

Clinical evaluation of *Pushyanuga choorna* and *Lodhrasava* in *Rakta Pradara* (DUB)

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Rakta Pradara (uterine hemorrhage) covers all types of menorrhagia. For the study, exclusively dysfunctional uterine bleeding was taken up in the clinics, where around 20 to 30% cases come with the problem. In Indian System of Medicine many effective remedies are available. Ayurvedic drugs, *Pushyanuga choorna* & *Lodhrasava* combination was selected for the study. Of total 46 cases studied, 12 (29.26%) cases showed good response, 16 cases (39.02%) showed fair response, 9 cases (21.95%) showed poor response and 4 cases (9.75%) did not show any response after treatment. Five (10.86%) cases were dropped out from study. The treatment was found to be highly significant ($P < 0.001$) in reduction of uterine hemorrhage.

Keywords: Uterine haemorrhage, Menorrhagia, Dysfunctional uterine bleeding, *Rakta pradara*, *Pushyanuga choorna*, *Lodhrasava*, Ayurvedic drugs

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Rakta Pradara or abnormal uterine bleeding, regular or irregular with alterations in amount or duration of menstrual loss, commonly implies to excessive regular menstrual bleeding or essential menorrhagia. It is in parlance with dysfunctional uterine bleeding (DUB), the incidence being about 30% amongst new patients attending gynecological OPD. Ayurvedic classics defined *Rakta Pradara* as excessive *Pradeerana* (secretion) of *Rajah*. *Charaka* described aetiopathogenesis and line of treatment very vividly. DUB is usefully classified into primary and secondary types. Primary DUB is abnormal uterine bleeding, where there is no disease of genital tract including ovaries, no IUCD present, no H/O administration of sex hormones, while secondary DUB is secondary to the use of IUCD or OCP. The *vayu* after getting vitiated, increases quantity of *Rakta* (blood), takes *Rakta* to *Rajovaha siras* and increases the quantity of *rajah* that comes out through *Rajovaha siras* and causes *Rakta pradara*.

According to the modern concept, the abnormal bleeding is most likely due to some disturbance in endometrial blood vessels and capillaries, coagulation in and around these vessels. These are probably related with alteration in the ratio of endometrial prostaglandins, which are delicately balanced in haemostasis of menstruation. This may be secondary to disturbance in hypothalamo-pituitary-ovarian axis. To counteract on the above said pathology there are

effective formulae in Ayurveda, which are non-hormonal & without any side effects. Among these, effect of one of the popular combination/ formulation, *Lodhrasava* + *Pushyanuga choorna* on dysfunctional uterine bleeding has been reported.

Methodology

Total 46 cases were included in the study after thorough examination and investigation. Selection criteria included excessive bleeding per vagina during menstruation; increased duration of the menstruation; clots in menstrual flow; excessive bleeding with increased duration of the menstruation; age ranging between 15-45 yrs, and duration of illness 6-24 months. While the exclusion criteria included pelvic inflammatory disease; ovarian cyst; uterine fibroid; endometrial carcinoma; cervical carcinoma; endometrial polyp; endometriosis; hypo & Hyperthyroidism; genital tuberculosis; IUCD; hypertension; coagulatory defects, and adenomyosis. *Lodhrasava* (30 ml) was administered thrice in a day, while *Pushyanuga choorna* (5 gm) was given thrice in a day with *Durva swarasa*.

Results and discussion

The scores of the subjective and objective parameters were recorded initially, during follow up and at the end of the study at monthly interval up to 3 subsequent assessments (Table 1). Good response was

considered for complete normalcy of clinical features as per criteria or more than 75%; fair response: relief in clinical features between 51-74%; poor response: relief in clinical features by more than 25% but less than 51%; and no response: Less than 25% of no relief at all in clinical features.

Total 46 cases were taken up for the study (Table 2). Main parameters adopted for the assessment of result were amount of bleeding, duration of flow and low backache. In the reduction of amount of bleeding before treatment, 12 cases (29.27%) complained severe bleeding, 23 cases (56.09%) complained with moderate bleeding and 6 cases (14.64%) were with mild amount of bleeding. After treatment, 20 cases (48.78%) got complete relief and 10 cases (24.39%) were with mild bleeding, 10 cases (24.39%) showed moderate amount of bleeding and 1 case (02.44%) did not show any response (Table 3). Regarding the change in the duration of bleeding before treatment, 26 cases (63.41%) were with 10-15 days duration and 15 cases (36.59%) were

with 7 days duration of bleeding. After treatment, normal duration was found in 8 cases (19.51%), 5 days duration was found in 12 cases (29.27%), 19 cases (46.34%) were with 7 days of duration and 2 cases (0.488%) remained under 10-15 days duration of bleeding (Table 4). Regarding change in low backache before treatment, 12 cases (29.27%) reported to no pain, 6 cases (14.64%) were with mild pain, and 23 cases (56.09%) were having moderate pain. After treatment, 19 cases (46.34%) came under no pain group, 15 cases (36.59%) in mild pain, and 7 cases (17.07%) in moderate pain group (Table 5). On overall assessment of parameters adopted for the study, good response was found in 29.26% cases, fair response in 39.04% cases, poor response in 21.9% cases and 9.75% cases did not show any response (Table 6).

The efficacy of this regime can be attributed mainly to the *Lodhra* along with *Durva* and other *Sthambhana* drugs of *Pushyanuga choorna* like *jambu*, *Rakta chandana*, *kataja*, *dhataki*, *manjista*, etc. The main ingredient *Lodhra* contains loturine

Table 1 — Parameters adopted for the study

Parameters	Gradation	Score
Amount of flow	Severe: 7 or >7 diapers per day	30
	Moderate: 5-6 diapers per day	15
	Mild: 3-4 diapers per day	07
Duration of flow	Severe: 10-15 days	20
	Moderate: 7 days	10
Pain Abdomen	Mild: 5 days	05
	Severe: Force to take rest	10
	Moderate: Pain during work	05
Giddiness	Mild: Slight pain during work	02
	Severe: Reeling sensation always	10
	Moderate: Reeling sensation on standing	05
Haemoglobin	Mild: Reeling sensation occasionally	02
	Severe: < 6 gm%	10
	Moderate: 8-6 gm%	05
Low backache	Mild: 8-10 gm%	02
	Severe: Excruciating pain even on rest	10
	Moderate: Pain during routine works	05
Weakness	Mild: Slight pain during routine works	02
	Severe: Confine to bed	10
	Moderate: Perform routine works by hardly	05
	Mild: Perform routine works with little difficulty	02

Table 2 — Age incidence

Age group in yrs	Number of patients	Percentage
0-15	02	04.34
16-25	05	10.86
26-35	17	36.95
36-45	14	30.46
46-55	08	17.39
Total	46	100.00

Table 3 — Change in amount of bleeding

Amount of flow	Before treatment		After treatment	
	No of cases	Percentage	No of cases	Percentage
<3 Diapers	00	00.00	20	48.78
3-4 Diapers	06	14.64	10	24.39
5-6 Diapers	23	56.09	10	24.39
7 or > 7 Diapers	12	29.27	01	02.44
Total	41	100.00	41	100.00

Table 4 — Change in duration of bleeding

Amount of flow	Before treatment		After treatment	
	No. of cases	Percentage	No. of cases	Percentage
3 Days	00	00.00	08	19.51
5 Days	00	00.00	12	29.27
7 Days	15	36.59	19	46.34
10-15 Days	26	63.41	02	4.88
Total	41	100.00	41	100.00

Table 5 — Change in low backache

Low backache	Before treatment		After treatment	
	No of cases	Percentage	No of cases	Percentage
No pain	12	29.27	19	46.34
Mild	06	14.64	15	36.59
Moderate	23	56.09	07	17.07
Severe	00	00.00	00	00.00
Total	41	100.00	41	100.00

Table 6 — Results of the study

Response	No of cases	Percentage
Good	12	29.26
Fair	16	39.04
Poor	09	21.95
No	04	09.75
Total	41	100.00

alkaloid in large quantity and à-spinosterol. Spinosterol showed antiinflammatory activity on isolated guinea pig ileum and on antiinflammatory model. Alcoholic fractions of *Lodhra* reduced the frequency and intensity of the contractions of both pregnant and non-pregnant uteri of some animals. It is suggested that *Lodhra* might have influenced the endometrial prostaglandin apparatus, thereby acting effectively in the control of dysfunctional uterine bleeding. *Durva*, the drug used for *anupana*, which proved haemostatic might have supported the astringent action of *Lodhra*. The other *sthambhana* drugs worked in addition to *Lodhra & Dhataki*.

Conclusion

Out of 41 cases, 28 cases got benefited with this regimen. Efficacy of these combinations of treatment

may be attributed to *Lodhra & Durva*. *Lodhra*, the main ingredient possesses *Kashaya rasa*, *Seetha veerya*, *Pittaghna*, *Sthambhana* and *grahi* properties. *Lodhra* contains *loturine* alkaloid and à-spinosterol. It is suggested that the pharmacological actions of *Lodhra* might have counteracted the pathology of DUB and *Durva*'s haemostatic action synergized with *Lodhra*. The efficacy of *Pushyanuga choorna & Lodhrasava* was found to be highly significant ($p < 0.001$) in *Rakta pradara*.

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