



ISSN 2456-3110

Vol 7 · Issue 1

Jan-Feb 2022

Journal of
**Ayurveda and Integrated
Medical Sciences**

www.jaims.in

JAIMS

An International Journal for Researches in Ayurveda and Allied Sciences



Maharshi Charaka
Ayurveda

Indexed

Randomized open label comparative clinical study on the efficacy of combination of *Chandana Churna* and *Shatapushpa Taila Nasya* with Tranexamic Acid in *Rakta Pradara* (DUB)

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ABSTRACT

Incidence of *Rakta Pradara* (DUB) is on rise due to life style changes. Rough estimate suggests that 10 to 13% of all gynaecological outpatients are for *Rakta Pradara*(DUB).^[1] Dysfunctional uterine bleeding is a state of abnormal uterine bleeding without any clinically detectable organic, systemic and iatrogenic cause.^[2] As per *Nidhana* of *Rakta Pradara* the aggravated *Vata* withholds *Rakta* vitiated due to various reasons mentioned in *Nidana* of *Rakta Pradara* increases its amount reaching *Rajovaha Srotas* which further increases the *rajas*, the *Srotas* involved is *Artavavaha Srotas*, here *Artava Vaha Srotas* taken as whole female genital organs along with functional axis i.e., H-P-O axis. Altered H-P-O axis and GNRH regulation causes *Rakta Pradara* (DUB). So, in this study to treat *Rakta Pradara* through nearest route *Nasya Karma* with *Shatapushpa Taila* is selected along with oral *Chandana Choorna* along with *Madhu* and *Sharkara*.

Key words: *Rakta Pradara*, *Shatapushpa Taila*, *Nasya*, *Chandana Choorna*, *Artavavaha Srotas*.

INTRODUCTION

Menstruation conception and mother hood are productive aspects of reproduction. The process of reproduction depends on a regular ovulatory menstrual cycle hence women's menstrual problems acquire a lot of significance

Acharya Sushruta has considered excessive prolonged or inter menstrual bleeding as *Rakta Pradara*.^[3] Length

of *Rutu Chakra* or menstrual cycle is usually 28 days to 30 days. Deviation of 2 or 3 days is quite common. The duration of bleeding is about 5 days and estimated blood loss is 20ml to 80ml. Any deviation in cyclicity and quantity is termed as *Rakta Pradara*. The normalcy of menstrual cycle depends on hypothalamo pituitary ovarian axis (HPO axis).

Now a day's females are facing gynecological disorders due to excessive consumptions of junk food sedentary life style, faulty dietary habits and also physical and mental stress because of work load which are considered as etiological factors for *Rakta Pradara*, so that HPO axis gets impaired.

As per *Acharya Charaka Rakta Pitta* treatment can be adopted in *Rakta Pradara*^[4] i.e., *Chandana Churna* with *Sharkara* and *Madhu* along with *Tandulodaka Anupana* orally is mentioned in the context of *Raktapitta Chikitsa*. *Acharya Kashyapa* explains use of *Shatapushpa Taila* in the form of *Nasya* in *Atyartava* in the chapter *Shatapushpa Shatavari Kalpa Adhyaya*^[5] which is clinically found effective.

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Submission Date: 06/01/2022 Accepted Date: 17/02/2022

Access this article online

Quick Response Code



Website: www.jaims.in

DOI: 10.21760/jaims.7.1.2

OBJECTIVES

To compare the effect of *Chandana Churna* and *Shatapushpa Taila Nasya* with Tranexamic acid in *Rakta Pradara* (DUB).

METHODOLOGY**Study Design**

A randomized open label comparative clinical study.

Duration of Study: 90 days

Assessment Criteria

Data was collected before during and after completion of treatment and subjected for analysis

Subjective Criteria

1. Bleeding
2. Pain

Objective criteria: Parameters of assessment

1. Duration of bleeding

- 1 – 5 days - 0
- 6 – 9 days - 1
- 10 – 12 days - 2
- >12 days - 3

2. Amount of bleeding

- 1 – 2 pads per day - 0
- 3 – 4 pads per day - 1
- 4 – 5 pads per day - 2
- >5 pads per day - 3

3. Interval between two menstrual cycles

- 26 days -30 days - 0 grade
- Less than 26 days - 1 grade
- 21days - 2 grade
- Less than 21 days - 3 grade

Inclusion criteria

- Age 15 - 40 years
- Excessive bleeding

- Inter menstrual bleeding
- Prolonged bleeding

Exclusion criteria

- Fibroid uterus
- Adenomyosis
- Thyroid dysfunction
- Pelvic inflammatory disease
- Endometriosis
- Anaemia
- Ectopic pregnancy
- Abortion
- Hypertension
- Coronary heart disease
- Liver diseases
- Malignancy
- Diabetes

Duration of treatment - 90 days

Diagnostic criteria

- Excessive bleeding
- Intermenstrual bleeding
- Prolonged bleeding

Laboratory Investigation

- Complete blood count
- Blood group
- Rh factor
- Bleeding time clotting time
- Liver function test
- Random blood sugar
- Ultra sonography of pelvis
- Thyroid profile (if necessary)
- Endometrial biopsy (if necessary)
- Pap smear (if necessary)

Estimation

Total 50 patients fulfilling the inclusion criteria were registered for the study.

- Total number of patients taken for study - 50
- Number of patients taken in Group A - 25
- Number of patients taken in Group B - 25

Sample Size

50 Patients having clinical feature of *Raktapradara* were selected for the study, considering the inclusion and exclusion criteria. Detailed history of the patient, disease and its symptoms were filled according to the proforma prepared for the study incorporating all the relevant points from both Ayurvedic and modern views.

It was Randomized comparative clinical trial; the selected 50 patients were randomly allocated into two groups each having 25 members and named as Group A and Group B.

Group 1

25 women were given *Chandana Churna* in 5gm bd dose from 5th day of cycle with *Madhu* and *Sharkara* orally with *Tandulodaka Anupana* till the bleeding stops and then *Pratimarsha Nasya* with *Shatapushpa Taila* is started and given till the onset of next cycle, same treatment is continued for next two cycles.

Route of Administration

- a) Oral: *Chandana Churna* 5gm bd from 5th day till bleeding stops.
- b) Nasal: *Shatapushpa Taila* 2 drops in each nostril from the day of cessation of menses till the onset of next cycle.

Dose

Chandana Churna 5gm

Shatapushpa Taila 2 drops in each nostril Duration : 3 cycles

Group 2

25 patients with Tranexemic acid for 5 days.

Route of Administration: Oral

Dose : 1 tablet 500mg BD

Duration : 5 days

Both the groups were assessed before and after treatment.

Selection Criteria

The cases were selected strictly as per the pre-set inclusion and exclusion criteria.

OBSERVATION

Total of 50 patients were taken for the clinical study and were randomly allocated into group-A and group-B of 25 each.

RESULTS**Overall Response after Treatment**

8 patients in group A and 3 patients in group B showed mild response

12 patients in group A and 12 patients in group B showed moderate response

3 patients in group A and 7 patients in group B showed marked response

Therefore, trail group is giving result as good as control group, parameter wise results also showing statistically insignificant difference on 90th day to 120th day but on the basis of Mann-Whitney U test ranks group B is better than group A

Overall Response after Follow-Up

After follow-up i.e., on 120th day 10 patients in group A and 11 patients in group B showed mild response. 10 patients in group A and 12 patients in group B showed moderate response and none of them showed marked response therefore group A is giving results as good as group B.

Overall Result after Follow-Up

Parameter wise results also showing insignificant difference but on the basis of mean score of all parameters both the groups are equally effective.

DISCUSSION

Discussion on Procedure

Maharishi Kashyapa has mentioned *Nasya Karma* as one among line of treatment in *Atyartava* or *Raktapradara* causing menstrual abnormalities. Menstrual abnormalities caused due to deranged HPO-axis.

Na Hi Vatadrute Vayum Yoni Sampradusyati which tells without role of *Vata* there is no *Stree Roga*. In *Raktapradara* 80% of the cycles are anovulatory, w.s.r to anovulatory factor mainly there is *Dusti* of *Vatadosa*. The treatment should be directed to the treatment of *Vata* and eradication of the cause. In modern science, it is given that the cell produces GNRH originate from the olfactory area and GNRH is a regulator of gonadotropin hormones.

So, considering this relation in mind, it has been tried to see the effect of *Nasya* in DUB or *Raktapradara*. So *Nasya* has role on specifically on *Pranavata* and *Udanavata*, there is no other form of medication better than oil for the treatment of *Vatadosha*. Oil is also said *Vatakapha Shamaka*. With the help of *Taila* as media for the action of *Nasya* on *Apana* via *Pranavata* and *Udanavata* having chain link. So, to treat imbalanced HPO - axis the nearest route is *Shiras* through *Nasamarga*. So, *Shatapushpa Taila Nasya* as *Shamana Nasya* is selected along with *Chandana Churna* orally as a *Shamana Oushadi*.

Discussion on Drug

Chandana Churna: *Acharya Charaka* explains the use of *Chandana Churna* with *Sharkara* along with *Tandulodaka Anupana* in the context of *Rakta Pitta Chikitsa*. This *Churna* has *Tiktamadhura Rasa*, *Ruksha Laghu Guna*, *Katu Vipaka* and *Sheeta Virya*.^[6] Hence, it is *Pitta Shamaka* and act as haemostatic in the control of bleeding. *Laghu Guna* clears all minute channels, *Ruksha Guna* remove *Sroto-Rodha* and does the *Drava Soshana*. *Sheeta Virya* helps in *Rasa Dhatu Utpathi* and reduce *Agni Guna* in *Artava* by balancing *Pitta*. *Katu Vipaka* helps in *Vata Shamana* and *Kapha Shamana* hence *Jataragni Mandya* and *Rasa Dhatu Agni Mandya* can be corrected which helps in *Utpathi* of *Rasa Dhatu*

in healthy state and *Madhura Vipaka Sharkara* controls *Apana Vayu* thereby inducing normal bleeding.

Shatapushpa Taila: *Acharya Kashyapa* has described the effect of *Shatapushpa* in various gynaecological disorders in separate chapter i.e., *Shatapushpa Shatavari Kalpa Adhyaya*.^[7] He explains it is *Ritupravartini*, *Yonisukra Vishodini*, *Putra Prada*, *Viryakari* etc properties. So, it is used in *Artava Kshaya*, *Atyartava*, *Alpa Artava*, *Yoni Suskata*, *Vandya* and *Shandi*.

Shatapushpa consists of mono-terpine such as carvone, limonine and trans-anethole and some flavonoids such as kaemferol and veccin. Kaemferol, trans-anethole and limonine exhibit phyto-estrogenic activity. Phyto-estrogen can be useful in both hyper estrogenic and hypo estrogenic state in the body due to their adoptogenic activity. Thus depending on the target tissue, it may be estrogenic and anti-estrogenic. So, it is useful in any of the above condition including DUB too as highlighted by *Maharishi Kashyapa*.

Shatapushpa because of its hypo-lipidemic and hypo-cholesterolaemic action helps to maintain BMI and help in the regulation of HPO-axis, hence re-corrects menstrual cycle.

Another mechanism for action of phytoestrogen may be their ability to effect the endogenous production of estrogen. The pituitary gland releases gonadotropins that stimulate estrogens synthesis in the ovaries. This enhances the ovulation and effective in the management of anovulatory cycles in DUB.

Presence of tannin is contributory to overcome the bleeding which may be due to ovulatory cycles in DUB.

Discussion on the basis of result

Within Group-A

The effect of treatment after follow-up 1, 2 & 3 when compared with before treatment within group-A in all the parameters with reduction in mean score is statistically significant. This indicates that *Shatapushpa Taila Nasya* and *Chandana Churna* orally helps to eliminate the *Srotodusti* and thus controls the duration and amount of bleeding in DUB (*Rakta-Pradara*).

The overall effect of treatment after follow-up in all parameters in group-A was 40% (10) which are rated as moderate response in relieving the disease *Rakta-Pradara*.

Within Group-B

The effect of treatment after follow-up 1, 2 & 3 when compare to before treatment in group-B in all the parameters with reduction in mean score is statistically significant because of its anti-fibrinolytic activity

The overall effect after follow-up in all parameters in group-B was 48% (12) which are rated as moderate response in relieving DUB.

Discussion on comparison between the groups after treatment

Among 50 patients 12 patients (48%) shows moderate response in group-A and 12 patients (48%) shows moderate response in group-B. 12% (3) patients from group-A and 7 patients (28%) from group-B shows marked response. This shows that trail drug is equally effective and giving results very near to control drug.

Discussion on comparison between groups after follow-up

Among 50 patients 10 patients (40%) from group-A and 12 patients (48%) from group-B shows moderate response and none of them showed marked response. This indicates that both the groups moderately respond to the treatment, hence both the drugs can be given and are equally effective.

CONCLUSION

Conclusions are the take outs from the whole work after detailed study of *Rakta Pradara* and its management. *Pradeerana* is the excessive expulsion of *Raja* or menstrual blood so called *Pradara* and *Deerana* is excessive expulsion of *Asrig* (blood), hence, it's called *Asrigdara*. 10 to 30% of the reproductive age group women suffer from dysfunctional uterine bleeding. Dysfunctional uterine bleeding is a state of abnormal uterine bleeding without any clinically detectable organic systemic and iatrogenic cause. Menstruation mainly depends upon the *Vata* i.e., *Apana Vata* and *Vyana Vata*. Hypo-thalamo-pituitary-ovarian function

has important role in the physiology of menstruation. The endometrium also undergoes a series of cyclical changes with the influence of hormones. Excessive amount of bleeding or prolonged bleeding per vagina with or without associated features, any one of the above are also important symptoms of *Rakta Pradara*. Intake of excessive *Lavana*, *Amla*, *Guru*, *Ushna*, *Vidahi*, *Vishtambi* and *Virudha Ahara* meat of fatty domestic and aquatic animals, *Kshara Krushara*, *Payasa* (rice cooked with milk and sweetened) curd, vinegar, *Mastu* (curd water), wine, exhausting activity and emotional upset etc. are the contributing factors for the incidence of *Rakta Pradara* to occur. The main line treatment of *Rakta Pradara* is *Rakta Stambana Pitta Kapha Shamana* and correction of *Vata Dusti*. *Vata Dosh* is responsible for the entire hormonal imbalance or hypothalamo-pituitary-ovarian axis derangements in the body. *Chandana Churna* with *Sharkara* and *Madhu* along with *Tandulodaka Anupana* acts as a haemostatic factor in the control of bleeding which is also a *Pitta Shyamaka Dravya*. The nearest route to correct the hypo-thalamo-pituitary ovarian axis derangement is tried in this dissertation work. So, *Shatapushpa Taila Nasya* is chosen to treat hypothalamopituitary ovarian axis derangement through nasal route, along with oral *Chandana Churna* with *Sharkara Madhu* and *Tandulodaka Anupana*. By *Nasya Vata Dosh* is regulated and hormonal pathway is corrected. Thus, it is concluded that *Shatapushpa* as media in the oil for *Nasya* and *Chandana Churna* as an oral medicine shows better results in controlling the amount and duration of bleeding and normalizing ovarian dysfunction. No untoward effect is seen with *Nasya* and oral *Churna* in any of the patient. The effect of therapy on chief complaints *Shatapushpa Taila Nasya* and oral *Chandana Churna* moderate results in both i.e., amount of blood loss and duration of blood loss. Among 50 patients 10 showed mild response (40 %) while 10 (40%) patient showed moderate response and none of them showed marked response in trail group and 11 patient (44%) showed mild response, 12 patient (48%) showed and none of them showed marked response in control group. 5 patient (20%) from trail group and 2 patient (8%) from control group were unchanged. Hence, the results of trail group are

nearer to the control group and both the drugs are equally effective.

REFERENCES

1. Dutta's text book of gynecology, edited by Hiralal konar, 8th edition page number 154
2. Dutta's text book of gynecology, edited by Hiralal konar, 8th edition page number 156
3. Sushruta Samhita of Sushruta with Ayurveda Tatva Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan Varanasi, Part 1-2, 9th edition 1995. Sha.2/18,19 Page. No. 346
4. Charaka Samhita with Vidyotini hindi commentary by Pt. Kashinath Shastri & Dr. Gorakhanatha Chaturvedi, Part-1 & 2, published by Chaukhamba Bharti Academy Varanasi, 22nd Edition 1996. Chi. 30/204-209, Page No.868
5. Kashyapa Samhita of Vriddha Jivaka revised by Vatsya with Sanskrit introduction by Pandit Hemaraja Sharma, Chaukhamba Sanskrit Series, 2002.Klp.5/9-13
6. Bhisajya Ratnavali of Govind Das ji, edited by bhishag ratna Sri Bramhashankar Mishra, English translation by Kanji lochan translation reviewed by Anand choudary, choukambha Sanskrit sansthan, volume 3, Varanasi, edition reprint 2006, chapter no 66/20, page no 342
7. Kashyapa Samhita of Vriddha Jivaka revised by Vatsya with Sanskrit introduction by Pandit Hemaraja Sharma, Chaukhamba Sanskrit Series, 2002.Klp.5/9-13

How to cite this article: Shilpa BS, Sridevi M. Randomized open label comparative clinical study on the efficacy of combination of Chandana Churna and Shatapushpa Taila Nasya with Tranexamic Acid in Rakta Pradara (DUB). J Ayurveda Integr Med Sci 2022;1:12-17. <http://dx.doi.org/10.21760/jaims.7.1.2>

Source of Support: Nil, **Conflict of Interest:** None declared.
