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RESEARCH ARTICLE

A CLINICAL STUDY TO ESTABLISH THE FUNCTIONAL UTILITY OF SROTOMOOLA W. S. R
RAKTA DHATU PRADOSHAJA VIKARA (ASRIGDARA)

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Abstract**Background**

The utility of the knowledge of sites of origin (*Srotomoola*) of channels (*Srotasa*) is not directly described in *Samhitas*. As a tree is seriously affected by injury to its root, similarly, the channels of circulation in the human body are seriously affected when their *Srotomoola* is injured.¹ In today's society, we are facing many life style disorders and many stress related problems. Asrigdara or excessive bleeding per vaginum is one of these ailments creating havoc in today's women lives. **Acharya Charaka explained Asrigdara as a separate disease in Yoni Vyapada Chikitsa with its management.² He also explained, it as Rakta-Pradoshaja Vikara³ and a complication of Pittavrita ApanaVayu⁴.** He has mentioned *Yakrita* & *Pliha* as the *Moola*(root) of *Rakatavaha Srotasaa*(channels of circulation) in *Viman Sthana*.⁵ These *srotasa* carry the *dhatu*(tissue elements or their constituents) undergoing transformation to their destination.⁶ This further implies that when the integrity of *srotasa* is impaired, both the *sthangata* and *marga gata dhatu* are involved and the vitiation spreads from one *dhatu* to another, thus causing disease of that particular *srotasa*. *Asrigdara* is one of the *Vikara* of *Rakatavaha Srotasaa*. The hypothesis of this study is "if we treat the *Moola* of a *Srotasaa* of a particular *Dhatu*, without giving medicines acting directly on the disease, even then the *Dhatu Pradoshaja Vikara* of that particular *srotasa* will automatically get treated. Similarly Asrigdara can be cured by treating the *moola* of *Rakatavaha Srotasa* instead of giving *vyadhihar* treatment i.e drugs directly prescribed in ayurvedic texts to treat asrigdara.

Aims and Objectives

- To establish the role and functional utility of *Srotomoola*(*Yakrita* & *Pliha*) w.s.r. *Rakta Dhatu Pradoshaja Vikara* i.e *Asrigdara*.

Methods

A total number of 45 patients were registered, of these 40 patients completed the course of therapy while 5 dropped out. The patients were randomly divided into three groups. Group I was taken under control group and given *Asrigdarahar* yoga, group II was given drug which acted on *yakrita*(*srotomoola*) and group III was given drug that acted on *pliha*(*srotomoola*). During the selection of drugs given in Group I and group II, care was taken that these drugs were not prescribed directly for the treatment of *Asrigdara* in ayurvedic texts.

Result

Group II & Group III had statistically extremely significant relief on almost all symptoms of *Asrigdara* as compared to Group I. This shows the improvement in the symptoms of *Asrigdara* in those groups which had taken medicine acting on *Srotomool*.

Conclusion

Srotomoola Chikitsa will give better response to cure of any *Dhatu Pradoshaja Vikara*.

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Introduction

Ayurveda, “the science of life” is one of the oldest Indian systems of medicine in the world. It has established its position as a unique health care system with a holistic approach to many complex health hazards. It is a systematic approach that utilizes all that nature has to offer to treat and prevent illness. *Srotasa* have been given a place of fundamental importance in *ayurveda* both in health and disease. This can be seen when the integrity of *srotasa* is impaired, both *sthangata* and *marga gata* dhatu are involved, the vitiation spreads from one dhatu to another and all *srotasa* are involved simultaneously. There is as much diversity in the *srotasa* as there are elements that compose the structure of the body. They are transporters of factors that cause the *prakopa* or *shamana* of doshas.^{vii}

According to *Charak* *Srotasa* is defined as the channel or structure through which *Sravanam karma* i.e. flowing, moving, Oozing & permeation of different constituents & nutrients of the body takes place^{viii}

Srotasa have been stated by *Charak* to behave like *Ayana Mukhani* (external orifice) for the *malas* as well as *dhatu*s, they are responsible for supplying nourishment to each & every *dhatu* in a appropriate quantities.^{ix}

The utility of the knowledge of sites of origin (*Srotomoola*) of channels (*Srotas*) is not directly described in *Samhitas*. As a tree is seriously affected by injury to its root, similarly, the channels of circulation in the human body are seriously affected when their *Srotomoola* is injured. With this view, *Sushruta* has described symptoms due to the injury at the sites of origin of these channels of circulation^x. But whether these origins are to be treated in vitiations of *Srotasa* (functional) or these are only organic parts, this is not very much clear from the classical description.

Any abnormality in *Rituchakra* (menstrual rhythm) leads excessive and irregular *Artava Praviti* during intermenstrual phase is called as *Asrigdara*. According to *Charak*, *Asrigdara* is very common *Raktapradoshaja Vikara* in women.

The hypothesis of this study is “if we treat the *Moola* of a *Srotasa* of a particular *Dhatu*, without giving medicines acting directly on the disease, even then the *Dhatu Pradoshaja Vikara* of that particular *srotasa* will automatically get treated. Similarly *Asrigdara* can be cured by treating the *moola* of *Rakatavaha Srotasa* instead of giving *vyadhihar* treatment i.e. drugs directly prescribed in *ayurvedic* texts to treat *asrigdara*.

Need of the present study

In the present era, most of the time disease is treated according to *Dosha & Lakshana. Srotomoola Chikitsa* is fading its importance now-a-days, because of lack of proper knowledge and confidence. According to *Acharyas*, during the treatment of any disease, we should pay attention to treatment of *Srotomoola*. The percentage of *Asrigdara* is increasing now days. Between 25% and 58% of women participating in the WHO multi country study reported having excessive bleeding per vaginum in the past three months^{xi, xii}. Commonly used line of treatment of *Asrigdara* is only for time being .It reoccurs again and again. As it is a *Raktapradoshaja Vikara* and if we treat its *Srotomool* i.e. *Yakrita & Pliha*, we can simply achieve cure of this dreadful disorder.

Objectives

- To establish the role and functional utility of *Srotomoola* (*Yakrita & Pliha*) w.s.r. *Rakta Dhatu Pradoshaja Vikara* i.e *Asrigdara*.

Material and Methods

Design of the study

Randomized, single blind study

Selection of patients

In the present clinical patients were registered and screened for general observations. The cases were taken from O.P.D/I.P.D. of *Aarogyashala*, National Institute of Ayurveda, Jaipur. A detailed history, evaluation and follow up studies were recorded on a Proforma designed especially for the present study.

Criteria for Inclusion

1. Patients willing to participate in the trial.
2. Patient presenting with complaints of excessive bleeding P/V specifically endometrial bleeding as a cardinal symptom or associated symptom.

3. Patient suffering from bleeding caused by DUB (Dysfunctional uterine bleeding), P.I.D (Pelvic inflammatory disease).

Criteria for Exclusion

1. Patients having bleeding after menopause.
2. Patients having bleeding from polyps, cervical erosions, cancer or big fibroid.
3. Patients having bleeding due to abortion.
4. Patients having bleeding from sites other than uterus.
5. Patients having coagulation disorders.
7. Patients having systemic diseases like severe Hypertension, Thyroid dysfunction, Congestive cardiac failure, bulky uterus more than 8 week size, uterus with IUCD etc.

Sampling:

Simple random sampling technique using lottery method was used. Group allocation was done by simple random allocation (complete randomization).

Sample size: 45 patients

Drop outs: 5

Total patients who completed the trial: 40

Grouping:

45 patients under trial were subdivided into three groups i.e. Group I, Group II and Group III (each 15 patients) to compare the effects.

Selection of Drug

Group I was taken under control group and given *Asrigdarahar yoga*, (*Daruharidra*, *Kirattikta/Kiratikta* , *Nagarmotha*, *Yavasa*). The drug is mentioned in treatment of *Raktarsha* as per classical text of *Charaka Samhita*^{xiii}. Group II was given drug which acted on *yakrita(srotomoola) krishna tila and saindhav lavana*^{xiv} and group III was given drug that acted on *pliha(srotomoola) sharpunkha kshar*^{xv}.

Note: During the selection of drugs given in Group II and group III, care was taken that these drugs were not prescribed directly for the treatment of *Asrigdara* in *ayurvedic* texts.

Group	Drug Administered	Dose	Anupana	Time of Administration	Duration of Treatment
I.	<i>Asrigdarhar yoga</i>	4 gm	water	Before meal twice a day.	2 menstrual cycle or 2 months.
II.	Yoga acting on <i>Yakrita(srotomoola)</i>	4 gm	water	Before meal twice a day.	2 menstrual cycle or 2 months.
III.	Yoga acting on <i>Pliha(srotomoola)</i>	500mg	water	Before meal twice a day.	2 menstrual cycle or 2 months.

Diagnostic criteria -

Clinical signs & symptomatology

- Intensity of flow of menstrual blood.
- Amount of flow of menstrual blood.
- Duration of flow of menstrual blood.
- Assessment of inter menstrual period
- Pain during Menstruation(*Vedana*)
- Weakness(*Daurbalya*)

- vii. Body ache (*Angamarda*)
- viii. Pallor (*Pandutva*)
- ix. Burning sensation in body (*Daha*).

Investigations

These were carried out before & after treatment:-

- Hemoglobin gm % (Hb %)
- TLC
- BT,CT
- Liver Function Test
- Urine Examination
- USG

Clinical assessment

General observations

Various demographic parameters like Age, Marital status, Religion, Socio-economic status, Education etc. along with specific features of *Dashvidha Pareeksha & Ashtvidha Pareeksha viz Prakriti, Satva, Samhanana* ,etc were analyzed in the present trial.

Subjective Assessment

The patients undergone the treatment were assessed for *Rakta Stambhaka* property on the basis of symptom rating score for improvement in specific symptoms of *Asrigdara* .

Statistical analysis:

The information gathered on the basis of observation was subjected to statistical analysis in terms of mean score (x), standard deviation (SD) standard error (SE), paired t test was carried out at the level of 0.05, 0.01, 0.001 of P level. The obtained results were then interpreted.^{xvixvixviii}

Observations and Results

TABLE NO.1: Effect of the trial drug of group-I (*Asrigdarahar yoga*) on hematological profile and biochemical profile of patients:

Table No.1 shows that the trial medicine of Group I, did not show any noticeable effect on the Hematological status of the volunteers who participated in the trial. All the variables exhibited a very little change after the completion of the trial which was not significant.

Table no.1 showing effect of therapy in Group I (paired t test)

S. No.	Variable	Mean		Diff.	% of Relief	SD	SE	't'	p	Results
		BT	AT							
1.	Hb (gm %)	10.885	10.892	0.0077	0.070	0.0277	0.0077	1.000	0.1685	NS
2.	TLC (/cu mm)	6576.9	6561.5	15.385	0.233	37.553	10.415	1.4771	0.0827	NS
4.	BT (per min.)	2.277	2.285	0.0077	0.337	0.1239	0.0344	0.2238	0.4133	NS
5.	CT (per min.)	5.192	5.177	0.0154	0.296	0.3152	0.0087	1.7598	0.0519	NS

SD = Standard Deviation, SE = Standard Error, NS = Not significant

TABLE NO.2: Effect of the trial drug of Group- II (yoga acting on *Yakrita (Srotomoola)* on hematological profile and biochemical profile of patients

Table No.2 shows that the trial medicine of Group II did not show any noticeable effect on the Hematological status of the volunteers who participated in the trial. All the variables exhibited a very little change after the completion of the trial which was not significant.

Table no.2 showing effect of therapy in Group II (paired t test)

S. No.	Variable	Mean		Diff.	% of Relief	SD	SE	't'	p	Results
		BT	AT							
1.	Hb (gm %)	10.262	10.277	0.0153	0.149	0.08987	0.02493	0.6172	0.2743	NS
2.	TLC (/cu mm.)	7856.4	7861.5	13.846	0.176	34.044	9.442	1.466	0.0841	NS
3.	BT(per min.)	2.126	2.119	0.0077	0.361	0.0188	0.0052	1.4771	0.0827	NS
4.	CT(per min.)	5.258	5.238	0.0192	0.365	0.04804	0.0133	1.4434	0.0873	NS

SD = Standard Deviation, SE = Standard Error, NS = Not significant

TABLE NO. 3: Effect of the trial drug of group-iii(yoga acting on *Pliha(Srotomoola)* on hematological profile and biochemical profile of patients:

Table No.3 shows that the trial medicine of Group III did not show any noticeable effect on the Hematological status of the volunteers who participated in the trial except on Hb which is statistically significant. Rest all the variables exhibited a very little change after the completion of the trial which was not significant.

Table no.3 showing effect of therapy in Group III (paired t test)

S. No.	Variable	Mean		Diff.	% of Relief	SD	SE	't'	p	Results
		BT	AT							
1.	Hb (gm %)	10.621	10.629	0.0071	0.065	0.0267	0.0071	1.000	0.1678	NS
2.	TLC (/cu mm)	7330.8	7276.9	53.846	0.730	112.66	31.246	1.723	0.0552	NS
3.	BT (per min.)	2.208	2.192	0.0154	0.696	0.0315	0.0087	1.7598	0.0519	NS
4.	CT (per min.)	5.264	5.236	0.0286	0.542	0.6112	0.0163	1.7489	0.0519	NS

SD = Standard Deviation, SE = Standard Error, S = significant, NS = Not significant

TABLE NO.4: Effect of the trial drug of Group-I (*Asrigdarahar Yoga*) on various subjective symptoms:

Table No.4 depicting the effect of drugs of Group I that reveals the maximum percentage of Relief was observed in the parameter of Pain during menstruation(50.00%), followed by Duration(38.88%), Intensity(37.48%), Body ache(35.29%), Pallor (30.43%) ,IMP(23.07%), Burning sensation (22.22%), Weakness(20.00%)and Amount of bleeding showed 15.38 % of Relief. Percentage of Relief is statistically Significant in Intensity, Duration, IMP, Pain during menstruation, Body ache, Pallor and it is Not Significant in case of Amount of bleeding, Weakness and Burning sensation.

Table no.4 showing effect of therapy in Group I(paired t test)

S. No.	Symptoms	Mean		Diff.	% of Relief	SD	SE	'w'	p	Results
		BT	AT							
1.	Intensity of bleeding	1.231	0.7692	0.4615	37.48	0.6602	0.1831	15.00	0.0313	S
2..	Duration of bleeding	1.385	0.8462	0.5385	38.88	0.6602	0.1831	21.00	0.0156	S
3.	Amount of bleeding	2.000	1.6923	0.3077	15.38	0.4804	0.1332	10.00	0.0625	NS
4.	Intermenstrual period (IMP)	2.000	1.5385	0.4615	23.07	0.6602	0.1831	15.00	0.0313	S
5.	Pain during menstruation(<i>vedana</i>)	1.231	0.6154	0.6156	50.00	0.7679	0.2130	21.00	0.0156	S
6.	Weakness(<i>daurbalya</i>)	1.154	0.9231	0.2308	20.00	0.4385	0.1216	6.00	0.1250	NS
7.	Body ache(<i>angamarda</i>)	1.308	0.8462	0.4615	35.29	0.6602	0.1831	15.00	0.0313	S
8.	Pallor(<i>panduta</i>)	1.769	1.231	0.5385	30.43	0.6602	0.1831	21.00	0.0156	S
9.	Burning sensation(<i>daha</i>)	0.6923	0.5385	0.1538	22.22	0.3755	0.1042	3.00	0.2500	NS

W=Sum of signed ranks, VS = Very significant, S = significant, NS = Not significant

TABLE NO. 5: Effect of the trial drugs of Group-II (yoga acting on *Yakrita(Srotomoola)* on various subjective symptoms:

Table No.5 depicting the effect of drugs of Group II reveals that maximum percentage of Relief was observed in the parameter of Intensity (64.47%), followed by Body ache(55.55%), Inter menstrual Period (53.12%), Pain during menstruation (47.82%), Weakness(46.42%), Duration (44.43%), Pallor (40.00%) , Amount (35.71%), and Burning sensation showed 21.42% of Relief. Percentage of Relief is statistically Extremely Significant in IMP, Very Significant in Intensity, Body ache, Pain during menstruation, Weakness, Duration, Pallor and Amount, and it is Not Significant in case of Burning sensation.

Table no.5 showing effect of therapy in Group II(paired t test)

S. No.	Symptoms	Mean		Diff.	% of Relief	SD	SE	'w'	p	Results
		BT	AT							
1.	Intensity of bleeding	1.214	0.4286	0.7857	64.47	0.8926	0.2386	28.00	0.0078	VS
2..	Duration of bleeding	1.286	0.7143	0.5714	44.43	0.5136	0.1373	36.00	0.0039	VS
3.	Amount of bleeding	2.154	1.3846	0.7694	35.71	0.5991	0.1662	45.00	0.0020	VS
4.	Intermenstrual period(IMP)	2.461	1.1538	1.3077	53.12	0.7511	0.2083	78.00	0.0002	ES
5.	Pain during menstruation(<i>Vedana</i>)	1.643	0.8571	0.7857	47.82	0.6993	0.1869	45.00	0.0020	VS
6.	Weakness(<i>daurbalya</i>)	2.154	1.154	1.000	46.42	0.8165	0.2265	45.00	0.0020	VS
7.	Body ache(<i>angamarda</i>)	1.286	0.5714	0.7143	55.55	0.7263	0.1941	36.00	0.0039	VS
8.	Pallor(<i>panduta</i>)	1.786	1.071	0.7143	40.00	0.6112	0.1634	45.00	0.0020	VS

9.	Burning sensation(<i>daha</i>)	1.077	0.8462	0.2308	21.42	0.4385	0.1216	6.00	0.1250	NS
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W=Sum of signed ranks, ES =extremely significant, VS = Very significant, S = significant, NS = Not significant

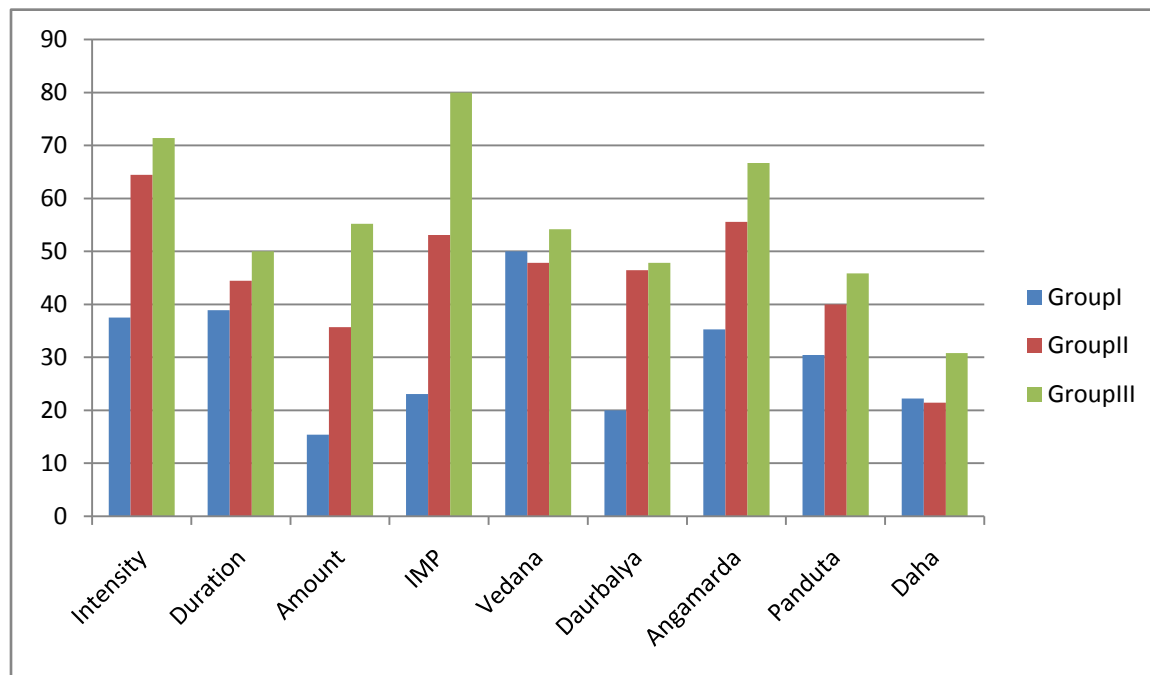
TABLE NO.6: Effect of the trial drugs of Group-III (Yoga acting on *Pliha(Srotomoola)* on various subjective symptoms:

Table No. 6 depicting the effect of drugs of Group III reveals that maximum percentage of Relief was observed in the parameter of Inter menstrual Period (80.00%) followed by Intensity (71.42%), Body ache(66.66 %), Amount (55.18%), Pain during menstruation(54.16%), Duration (50.00%),Weakness(47.82%), Pallor (45.83%) and Burning sensation showed 30.79 % of Relief. Percentage of Relief is statistically Extremely Significant in Amount, Very Significant in IMP, Intensity, Body ache, Pain during menstruation, Duration, Weakness, Pallor and it is Not Significant in case of Burning sensation.

Table no.6 showing effect of therapy in Group III (paired t test)

S. No.	Symptoms	Mean		Diff.	% of Relief	SD	SE	'w'	p	Results
		BT	AT							
1.	Intensity of bleeding	1.077	0.3077	0.7692	71.42	0.8321	0.2308	28.00	0.0078	VS
2..	Duration of bleeding	1.077	0.5385	0.5385	50.00	0.5189	0.1439	28.00	0.0078	VS
3.	Amount of bleeding	2.071	0.9286	1.1429	55.18	0.8644	0.2310	66.00	0.0005	ES
4.	Intermenstrual period (IMP)	1.429	0.2857	1.1429	80.00	1.0995	0.2938	36.00	0.0039	VS
5.	Pain during menstruation(<i>Vedna</i>)	1.846	0.8462	1.000	54.16	0.8165	0.2265	45.00	0.0020	VS
6.	Weakness(<i>daurbalya</i>)	1.643	0.8571	0.7857	47.82	0.8926	0.2386	28.00	0.0078	VS
7.	Body ache(<i>angamarda</i>)	1.154	0.3846	0.7692	66.66	0.8321	0.2308	28.00	0.0078	VS
8.	Pallor(<i>panduta</i>)	1.846	1.000	0.8462	45.83	0.6887	0.1910	45.00	0.0020	VS
9.	Burning sensation(<i>daha</i>)	0.9286	0.6429	0.2857	30.79	0.6112	0.1634	6.00	0.1250	NS

W=Sum of signed ranks, ES = extremely significant, VS = Very significant, S = significant
NS = Not significant



COMPARITIVE ANALYSIS OF GROUPS ON THE BASIS OF SUBJECTIVE PARAMETERS

Sr. No.	Symptoms	Comparison of groups	Mean difference	Rank	P value	Results
1.	Intensity	Gr.I vs Gr.II	-3.923		>0.05	NS
		Gr.I vs Gr.III	-3.830		>0.05	NS
		Gr.II vs Gr.III	0.09341		>0.05	NS
2.	Duration	Gr.I vs Gr.II	-0.6923		>0.05	NS
		Gr.I vs Gr.III	-1.335		>0.05	NS
		Gr.II vs Gr.III	-0.6429		>0.05	NS
3.	Amount	Gr.I vs Gr.II	-7.615		>0.05	NS
		Gr.I vs Gr.III	-11.830		<0.05	S
		Gr.II vs Gr.III	-4.214		>0.05	NS
4.	Intermenstrual period	Gr.I vs Gr.II	-10.654		<0.05	S
		Gr.I vs Gr.III	-7.909		>0.05	NS
		Gr.II vs Gr.III	2.745		>0.05	NS
5.	Pain during Menstruation	Gr.I vs Gr.II	-5.538		>0.05	NS
		Gr.I vs Gr.III	-2.769		>0.05	NS
		Gr.II vs Gr.III	2.769		>0.05	NS
6.	Weakness	Gr.I vs Gr.II	-10.308		<0.05	S
		Gr.I vs Gr.III	-7.022		>0.05	NS
		Gr.II vs Gr.III	3.286		>0.05	NS
7.	Body ache	Gr.I vs Gr.II	-4.154		>0.05	NS
		Gr.I vs Gr.III	-3.835		>0.05	NS
		Gr.II vs Gr.III	0.3187		>0.05	NS
8.	Pallor (<i>Panduta</i>)	Gr.I vs Gr.II	-5.077		>0.05	NS
		Gr.I vs Gr.III	-3.198		>0.05	NS
		Gr.II vs Gr.III	1.879		>0.05	NS
9.	Burning Sensation	Gr.I vs Gr.II	-1.500		>0.05	NS
		Gr.I vs Gr.III	-1.464		>0.05	NS
		Gr.II vs Gr.III	0.0357		>0.05	NS

On the comparative analysis of the three groups on the subjective parameter of amount, IMP, Weakness Significant result was found in between Gr.I vs Gr.III; Gr.I vs Gr.II; Gr.I vs Gr.II respectively.

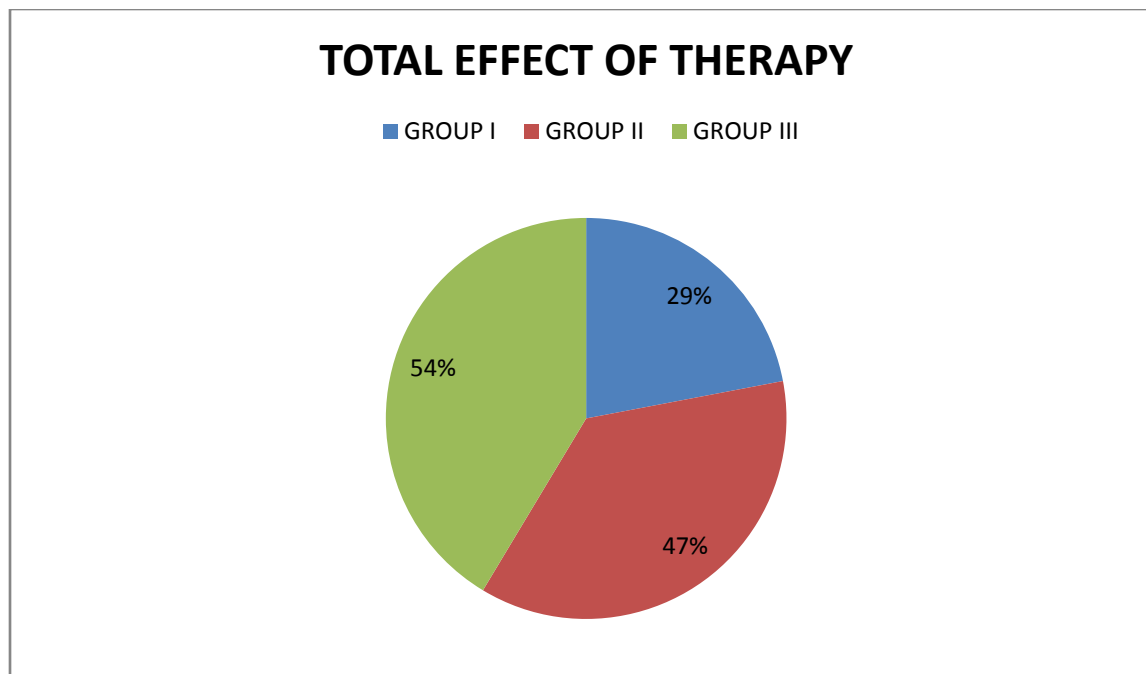
COMPARATIVE ANALYSIS OF EFFECT OF THERAPY ON GROUP I, GROUP II & GROUP III

Gr.	BT	AT	Diff.	%Relief	SD	SE	t	p	Result
I	1.4189	1.0137	0.4052	28.556	0.2141	0.0714	5.6777	0.0002	ES
II	1.6874	0.8865	0.801	47.467	0.3009	0.1003	7.9845	<0.0001	ES
III	1.4384	0.666	0.7724	53.698	0.2669	0.089	8.6817	<0.0001	ES

Table clearly shows that “Group II & Group III” had statistically extremely significant relief on almost all symptoms of *Asrigdara* as compared to Group I. This shows the improvement in the symptoms *Asrigdara* in those groups which had taken medicine acting on *Srotomool*.

TOTAL EFFECT OF THERAPY IN 40 PATIENTS (SUBJECTIVE SYMPTOMS)

Sr.No.	Groups	Total Effects (%)	Result
1.	Group I	28.556	Mild Improvement
2.	Group II	47.47	Mild Improvement
3.	Group III	53.69	Moderate Improvement



Subjective symptoms are found to be moderately improved in Group III (53.69%), followed by mild improvement in Group II (47.47%) and lastly Group I (28.556%).

Discussion

Srotasa which represent the internal transport system include a series of the channels through which *Rasa-Raktaadi Dhatu* is propelled to all parts of the body. All metabolic exchange *Paripaka* or *Dhatupaka* and *Chyapachya* take place in *Srotasaa*. *Srotasaa* sub serve the needs of transportation^{xx}. The importance of the knowledge of *Srotomoola* (sites of origin) of *Srotasa* (channels) is not directly described in *Samhitas*. There is very small description of *Moola* found in *Viman Sthana* of *Charak Samhita*. *Moola* means origin. *Acharya Sushruta* has also described symptoms due to the injury at the *Moola* (sites of origin) of the *Srotasa* i.e. channels of circulation. *Moola* of *Raktavaha Srotasaa* which carries blood is *Yakrita & Pliha*, same as in *Sushruta Samhita* i.e. *Raktavaha Srotasa* are two and their *Moola* i.e. *Yakrita, Pliha & Raktavahi Dhamani*^{xx}. Blood is responsible for *Bala, Varna* and *Sukhayu*^{xxi}. *Uttapatti* and *Sthiti* of *Deha* are based on blood. Blood is life of human being, so blood should be protected carefully^{xxii}. Taking this aspect in the mind, the clinical study was planned to establishment of functional utility of *Srotomoola* in the management of the disease.

According to *Acharya Charka*, *Rakatpradara* is very common *Rakata-Dhatu pradoshajvikara* in women. In *Asrigdara*, causative factor or *Dosha* is *Vayu* and vitiated *Dhatu* or *Dushya* is *Rakta* or in this condition blood is also vitiated. Due to vitiated *Rakta-Dhatu*, *Raktavaha Srotomoola* also gets vitiated. As *Rakta* and *Pitta* both are quite similar in their properties, naturally this causes vitiation of *Pitta* also. *Yakrita* is the seat of *Rakta* as well as *Pitta*. The causes which vitiate *Pitta* and *Rakta*, they are also responsible for vitiation of *Yakrita* and *Pliha*. The vitiated *Pitta*, covers *Vayu* and aggravates it. Due to this, amount of blood is also increased. This increased *Rakta* (blood) gets mixed with *Raja* (menstrual blood), after reaching in *Raja* carrying vessel of the uterus, increases immediately the amount of *Raja*. Hence excessive blood is discharged and it is called as *Asrigdara*.^{xxiii} So This *Srotodusti (Ati-pravriddhi)* play major role in production of this *Sroto-Vikara*.

So many preparations have been mentioned in our texts for the treatment of *Asrigdara*. *Acharya Charak* explained the treatment of *Asrigdara* after giving due consideration to the association of the *Dosha*. He said it to be treated on the lines of treatment of *Vatala-Yoni Vyapada, Raktatisara, Raktapitta* and *Raktaarsha*.^{xxiv} Hence, in the present study *Asrigdarahara Yoga (Daruharidra, Kirattikta /Kalmegh, Mustaka, Yavasa)* which is described in *Raktarsha Chikitsa*, has been taken in the management of *Asrigdara*.

Another drug *Krishna Tila & Saindhava Lavana* and *Sharpunkha Kshara* has been selected for *Yakrita* and *Pliha* respectively i.e. *Raktavaha Srotomoola*.

Probable mode of action of *Asrigdarahar Yoga*

The herbs of *Asrigdarahar Yoga* were *Daruharidra*, *Kirattikta/Kiratikta*, *Nagarmotha*, *Yavasa*. The common properties of used drugs are mainly *Tikta*, *Kashya RasaPradhana*, *Laghu*, *Ruksha Gunayukta*, *Ushna Virya*, *Katu Vipaka* and *Kapha-Pitta Shamaka*.^{xxv} In pathogenesis of *Asrigdara*, *Chala* of *Vata* and *Sara*, *Drava Guna* of *Pitta Dosha* increases amount of blood. Hence these drugs might have affected the *Sara*, *Drava Guna* of *Pitta Dosha* with the help of *Ruksha* and *Laghu Guna* of *Tikta Rasa*. So this reason might be fined for amount of bleeding which got decreased.

Probable mode of action of *Yoga acting on Yakrit(srotomoola)*

The drugs acting on *Yakrita* were *saindhav lavana* and *Krishna tila*. As per *Acharya Charaka*, in *Pittavrita Apana Vayu* there is excessive bleeding per vaginum i.e. *Asrigdara*. For *Apanvayu*, *Anulomana chikitsa* should be done. So *Tila* has *Vatashamaka* and *Saindhava Lavana* has *Vatanulomaka* properties.^{xxvi} Both were able to normalize *Apanavayu* along with this, they have *Kapha Shamaka* and *Snigdha guna* which did *Sroto-Shodhana*.^{xxvii}

Probable mode of action of *Yoga acting on Pliha(srotomoola)*

The drugs given were *Sharpunkha Kshara* orally. *Sharpunkha* has *Kapha-Vata Shamaka* property, that might have reduced the *Grathita-Rakta* (clotted blood)^{xxviii}. *Rakta* may *Grathibhoot* due to predominancy of *Vata-Kapha Dosha*. *Kshara* is having *Tridoshaghna*, *Shodhaka*, *Shoshaka*, *Raktastambhaka*, *Amanashaka* property. So by oral administration of *Sharpunkha Kshara*, excessive bleeding with clots might have been reduced and *Ama Dosha* also. *Ushna*, *Tikshna* and *Rukshna Guna* reduced the *Sheeta Guna* of *Vata* and *Picchila Guna* of *Kapha*. That might have dissolved the clotting of blood. The making of *Sharpunkha Kshara* was kept *Saumya*, so it did not create any complication (like *Daha*) to the patients.

So the overall effects of medicines were good for the disease *Asrigdara*. The main symptoms were subsided as well as associated symptoms also get relieved. *Daurabalya* was relieved by *Bringhana*. Due to *Raktakshya*, *Vata* got aggravated, which started *Shoshana* of *Dhatu*, so patient complained presence of *Durbalta*. That is why, *Brighana* drugs showed effect.

Excessive bleeding caused *Panduta* and it was be subsided by drugs having *Raktastambhana*, *Samgrahi Guna*. With the help of *Sthambhana* and *Samgrahi Guna*, loss of blood was check out. *Daha* is produced by *Pitta*; it was relieved by *Sheeta Virya* and *Madhura Rasa* having *Pitta Shamaka Guna*. *Raja Sravajanya Vedana* was due to *Atipravritti* of *Artava*. It is due to aggravation of *Apana Vayu* situated in *Garbhashya*. *Atipravritti* type of *Srotodushti* is found in *Asrigdara* which happened in *Garbhashya* i.e. *Moola* of *Artavavaha Srotasa*. *Madhur Vipaka* drugs played good role in management of *Atipravritti* as *Madhur vipaka* have *Vata-Pitta Shamaka* properties.

Conclusion

The purpose of the present study is to understand the functional utility of *Srotomoola*. *Srotasa* performs their function by *Srotomoola*. *Srotomoola* play important role in maintenance of *Nirogavastha of Sharira*. Entire study is based on the hypothesis i.e. whenever a disease produced after *Srotodushti* by vitiation of a *srotasa*, it can be cured by treatment of that particular *Srotomoola*. The drugs used in this trial, acted on *Srotomoola* as well as disease. Results were found good in that group of patients which had taken medicine prescribed for treatment of *Srotomoola*. Most of the symptoms were also subsided in that same group. So on the basis of results of subjective parameters; we can conclude that *Srotomoola Chikitsa* will give better response to cure of any *Dhatu Pradoshaja Vikara*. Keeping the above facts in view, we can conclude that *Acharya* have mentioned the *Moolas* of *Srotasa*, so that while treating the disease we can pay attention to the treatment of *Moola* also. Though it was study on small sample even then, it is a pivotal study in the field of *Srotomoola* to establish its functional utility in the treatment of diseases. This study will certainly serve the purpose of inspiration for the future researchers who will work in this field.

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