Subjective Parameter****H/O previous Abortions with complaint of**

- Bleeding P/V (mild/moderate/severe)
- Consistency and color of discharges.
- Pain in lower abdomen and backache (mild/moderate/severe)
- Number of previous Abortions.

Grading Pattern in Cases of H/O Abortions**Bleeding P/V**

- Grade 0 → No Bleeding P/V
- Grade 1 → Spotting P/V
- Grade 2 → Mild Bleeding P/V before expulsion of fetus
- Grade 3 → Moderate Bleeding P/V (with/without clots) before expulsion of fetus
- Grade 4 → Severe Bleeding P/V (with /without clots) before expulsion of fetus

Consistency/color of discharges stained with blood

- Grade 0 → mucoid
- Grade 1 → blood stained mucoid
- Grade 2 → blackish clotted

- Grade 3 → red clots
- Grade 4 → bleeding P/V with big pieces

Pain associated with bleeding P/V

- Grade 0 → No pain
- Grade 1 → Bearable pain
- Grade 2 → Requirement of oral /injectable analgesics
- Grade 3 → No relief after analgesic

Objective Parameter**Endometrial Thickness**

- Grade 0 → > 8 mm
- Grade 1 → 8-6 mm
- Grade 2 → 6-4 mm
- Grade 3 → < 4mm

FINAL ASSESSMENT

- Completely cure –if pregnancy occurs without bleeding with healthy fetus upto 20 weeks of pregnancy (100% relief)
- Marked improvement with on/off spotting P/V without any secondary support to pregnancy (75% to <100% relief)
- Moderate improvement with mild bleeding P/V, if fetus is healthy patient was referred for secondary opinion, for further support of the pregnancy. (50% to <75% relief)
- Inevitable Abortion with mild bleeding P/V and mild pain (25% to < 50%)
- Patients not conceived but showed improvement in Endometrial thickness. (0-<25%)

Addition and exclusion were done in assessment criteria as per necessity of the study.

STATISTICAL ANALYSIS

Wilcoxon Signed rank test was applied on the subjective Parameters.

Paired t 'test' was applied on objective parameter.

The obtained results were interpreted as follows-

- p>0.05 -Insignificant
- p<0.05 and <0.01 -Significant
- p<0.001 -Highly Significant

RESULTS AND DISCUSSION

Table No. 1: Patients conceived after Treatment.

Pregnancy status		No. of Patients	Percentage (%)
Not Conceived		20	66.67%
Conceived 10(33.33%)		10	33.33%
	Pregnancy Continued	4(13.33%)	
	Aborted	6(20%)	

Out of 30 patients after treatment 10 (33.33%) patients conceived. 4(13.33%) patients out of 10 conceived patients had successful pregnancy upto 5 months (20 weeks) without any bleeding P/V or secondary support.6

(20%) out of 10 conceived patients again aborted after treatment but there was improvement in associated symptoms as compared to before treatment.

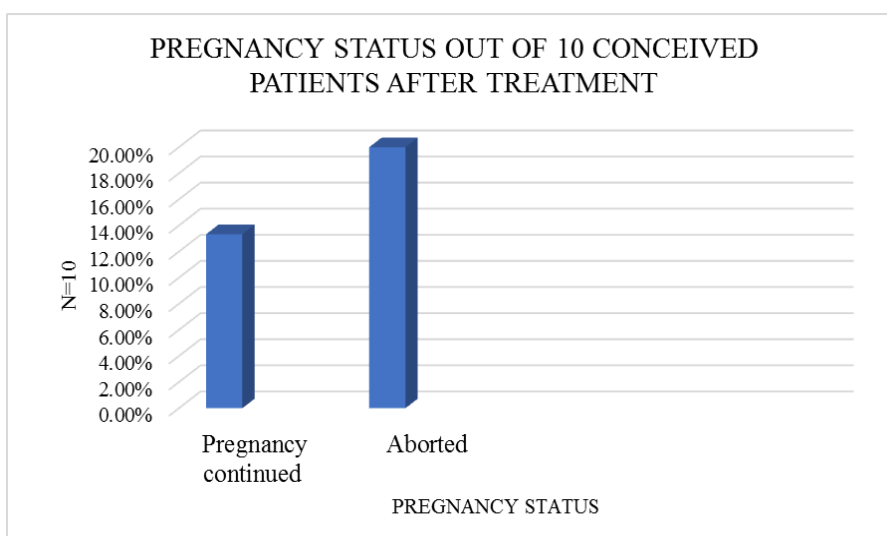
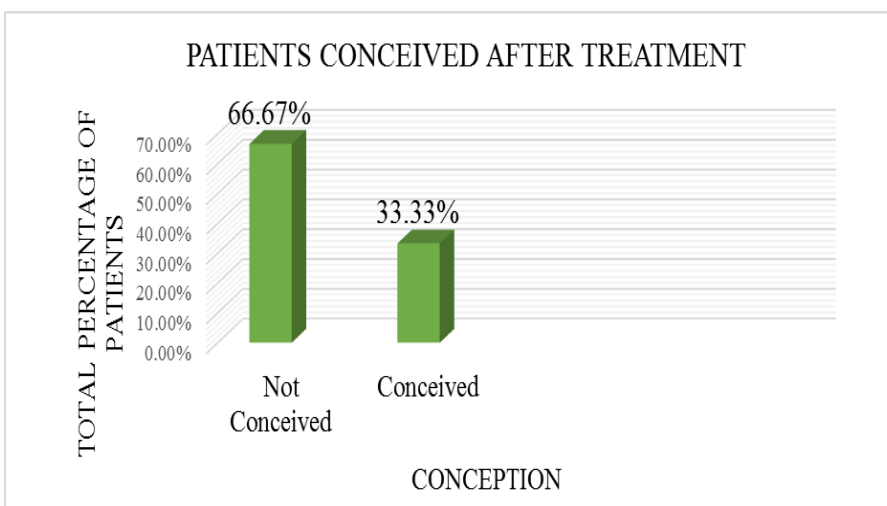
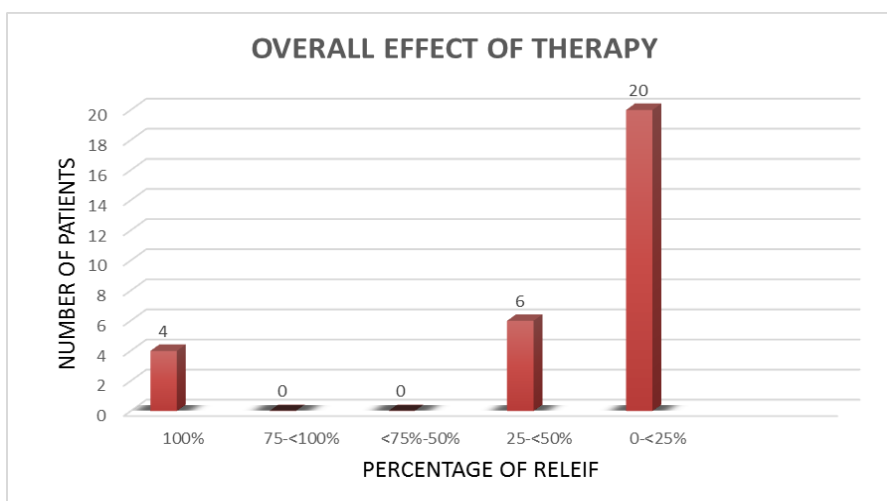


Table No. 2: Effect of Uttarbasti on Bleeding P/V before expulsion of fetus.

Chief Complain	Mean of grading		Mean Difference	% Relief	W	P	N	Sig.
Bleeding P/V before expulsion of foetus	B.T.	A.T.						
	2.600	1.000	1.600	61.53%	55.000	0.002	10	S

Out of 10 patients conceived effect of *Uttarbasti* showed 61.53% improvement in Bleeding P/V with significant result.

Table No.3: Effect of Uttarbasti on Consistency /color of discharges stained in cases of abortions.

Chief Complain	Mean of grading		Mean Difference	% Relief	W	P	N	Sig.
Consistency/color of discharges stained with blood	B.T.	A.T.						
2	2.400	1.000	1.400	58.33%	45.000	0.004	10	S

Out of 10 conceived patients effect of *Uttarbasti* showed 58.33% improvement in consistency /color of discharges with significant result.

Table No.4: Effect of Uttarbasti on Pain associated with Bleeding P/V in cases of abortions.

Chief Complain	Mean of grading		Mean Difference	% Relief	W	P	N	Sig.
Pain associated with bleeding	B.T.	A.T.						
	2.000	0.600	1.400	70%	45.000	0.002	10	S

Out of 10 conceived patients 70% showed improvement in pain with significant result.

Table No.-5: Effect of Uttarbasti on Endometrial Thickness.

Chief Complain	Mean		Mean Difference	% Relief	S.D.	S.E.	P	't'	N	Sig.
Endometrial Thickness	B.T.	A.T.								
	7.950	10.495	2.545	32%	1.184	.265	<0.001	9.614	20	H.S.

Out of 20 patients which did not conceive 32% showed improvement with highly significant result.

Table No.6: Overall Effect of Therapy.

S.No.	Range of Effect	Result	No. of Patients	Obtained Result of Study (%)
1.	Patients Conceived and continued pregnancy with healthy fetus upto 20 weeks without bleeding P/V	100%	4	13.33%
2.	Pregnancy continued with spotting P/V	75-<100%	0	0
3.	Pregnancy continued with mild Bleeding P/V, if fetus is healthy patient was referred for secondary opinion, for further support of the pregnancy.	<75%-50%	0	0
4.	Inevitable abortion with mild Bleeding P/V and mild pain.	25-<50%	6	20%
5.	Patients not conceived but showed improvement in endometrial Thickness	0-<25%	20	66.67%

4(13.33%) patients conceived and continued pregnancy with healthy foetus upto 20 weeks without bleeding P/V and showed 100% improvement.

6(20%) had Inevitable abortion with mild Bleeding P/V and mild pain with 25-<50% improvement.

While 20(66.67%) Patients not conceived but showed improvement in endometrial Thickness with <25% improvement.

DISCUSSION

Effect Of Therapy On Conception: Out of 30 patients after treatment 10 (33.33%) patients conceived. 4(13.33%) patients out of 10 conceived patients had successful pregnancy upto 5 months (20 weeks) without

any bleeding P/V or secondary support. 6 (20%) out of 10 conceived patients again aborted after treatment but there was improvement in associated symptoms as compared to before treatment. (Table No.1).

Effect of Uttarbasti on Bleeding P/V after treatment in 6 aborted patients

In 10 patients conceived after treatment 6 patient aborted but showed 61.53% improvement in Bleeding P/V with significant result. *Kaashmari* is *Kashaya*, *Tikta* and *Madhura* therefore it is *Pittashamaka*, which correct the *Raktadushti*, and also *Raktastambhaka* and *Raktashodhak* property of *Kutaja* help in reducing excessive bleeding P/V. It is *Dahaprashmana* and *Shothara* so helps in removing any inflammation and excessive bleeding due to it. Due to *Sangrahika* and

Upshoshan Guna of Kutaja, there was less bleeding P/V after treatment. Also, *Goghrita* is *Vata-Pitta Shamaka* which helps in decreasing bleeding P/V. (Table No.2).

Effect of Uttarbasti on consistency /color of discharges stained with blood after treatment in 6 aborted patients

Effect of *Uttarbasti* showed 58.33% improvement in consistency /color of discharges with significant result. As *Kaashmari* is *Ushna* in *Virya*, it is *Kapha Vata Shamaka* and helps in decreasing excessive discharges. Also due to *Upshoshan Guna of Kutaja*, it helped in decreasing the discharges. (Table No.3).

Effect of Uttarbasti on pain associated with Bleeding P/V after treatment in 6 aborted patients

70% patients showed relief in pain associated with Bleeding P/V and results were statistically significant. As *Goghrita* is *Vatashamaka* it may have worked to pacify severe pain during abortion. After administration of *Uttarbasti* with *Kaashmari* and *Kutaja Kwatha Siddha Ghrita*, due to *Vednasthapana Karma* of *Gambhari* and *Vatashamaka* property of *Uttarbasti*, *Vata* became normal and begin to show its normal physiological function. (Table No.4).

Effect of Uttarbasti on endometrial thickness - Out of 20 patients which did not conceive 32% showed improvement with highly significant result. It can be said that *Garbhsthapaka*, *Balya karma* of *Gambhari* and *Goghrita* worked on endometrial thickness. (>8 mm) which is more receptive for implantation. (Table No.5).

OVERALL ASSESMENT- 4(13.33%) patients conceived and continued pregnancy with healthy foetus upto 20 weeks without bleeding P/V and showed 100% improvement.

6(20%) had Inevitable abortion with mild Bleeding P/V and mild pain with 25-<50% improvement.

While 20(66.67%) Patients not conceived but showed improvement in endometrial Thickness with <25% improvement. (Table No.6).

Probable Mode of Action of Uttarbasti With Kaashmari And Kutaja Kwatha Siddha Ghrita

As, *Vata* is mainly responsible for all the *Yonirogas* (Ch. Chi. 30/115) and *Basti Chikitsa* is considered as best *Chikitsa* of *Vata*. (Ch. Su. 25/40).

अपानोअपानगः श्रोणिबस्तिमेढोरुगोचरः | शुक्रआर्तवशक्रन्मूत्र
गर्भनिष्क्रमणाक्रियेः|| (अ.ह.सु.१२/९)

According to above reference, normal *Apana Vayu* is situated at *Shroni* (Pelvic organ like anal canal, Utero vaginal channel etc., urinary bladder, penis etc.) and is responsible for expulsion of *Shukra*, *Aartava*, *Mala*, *Mutra* and *Garbha* at proper time. But *Prakupita* (*Apana*) *Vayu* leads to repeated pregnancy loss before

term in early weeks of pregnancy, known as *Putraghni*. *Uttarbasti* is one type of *Basti* which is all time best treatment for the *Yonirogas* of females.

As *Acharya Charaka* has said,

----- गर्भं योनिस्तदा शीघ्रं जिते गृहणाती मारुत -----
(च.सि.१/६२-६३-६४-६५)

Once the *Vayu* is controlled by *Uttarbasti*, she achieves conception quickly. So *Uttarbasti* leads to correction of *Prakupita Vayu*. It also tones up the seat of foetus i.e. *Garbhashaya* and thus by applying proper drug through *Uttarbasti*, it subsides the *Kshetrajaya Dushti* directly.

As *Poorvakarma* is done before *Uttarbasti* the Probable mode of action of *Poorvakarma* in *Uttarbasti* is-

- ❖ It is stated that by *Snehana* on body, the parts become soft (*mardavakara*) and it provides strength and nourishment. (*Abhyanga*) *Snehana* also has *Vatashamaka* and *Vatanulomaka* action.
- ❖ Other than it, *Snehana* and *Swedana* just prior to *Uttarbasti* relax the Abdominal muscles. Good relaxation is very important for *Uttarbasti*, so that uterus does not get irritated by the instillation of medicine from outside. If it is not relaxed adequately, it may contract at once and may not retain any of the medicine.^[1]
- ❖ *Snehana* and *Swedana* before *Uttarbasti* also lessen the pain during and after procedure.^[1]
- ❖ *Yoni Prakshalana* done prior to *Uttarbasti* with *Kwatha* of antiseptic property nullifies the possibility of any type of infection as a complication.^[1]

The Probable mode of action of *Pradhankarma* i.e. the instillation of *Kaashmari* and *Kutaja Kwatha Siddha Ghrita* inside the uterus favours *Vata shamana*.

Uttarbasti along with properties of drug i.e. *Madhura Rasa*, *Guru*, *Snigdha Guna*, etc. directly normalizes *Apana Vayu* which in turn helps to correct the *Rakta-Adhikya* (due to Vitiated *Vata* and *Pitta*) in *Artavavah Dhaminis* of *Garbhashaya* and excessive bleeding P/V through uterus even after conception (*Asraja/Raktyoni*). Apart from this, *Uttarbasti* also stimulates certain receptors in the endo-metrium, leading to correction of all the physiological processes of reproductive system.

It also helps in rejuvenation of endometrium. *Uttarbasti* also acts after getting absorbed from rich blood circulation of uterus and posterior fornix. Then, it acts on whole body system (acting as a parenteral route). It also acts by stimulating some neuro-endocrine pathways after getting absorbed.

But exact mechanism of action of *Uttarbasti* is yet to be elucidated. This can be subjected as topic for future research workers to find out the exact mechanism of function of *Uttarbasti*. It is very much important to know

the mechanism function of *Uttarbasti* by modern technical approach, as it is said that the *Basti* is the half treatment for any disease

As, due to faulty *Nidaan Sevana*, like *Pitta Prakopaka Ahaar Vihara*, led to *Prakupita Pitta* which in turn led to *Rakta Dushti* which ultimately led to *Sthaanik Garbhashaya Gata Rakta -Pitta Dushti*. In the Same way, by taking *Vata Prakopaka Ahaar* and *Vihaara* led to *Prakupita Vata* and simultaneous effect of *Prakupita Vata* and *Prakupita Pitta* led to *Rakta-Aadhikya* in *Aratav-vah Dhaminis* of *Garbhashaya* which led to excessive *Rakta Srava* even after conception known as *Asraja/Raktayoni* and *Punh Punh Garbh Srava* known as *Putraghni*.

The *Vatashamaka* properties of *Uttarbasti* and *Goghrita* (*Vata-Pitta Shamaka*), as well as *Madhura, Kashaya Rasa, Guru Guna* of *Kaashmari* led to normalization of *Apana Vayu* situated in pelvic organs. Also due to *Sheeta Veerya* of *Kutaja* and *Goghrita*, correction of *Prakupita Pitta* occurs leading to correction of *Rakta Pitta Dushti* inside *Garbhashaya*. Also, *Raktstambhaka* and *Raktashodhaka* properties of *Kutaja* normalize the *Raktaadhikya* in *Aratav-vah Dhaminis* and Ultimately, the *Garbhashapana Karma* of *Kaashmari* and *Goghrita* helped in conception and proper development of foetus after conception.

Patients who aborted after conception (after treatment) had improvement in Bleeding P/V due to *Kashaya, Tikta and Madhur Guna* of *Kaashmari*, *Pittashamana* occurred, which corrected the *Raktadushti* and also *Raktstambhaka* and *Raktashodhak* property of *Kutaja* helped in reducing excessive bleeding P/V. Also due to *Upshoshan Guna* of *Kutaja*, it helped in decreasing the discharges. They showed improvement in pain which is the synergistic effect of *Goghrita* and *Uttarbasti*, as *Goghrita* is *Balya* and *Vatashamaka* and *Uttarbasti* Normalises *Apana Vayu*.

CONCLUSION

- ❑ Maximum patients with pregnancy losses were between 20 to 30 years of age group because this is the reproductive age group.
- ❑ Maximum patients with pregnancy losses belonged to lower middle class because they are not capable to carry out necessary investigations and treatments due to low income.
- ❑ Maximum patients with pregnancy loss used to take more *Amla, Katu, Lavana Rasa* in their diet which are known to provoke *Pitta* and harm the fetus.
- ❑ Maximum patients had pregnancy loss in *Grishma Ritu* as *Svabhava* of *Grishma Ritu* is opposite to that needed for a conceptus.
- ❑ Effect of *Uttarbasti* showed conception in (4)13.33% patients which continued till 5 months and showed 100% result.
- ❑ Effect of *Uttarbasti* showed improvement in Bleeding P/V in Aborted Cases as compared to

before treatment due *Raktstambhak, Raktashodhak* properties of drugs used in *Uttarbasti*. The complaint of discharges and pain also improved. As well as the *Garbhsthapaka karma* of *Gambhari* and *Goghrita* worked on endometrial thickness which became more receptive for implantation.

- ❑ As *Uttarbasti* in 2nd and 3rd sittings were not possible in some patients due to closure of cervical os, so a *Pichu* of *Kaashmari* and *Kutaja Kwatha* was administered on these sittings and it was effective in patients.

RECOMMENDATION

- Though study of 30 patients were carried out in this research work, but further number of patients in large scale will be more valid in suggesting efficacy of the drug.
- Duration of therapy should be of at least six months, so as to find the overall effect of therapy in the patients for further conception, which was not possible to carry out in the present study due to time limitation.
- The work should also be done on other Causes of Abortion (Tubal blockage, infections) other than unknown causes as the drugs were *Shothhara, Krimihara* etc.
- As conception in itself is a natural process, there is no fixed time for it, so, the follow up should be kept for longer duration.

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DISCUSSION

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