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A CLINICAL STUDY ON THE EFFICACY OF VIRECHANA FOLLOWED BY SHATYADI CHOORNA (AS SHAMANA) IN THE MANAGEMENT OF TAMAKA SWASA

Arjun SasiKumar

Assistant Professor, Department of Panchakarma, Ashwini Ayurvedic Medical College, Hospital & Research Centre, Ring Road, Maralur, Tumkur, Karnataka, India

Email: drarjunsasi@gmail.com

ABSTRACT

Background: Virechana Karma, can be effective in Tamaka Swasa as its origin is Pitta Sthana, Secondary treatment of Kapha dosha and causes anuloma gati to vata -Samprapti Vighatana. Trivrutadi Modaka from kalpa sthana of Charaka Samhita is an excellent Virechana Yoga for Vata Kapha predominant diseases like Swasa, etc. Shatyadi Choorna from Chikitsa sthana of Charaka Samhitha is used for Shamana purpose. Objective: To evaluate the efficacy of Virechana followed by Shatyadi choorna (as Shamana) in the management of Tamaka Swasa. Methodology: Single blind clinical comparative study was designed after proper diagnosis of Tamaka Swasa (Pratamaka type), 30 patients were selected from OPD and IPD of Shri Shivayogeeshwara Rural Ayurvedic Medical College and Hospital, Inchal. They were categorized randomly into two groups: Group A were administered Virechana Poorvaka Shamana and Group B with Shamana. Result: Virechana poorvaka shamana (Group A) was found effective than shamana (Group B) in the management of Tamaka Swasa. The analysis of total effect of therapies in both groups revealed that all patients got relief by the treatments. There is strong significance on the effect of therapies done on all the symptoms with p value <0.001. Conclusion: The present clinical study is taken with an aim to compare Virechana Poorvaka Shamana with shamana alone. Administration of Virechana followed by shamana definitely has the potential effect to treat Tamaka Swasa better than Shamana alone. Overall response is found better in Group A than in Group B.

Keywords: Tamaka Swasa, Virechana, Shamana, Shatyadi choorna

INTRODUCTION

Tamaka Swasa is prevalent in most parts of India. With the increasing population and mental stress the disease is imposing burden on the community of developing countries like India, It has been observed that immunological, structural, functional and microbiological changes related with the

epidemiological, environmental, occupational, personal or social factors which makes a man prone to develop this disease¹. According to Ayurvedic texts, *Tamaka Swasa* is considered as *Kaphavata janya Swasa*. The origin of *Swasa roga* is from *pittasthana*. The vitiation of *pittasthana* affects the normal

function of *pitta* and give rise to *ama* formation². In this mode of vitiation, the line of treatment should relieve the paroxysmal attack of *Swasa* and correct the metabolic functions and also maintain the equilibrium of *doshas*. Only doing *Shamana* therapy is not useful without *Virechana* as *Acharya Charaka* has mentioned "*Tamake Tu Virechanam*³". This led to the hypothesis that *Virechana* followed by *Shamana* help the patient to resist the severity of the disease by building up immunity and will improve the quality of life of *Tamaka Swasa* patients.

MATERIALS AND METHODS

Source and method of collection of Data: 30 patients showing signs and symptoms of *Tamaka Swasa* (*Pratamaka* type) was selected from OPD & IPD of Shri Shivayogeeshwar Rural Ayurvedic Medical College &Hospital, Inchal, and special medical camps conducted at ShriShivayogeeshwar Rural Ayurvedic Medical College Hospital, Inchal.

Inclusion Criteria:

- All cases of clinical signs and symptoms of Tamaka Swasa will be included.
- Patients complaining of Tamaka Swasa of either
- Pratamaka Swasa.
- Patients between the age group of 10 years to 60 years.
- Patients fit for *Virechana*.

Exclusion Criteria:

- Patients showing the symptoms of Santamaka Swasa.
- Status Asthmatics.
- Patients less than 10 years and more than 60 years of age.
- Pregnant women and lactating mothers.
- Patients suffering from systemic disorders like Hypertension, Diabetes mellitus
- Patient unfit for Virechana.

Investigations:

- Routine Blood investigations Hb%, TC, DC, ESR, RBS.
- PEFR: Peak Expiratory Flow Rate.

• BHT: Breath Holding Time.

Procedure to measure PEFR: The Peak flow meter is used to measure PEFR. First, the patient is asked to take deep breath and then blow hard into the mouth piece of the peak flow meter with a sharp blast. The needle on the dial indicates the PEFR in liters per minute. Six readings are taken at 1 minute intervals and the averages of 4 higher readings are recorded, for the assessment before and after treatment. Normal range is 350-500litres per minute.

Procedure to measure Breath Hold Time: The patient is asked to sit quietly for a few minutes, and to breath normally, before the BHT exercises are started. The patient is asked to pinch his nostrils with the thumb and fore finger and hold breath after a normal inspiration. The time for which the breath could be held was noted with stop-watch. Observations are made at intervals of 2 minute; the best value was taken for the assessment, before and after treatment.

To establish the results statistically each sign and symptom was given grade: It is divided into two sections:

SECTION NO.1: SUBJECTIVE PARAMETERS

1. Frequency of *Swasa vega* (Breathlessness - Intensity and duration of attack)

0-No Swasa

- 1-Mild breathlessness and attack lasts 10 min., do not require any medication.
- 2-Moderate breathlessness, it lasts 30 min., after taking rest/mild medication.
- 3-Severe breathlessness and it lasts more than 30 min., resolution only after strong medication.

2. Ghurghurakam(Wheezing)

- 0- No wheezing
- 1-Wheezing only during attack
- 2-Occasional wheezing.
- 3-Very often wheezing.

3. Kasa (Cough)

- 0-No cough
- 1-Occasional cough.
- 2-Coughwith some pain, not disturbing the sleep.
- 3-Very troublesome cough , does not even allow to sleep at night.

4. Peenasa (Allergic Rhinitis)

0-No Peenasa.

1-Peenasa during the attack and subsides 1-2 days after attack.

2-Very often *Peenasa*, even without attack.

3-Always *Peenasa* persisting

5. Asinolabhatesukham (Relieves comfort in sitting posture)

0 -Relief in lying position

1-Feels better in sitting posture

2-Sitting posture gives relief.

3-Can't sleep, patient adopts spontaneous sitting posture during attack.

6. Shleshmavimokshanthesukham (Comfort after Phlegm comes out)

0-No relief even after phlegm comes out.

1-Comfort after the phlegm comes out during attack.

2-Very often comfort after the phlegm comes out.

3-Feels comfort after the phlegm comes out every time.

7. Parshvashula (Pain in inter-costal spaces)

0-No parshvashula.

1-Parshvashula during the attack.

2-Very often *parshvashula* even without attack.

3-Always parshvashula (Persistent pain).

8. Jwara (Fever)

0-No fever.

1-Mild fever with 99°F temperature.

2-Moderate fever with 100°F temperature.

3-Severe fever above 101°F temperature.

SECTION NO.2: OBJECTIVE PARAMETERS

1. PEFR (Peak Expiratory flow rate)

0 - > 350 l/min.

1-250l/min.- 350l/min.

2-150 l/min.-250l/min.

3- No response/ decrease in PEFR.

2. BHT (Breath Holding time)

 $0-\ge 40 \text{ sec.}$

1-25 sec-40 sec.

2-15 sec-25 sec.

3- No response/ decrease BHT.

CRITERIA FOR THE OVERALL RESPONSE OF TREATMENT

To assess the overall response of treatment, the following criteria were fixed to each of the status.

• Very good response: More than 90% relief.

• Good response: 70% to 90% relief.

• Moderate response: 51% to 70% relief.

• Mild response: 25% to 50% relief.

• **Poor response:** Less than 25% relief in signs and symptoms with no change.

OBSERVATIONS AND RESULTS

In the present study 40 patients were registered as *Tamaka Swasa*. Four patients were excluded on the basis of age and associated with other symptoms mentioned in exclusion criteria. Total 36 patients were recruited in this study as they fulfilled the inclusion criteria. Out of 36 patients, six patients (3 patients from each group) were drop out during the clinical trial as they didn't came for follow up. The remaining 30 patients, 15+15 in each group completed the treatment and follow up.

Table 1: Shows the effect of therapies on Frequency of Swasa vega

Frequency of Swasa vega	BT	AT	Follow up 1	Follow up 2
Group A	2.73±0.46	1.67±0.49	1.40±0.51	0.80±0.56
Group B	2.93±0.26	2.27±0.46	1.73±0.46	1.20±0.41
P value	0.152	0.002**	0.069+	0.034*
% of relief in Group A		39%		71%
% of relief in Group B		22.5%		59%

In group A, It was noted that the mean before treatment on Frequency of *Swasa vega* was 2.73 which reduced to 1.67 after treatment. During 1st

follow up, mean was 1.40 which reduced to 0.80 on 2nd follow up. **In group B,** It was noted that the initial mean on Frequency of *Swasa vega* was 2.93 which

reduced to 2.27 after treatment. During 1st follow up, mean was 1.73 which reduced to 1.20 on 2nd follow

up. There was significant effect on frequency of *Swasa vega* (P<0.05).

Table 2: Shows the effect of therapies on Ghurghurakam

Ghurghurakam	BT	AT	Follow up 1	Follow up 2
Group A	2.27±0.59	1.80±0.68	1.13±0.64	0.67±0.72
Group B	2.67±0.49	2.13±0.74	1.67±0.62	1.27±0.70
P value	0.053+	0.209	0.028*	0.029*
% of relief in Group A		21%		71%
% of relief in Group B		20%		52%

In group A, It was noted that the initial mean on *Ghurghurakam* was 2.27 which reduced to 1.80 after treatment. During 1st follow up, mean was 1.13 which reduced to 0.67 on 2nd follow up. **In group B,** It was noted that the initial mean on *Ghurghurakam* was 2.67

which reduced to 2.13 after treatment. During 1^{st} follow up, mean was 1.67 which reduced to 1.27 on 2^{nd} follow up. There was significant effect on *Ghurghurakam* (P<0.05).

Table 3: Shows the effect of therapies on *Kasa*

Kasa	BT	AT	Follow up 1	Follow up 2
Group A	2±0.65	1.33±0.62	0.87±0.52	0.40±0.51
Group B	2.53±0.64	2±0.65	1.47±0.74	0.87±0.52
P value	0.032*	0.008**	0.016*	0.019*
% of relief in Group A		33.5%		80%
% of relief in Group B		21%		66%

In group A, It was noted that the initial mean on *Kasa* was 2 which reduced to 1.33 after treatment. During 1^{st} follow up, mean was 0.87 which reduced to 0.40 on 2^{nd} follow up. In group B, It was noted that the initial

mean on Kasa was 2.53 which reduced to 2 after treatment. During 1st follow up, mean was 1.47 which reduced to 0.87 on 2nd follow up. There was significant effect on Kasa (P<0.05).

Table 4: Shows the effect of therapies on *Peenasa*

Peenasa	BT	AT	Follow up 1	Follow up 2
Group A	1.80±0.56	0.67±0.62	0.13±0.35	0±0
Group B	1.80±0.56	1.13±0.74	0.47±0.64	0.20±0.56
P value	1.000	0.072+	0.088+	0.178
% of relief in Group A		63%		100%
% of relief in Group B		37%		89%

In group A, It was noted that the initial mean on *Peenasa* was 1.80 which reduced to 0.67 after treatment. During 1st follow up, mean was 0.13 which reduced to 0 on 2nd follow up. **In group B,** It was noted that the initial mean on *Peenasa* was 1.80 which

reduced to 1.13 after treatment. During 1^{st} follow up, mean was 0.47 which reduced to 0.20 on 2^{nd} follow up. There was no significant effect on *Peenasa* (P>0.1).

Table 5: Shows the effect of therapies on *Asinolabhate sukham*

Asinolabhate sukham	BT	AT	Follow up 1	Follow up 2
Group A	2.47±0.52	2±0.85	1.20±0.68	0.93±0.88
Group B	2.67±0.49	2.20±0.56	1.33±0.49	1.20±0.68
P value	0.285	0.451	0.541	0.361
% of relief in Group A		19%		62%
% of relief in Group B		18%		55%

In group A, It was noted that the initial mean on *Asinolabhate sukham* was 2.47 which reduced to 2 after treatment. During 1st follow up, mean was 1.20 which reduced to 0.93 on 2nd follow up. **In group B,** It was noted that the initial mean on *Asinolabhate*

sukham was 2.67 which reduced to 2.20 after treatment. During 1st follow up, mean was 1.33 which reduced to 1.20 on 2nd follow up. There was no significant effect on *Asinolabhate sukham* (P>0.1).

Table 6: Shows the effect of therapies on Shleshmavimokshante sukham

Shleshmavimokshante sukham	BT	AT	Follow up 1	Follow up 2
Group A	2.40±0.74	1.73±0.46	1.07±0.70	0.67±0.49
Group B	2.73±0.59	2.27±0.59	1.67±0.72	1.20±0.68
P value	0.183	0.010*	0.029*	0.020*
% of relief in Group A		28%		72%
% of relief in Group B		17%		56%

In group A, It was noted that the initial mean on *Shleshmavimokshante sukham* was 2.40 which reduced to 1.73 after treatment. During 1st follow up, mean was 1.07 which reduced to 0.67 on 2nd follow up. **In group B,** It was noted that the initial mean on

Shleshmavimokshante sukham was 2.73 which reduced to 2.27 after treatment. During 1st follow up, mean was 1.67 which reduced to 1.20 on 2nd follow up. There was significant effect on Shleshmavimokshante sukham (P<0.05).

Table 7: Shows the effect of therapies on Parshvashula

Parsvasula	BT	AT	Follow up 1	Follow up 2
Group A	1.87±0.35	1.07±0.46	0.60±0.51	0.20±0.41
Group B	2.27±0.46	1.87±0.52	1.20±0.56	0.60±0.63
P value	0.012*	<0.001**	0.005**	0.050+
% of relief in Group A		43%		89%
% of relief in Group B		18%		74%

In group A, It was noted that the initial mean on *Parshvashula* was 1.87 which reduced to 1.07 after treatment. During 1st follow up, mean was 0.60 which reduced to 0.20 on 2nd follow up. **In group B,** It was noted that the initial mean on *Parshvashula* was 2.27

which reduced to 1.87 after treatment. During 1st follow up, mean was 1.20 which reduced to 0.60 on 2nd follow up. There was significant effect on *Parshvashula* (P=0.05).

Table 8: Shows the effect of therapies on *Jwara*

Jwara	BT	AT	Follow up 1	Follow up 2
Group A	1.00±0.00	0.00 ± 0.00	0.00 ± 0.00	0.00±0.00
Group B	1.27±0.46	0.60±0.51	0.20±0.41	0.00±0.00
P value	0.032*	<0.001**	0.072+	-
% of relief in Group A		100%		100%
% of relief in Group B		53%		100%

In group A, It was noted that the initial mean on Jwara was 1 which reduced to 0 after treatment. During 1st follow up and on 2nd follow up, the mean were 0. In group B, It was noted that the initial mean

on *Jwara* was 1.27 which reduced to 0.60 after treatment. During 1st follow up, mean was 0.20 which reduced to 0 on 2nd follow up.

Table 9: Shows the effect of therapies on Peak expiratory flow rate (PEFR).

PEFR	BT	AT	Follow up 1	Follow up 2
Group A	1.13±0.52	0.87±0.52	0.20±0.56	0.07±0.26
Group B	1.73±0.59	1.33±0.49	0.73±0.59	0.47±0.52
P value	0.006**	0.017*	0.017*	0.012*
% of change in Group A		23%		94%
% of change in Group B		23%		73%

In group A, It was noted that the initial mean on PEFR was 1.13 which reduced to 0.87 after treatment. During 1st follow up the mean was 0.2 which reduced to 0.07 on 2nd follow up. **In group B,** It was noted that

the initial mean on PEFR was 1.73 which reduced to 1.33 after treatment. During 1^{st} follow up, mean was 0.73 which reduced to 0.47 on 2^{nd} follow up. There was significant effect on PEFR (P<0.05).

Table 10: Shows the effect of therapies on Breath holding time (BHT)

ВНТ	BT	AT	Follow up 1	Follow up 2
Group A	2.47±0.52	1.80±0.56	1.07±0.70	0.53±0.64
Group B	2.93±0.26	2.67±0.49	2.20±0.56	1.53±0.52
P value	0.004**	<0.001**	<0.001**	<0.001**
% of change in Group A		27%		78.5%
% of change in Group B		9%		48%

In group A, It was noted that the initial mean on BHT was 2.47 which reduced to 1.80 after treatment. During 1st follow up the mean was 1.07 which reduced to 0.53 on 2nd follow up. **In group B,** It was noted that

the initial mean on BHT was 2.93 which reduced to 2.67 after treatment. During 1^{st} follow up, mean was 2.20 which reduced to 1.53 on 2^{nd} follow up. There was significant effect on BHT (P<0.05).

Table 11: Shows the overall symptoms score

Overall Symptoms score	BT	AT	Follow up 1	Follow up 2
Group A	20.13±2.58	12.93±2.74	7.67±2.49	4.27±2.78
Group B	23.53±2.69	18.47±3.09	12.67±3.06	8.53±3.14
P value	0.001**	<0.001**	<0.001**	<0.001**

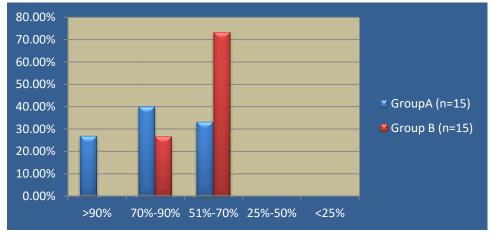
In group A, It was noted that the initial mean on overall symptoms score was 20.13 which reduced to 12.93 after treatment. During 1st follow up, the mean was 7.67 which reduced to 4.27 on 2nd follow up. **In group B,** It was noted that the initial mean on overall symptoms score was 23.53 which reduced to 18.47

after treatment. During 1st follow up, the mean was 12.67 which reduced to 8.53 on 2nd follow up. The study shows strong significance on the effect of therapies on overall symptoms after treatment, during follow up 1 and follows up 2.

Table 12: Shows the overall response of treatment

Effect of therapy	Range	GroupA (n=15)	Group B (n=15)
Very good response	>90%	4(26.7%)	0
Good response	70%-90%	6(40%)	4(26.7%)
Moderate response	51%-70%	5(33.3%)	11(73.3%)
Mild response	25%-50%	0	0
Poor response	<25%	0	0

The analysis of overall response of treatment in both groups revealed that all patients got relief. None of the patients in both groups showed poor response and none of the patients in both groups had complete relief.



DISCUSSION

Tamaka Swasa is a distressing disease having so many similarities with Bronchial Asthma mentioned in modern science. Increased usages of steroids, antibiotics, bronchodilators etc. are used to eradicate it. For safe treatment measures, Ayurvedic way is the best. It has been narrated in the classics that Tamaka Swasa involves Pranavaha srotas and vitiation of Kapha and Vata doshas mainly. In special samprapthi, pratiloma gati of vayu is mentioned. Tamaka Swasa is a disease occurring from the seat of pitta. During Samhitha kala, description of Tamaka Swasa was elaborated. Those are available in Brihatrayi and Laghutrayi. Acharya Indu and Arunadatta in their commentaries of Ashtanga

Sangraha and Ashtanga Hrudaya had mentioned that Swasa roga is developed due to upekshya of Kasa⁴. Acharya Sharangadhara described the process of respiration in detail in Purvakhanda. According to him, Respiration starts from nabhi, which is considered as umbilical region⁵. According to Acharya Susrutha, Vayu, Prana, Apana & Samana have prime importance for the normal function of Agni. In Ayurvedic Samhitas, Poorvarupa of Swasa rogas are not described separately. Poorvarupa of considered here are Anaha, Swasa roga Pranasya Pidanam Hridayasya, Parshvashula, Bhakthadvesha, Vadanasva vilomata. Arati. Vairasyata, Adhmana, Shankha nisthoda and Shula. In Ayurvedic classics, the symptoms (Rupa) of Tamaka

Swasa were clearly mentioned. In Tamaka Swasa, patients exhibit symptoms like difficulties in respiration, wheezing, night awakening, productive cough etc. The patients feel comfort in sitting posture, feels better after expectoration and ushnakamata will be there as it is *Upashaya* (relieving factor) for *kapha* and vata doshas. Durdina, Meghambu, Sheetharitu, Sheethambu, Kaphavardhaka ahara viharas are considered as Anupashaya (un-relieving factors) for Tamaka Swasa⁶. Acharva Charaka has beautifully narrated vishishta samprapthi. In the Pranavaha srotas, Kapha obstructs the flow of Pranavavu and which produces characteristic sound Ghurghurakam (wheezing) and other symptoms. Tamaka Swasa is said to be pittasthana samudbhava by Acharya Charaka while Acharya Vagbhata considered as Amashaya samudbhaya. Tamaka Swasa in general is described as Yapya vyadhi. However in an individual with recent origin of Tamaka Swasa having Pravara bala are said to be Sadhya. Acharya Sushruta have an opinion that Tamaka Swasa can be cured with difficulty (Krichra sadhya). Recurrent exposure to dust, smoke, cold etc. leads to chronicity of the disease. In later stage, Dhatus gets affected which leads to bad prognosis.

The drugs used in Poorvakarma were Trikatu choorna and Kantakari ghrita⁷ for internal administration. Murchita Tilataila⁸ was used for Abhyanga. The main drugs used in my clinical study were Trivrutadi Modaka⁹ and Shatvadi choorna¹⁰. Trivrutadi Modaka was used for Virechana and Shatyadi choorna for Shamana purpose. After Deepana and Pachana, Kantakari ghrita was administered for Snehapana in Vardhamana krama, starting with hrasiyasi matra, i.e. 30ml upto attainment of samyak snigdha lakshanas. For 3 days, Abhyanga and Bashpa sweda were done and on the 4th day, after sneha sweda karmas Trivrutadi Modaka was given by considering the rogi bala, roga bala, agni of the patient for Virechana karma. Rasa Samsarjana krama was followed according to shuddhi prakara. After this, Pathya was advised to each of the patients.

The analysis of total effect of therapies in both groups revealed that all patients got relief by the treatments.

None of the patients in both groups got complete relief. There was strong significance on the effect of therapies done on all symptoms with P value <0.001. In group A, 4 patients (26.7%) showed very good response, 6 patients (40%) showed good response and 5 patients (33.33%) showed moderate response. In group B, 4 patients (26.7%) showed good response and 11 patients (73.3%) showed moderate response. Statistical inference shows patients of Group A had better response than the patients of Group B. Overall effect of therapies showed better response in symptoms in *Virechana poorvaka shamana* (Group A) than *Shamana* (Group B).

CONCLUSION

The total effect of therapies in both groups revealed that all patients got relief by the treatments. In Group A, 4 patients (26.7%) showed very good response, 6 patients (40%) showed good response and 5 patients (33.33%) showed moderate response. In Group B, none of the patients showed very good response, 4 patients (26.7%) showed good response and 11 patients (73.3%) showed moderate response. Virechana karma with Trivrutadi Modaka and Shamana with Shatyadi choorna for Group A patients had significant effect than Group B patients who had only Shamana with Shatyadi choorna. The combined effect of Virechana with Shamana definitely has the potential effect to treat Tamaka Swasa better than Shamana.

Scope for further study:

- > Further extensive study is recommended to authenticate the results of the present study with larger samples.
- ➤ To study the therapeutic efficacy with the help of Spirometry, AEC (Absolute eosinophil count).
- Other medicines mentioned for Tamaka Swasa for Virechana and Shamana can be used for comparative study.

REFERENCES

- Ancient Science of Life, Journal on the Effect of Svasa Kuthararasa and Shirishadi Kashaya on patients of Tamaka Swasa, Vol.No.XV3, January 1996, P.213-218.
- Acharya Agnivesha, Charaka Samhita, Chikitsasthana, Chapter 17, Shloka 8, Ayurveda Dipika commentary of Chakrapanidatta, Editor Vaidya Jadavaji Trikamji acharya, Varanasi; Chaukhambha Krishnadas Academy, Reprint-2010, P.533.
- Acharya Agnivesha, Charaka Samhita, Chikitsasthana, Chapter 17, Shloka121, Ayurveda Dipika commentary of Chakrapanidatta, Editor Vaidya Jadavaji Trikamji acharya, Varanasi; Chaukhambha Krishnadas Academy, Reprint-2010, P.538.
- 4. Acharya Vagbhata, Ashtanga Sangraha, Nidana Sthana, Chapter 4, Shloka 1-2, Commentary by Indu, P.370.
- Acharya Sharangadhara, Sharangadhara Samhita, Purvakhanda, Chapter 7, Shloka 24, Dipika commentary of Adhamalla acharya and Gudhartha-Dipika commentary of Kasiram acharya, Editor Pt. Parashuram Shastri Vidyasagar, Varanasi; Krishnadas Academy, Reprint-2000, P.33.
- Acharya Agnivesha, Charaka Samhita, Chikitsasthana, Chapter 17, Shloka 55-62, Ayurveda Dipika

- commentary of Chakrapanidatta, Editor Vaidya Jadavaji Trikamji acharya, Varanasi; Chaukhambha Krishnadas Academy, Reprint-2010, P.535.
- Acharya Agnivesha, Charaka Samhita, Chikitsasthana, Chapter 18, Shloka 35, Ayurveda Dipika commentary of Chakrapanidatta, Editor Vaidya Jadavaji Trikamji acharya, Varanasi; Chaukhambha Krishnadas Academy, Reprint-2010, P.541.
- 8. Author: Govinda Das, Bhaishajya Ratnavali, Volume 1, Chapter 5, Shloka 1286-1287, Hindi commentary, Editor Prof. Siddhinandan Mishra, Varanasi; Chaukhambha Surbharati Prakashan, 5th edition, Reprint-2007, P.130.
- Acharya Agnivesha, Charaka Samhita, Kalpasthana, Chapter 7, Shloka 37-39, Ayurveda Dipika commentary of Chakrapanidatta, Editor Vaidya Jadavaji Trikamji acharya, Varanasi; Chaukhambha Krishnadas Academy, Reprint-2010, P.664.
- Acharya Agnivesha, Charaka Samhita, Chikitsasthana, Chapter 17, Shloka 123-124, Ayurveda Dipika commentary of Chakrapanidatta, Editor Vaidya Jadavaji Trikamji acharya, Varanasi; Chaukhambha Krishnadas Academy, Reprint-2010, P.538.

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