

AN OPEN RANDOMIZED COMPARATIVE CLINICAL STUDY ON LASHUNA RASAYANA AND VAITARANA BASTI IN GRIDHRASI

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ABSTRACT

The human spine withstands the gravity and defines human being as a biped. The spine acts as a channel for the neural structures of the body and bears the physiological capacity for lifting the body mass and supports for walking. As an ailment low back ache is second only to the common cold with 70 – 80% of the population experiencing low back pain at some point of time. The causes of low back ache can range from trivial mechanical inflict to more severe lingering or fatal illnesses. Considering this, the present study has been carried out to establish a treatment protocol to provide maximum outcome to the society. Selected patients were treated with oral administration of *Lashuna Rasayana* for a period of 15 days with the *anupana* of 150 ml of Takra in one group and another group was administered with 3 sittings of *Vaitarana Basti* during morning in empty stomach for 3 days in a dose of 335 ml. Results showed that *Lashuna Rasayana* and *Vaitarana basti* are effective in the remission of the symptoms of *Gridhrasi* as evidenced by statistically significant reduction in the symptom score of various subjective and objective parameters.

Keywords: *Gridhrasi, Lashuna Rasayana, Vaitarana Basti, Sciatica*

INTRODUCTION

Gridhrasi is considered as most common cause of low back ache mostly affecting the people at their most productive age. *Gridhrasi* is paralleled to Sciatica Syndrome in the modern parlance. *Kandara* or else termed as *gridhrasi snayu* is affected in *gridhrasi* causing *ruja* (pain) as the dominant feature¹. Pain is felt in the region of *sphik, prushta, jaanu, jangha, and pada*². The typical diagnostic method mentioned for the sciatica, straight leg rising test

(SLR), is explained as *sakthi utkshepa nigraha*³ in the classics. The line of management depends upon the *dosha* and *dushya* involved in the pathogenesis of the ailment which in turn depends upon the *nidana* and the treatment for *vataja nanatmaja vyadhi* should be specific, definite and immediate. *Kevala vataja* and *vatakaphaja* are the two clinical variations in presentation of *gridhrasi shoola*⁴. *Snigdha sweda, virechana karma, niruha basti, anuvasana basti, agni-*

karma, siravyadha, shamana medications and *rasayana* form the complete treatment of *gridhrasi* in both the varieties with little difference⁵. Oral administration of *lashuna* in different formulations or else by the unique procedure of *rasayana* is said to be very effective and curative in *vatavyadhi*⁶ which is indicated both in *vataja* and *vata-kaphaja* variants of *gridhrasi*. *Basti* is described as the best line of treatment to cure the imbalances of *vata dosha*⁷. It is also true that this procedure is equally effective in rectifying abnormal accumulation of *pitta* as well as *kapha dosha*. Hence *basti* procedure is given much importance than any other *shodhana* therapy. *Vaitarana basti* is a *tikshna niruha basti* and has special indication in *gridhrasi shoola*⁸. The drugs used in this *basti* are minimal in number, cheap and effective. Reviewing the clinical trials carried out regarding the effective management of *gridhrasi* in different postgraduate and research institutes revealed that most of the studies on *gridhrasi* are centered on oral medication or external treatment of *svedana*. Fewer studies are carried out in regards to the therapeutic effect of *rasayana* treatment in the management of *gridhrasi*. Also the studies related to the treatment with *basti* are inadequate to prove the efficacy of the same. Hence this study is intended to evaluate and compare the therapeutic effect of *lashuna rasayana* and *vaitarana basti* in patients suffering from *gridhrasi*.

OBJECTIVES

1. To evaluate the therapeutic efficacy of *Lashuna Rasayana* in the remission of the symptoms of *Gridhrasi/Sciatica*.
2. To evaluate the therapeutic efficacy of *Vaitarana Basti* in the remission of the symptoms of *Gridhrasi/Sciatica*.

3. To compare the effect of *Lashuna Rasayana* and *Vaitarana Basti* in bringing symptomatic relief and functional improvement in the patients of *Gridhrasi/Sciatica*.

MATERIALS AND METHODS

STUDY DESIGN

Open randomized comparative clinical study with pre-test and post-test design.

SOURCE OF DATA

40 patients diagnosed as *Gridhrasi/Sciatica* fulfilling the diagnostic/ inclusion and exclusion criteria were taken for study from OPD and IPD of SDM Ayurveda Hospital, Udupi, Karnataka.

DRUG

The cellulose capsules each containing 500 mg of freeze dry powder of *Lashuna and Erandataila for Lashuna Rasayana Group* and ingredients for the administration of *Vaitarana Basti i.e., Gomutra, Chinch, Guda, Saindhava lavana and Tila taila* in the *Vaitarana Basti Group* were obtained from SDM Ayurveda Pharmacy Udyavara, Udupi.

METHOD OF COLLECTION OF DATA

A special proforma was prepared incorporating all the clinical manifestation and assessment criteria including laboratory investigation findings of the *Gridhrasi/Sciatica*. Complete data including detailed clinical history and complete physical examination were collected from all the selected patients as per this proforma.

DIAGNOSTIC CRITERIA

1. Presence of symptoms of *Gridhrasi* that include stiffness, pain, pricking sensation, twitching in waist, buttocks & then radiating to back of the thigh, leg, ankle, foot suggestive of *Vataja Gridhrasi*. The additional symptoms like heaviness in

the legs, drowsiness and tastelessness may be present.

2. Presence of radicular pain of Sciatica that includes sudden/gradual onset of low back ache radiating to buttock, thigh, calf and foot.

INCLUSION CRITERIA

1. Patients of *Gridhrasi*/Sciatica between the age group of 16 to 70 years.
2. Patients with/without radiological evidence of Lumbar Spondylosis.
3. Patients of with/without radiological evidence of Disc Prolapse.

EXCLUSION CRITERIA

1. Sciatica with congenital deformities of spine
2. Neoplastic conditions of the spine with radicular pain.
3. Infections of the spine with Sciatica.
4. Patients with any other systemic illness associating Sciatica.
5. Patients contraindicated for *Basti Karma*.

ASSESSMENT CRITERIA

Subjective Parameters

1. Pain(*Ruk*) - Greenough & Fraser Scoring method
2. Stiffness(*Sthambha*)
3. Pricking type of pain(*Toda*)
4. Twitching(*Spandana*)
5. Functional Ability- Sugar baker & Barofsky Clinical Mobility Scale
6. Functional Disability - Oswestry Disability Assessment Questionnaire

Objective Parameters

1. Restricted limb movement/SLR Test (*Sakthikshepa nigraha*)
2. Neurological Deficit- Herron & Turners Rating

INTERVENTION

The patients selected were randomly divided into 2 groups of 15 each by adapting the permuted block randomization method.

1. Group A - LASHUNA RASAYANA GROUP

20 patients were treated with *Lashuna Rasayana* for a period of 15 days. Following are the details of the medication: Day 1 – 20 ml of *Eranda Taila* was orally given during the morning in empty stomach for *Kostha Shodhana*. Day 2 to Day 16 – Oral administration of 24 capsules (each 500 mg) of sprays dried *Lashuna* every day morning in empty stomach with the *Anupana* of 150 ml of *Takra*⁹. Day 17 - 20 ml of *Eranda Taila* was orally given during the morning in empty stomach to achieve the *Mrudu Virechana* completing the course of *Rasayana Chikitsa*¹⁰.

2. Group B – VAITARANA BASTI GROUP

20 patients were treated with 3 sittings of *Vaitarana Basti* during morning in empty stomach for 3 days. For this purpose after the evacuation of the bowel and bladder and after daily routines the patient was treated 30 minutes with *Sthanika Abhyanga* and *Sthanika Svedana* on the buttocks and lower abdomen using *tila taila* and *dashamula kvaatha nadisveda* respectively. This *Snigdha Sveda* was followed by administration of *Vaitarana Basti* by using the enema can in a dose of 335 ml¹¹ for 3 days consecutively. All the necessary after measures for the *Basti Karma* were carried out and the patient was observed for the effect of *Basti Karma*. Patient was advised to follow the restriction of *Parihara Kala* for 6 days.

INVESTIGATIONS

Complete Haemogram, ESR, RBS, X-Ray Lumbosacral Spine

OBSERVATIONS

Among the 40 patients taken for the study 47.5 % of the patients belonged to the age group of 31-40 years. 57.5% patients were males and 42.5% were females. 85% of the patients belonged to Hindu Religion. Majority of patients comprising 32.5 % in this study had completed their Higher Secondary School education; 92.5% of patients were married. Majority of the patient belonged to upper middle class i.e. 47.5%. 62.5 % of the patients had the dietary habit of taking mixed diet. 82.5 % patients among the 40 patients diagnosed as *Gridhrasi* followed *Vishamasana*. 72.5 % of the patients had the habit of taking coffee or tea regularly. Out of the 40 patients, maximum of 80 % of the patients had disturbed sleep. 57.5 % had the history of oral NSAID intake before the commencement of the study, 7.5 % of the patients had underwent Laminectomy. Majority of Patients belonged to *Vatapitta Prakruti* i.e. 60 % and 25 % belonged to *Vata-kapha Prakruti*; analysis of the symptoms revealed that 82.5 % patients exhibited *Kevala Vataja Gridhrasi*, and 17.5 % patients had *vata-kaphaja* type of *gridhrasi*, 95 % patients exhibited *Madhyama Sara*, 77.5 % recorded *Madhyama Samhanana*, 100% patients had *Madhyama Pramana* 82.5 % patients having *Madhyama satva and satmya*, 75 % of patients had *Madhyama Abhyavaharana Shakti*, 80 % of patients had *Madhyama Jarana Shakti* and 62.5 % of the patients had *Avara Vyayama Shakti*. 100 % patients have the symptom *toda*, *stambha*, *ruk* and *spandana*. 12.5 % had *Aruchi*, *tandra* and *gaurava* as symptom.

RESULTS

Lashuna Rasayana Group – The study proved that there was 90.58 % improvement

in *stambha*, 90.76 % improvement in *toda* and *aruchi*, 97.561 % improvement in *spandana*, 159.20 % improvement in the pain which were statistically highly significant with P value < 0.001. Neurological deficit was improved by 60.156 % with P < 0.001, Functional ability increased by 34.251 and functional disability decreased by 64.724 %. The improvement in SLR test Active and Passive was by 135.04 % and 120.13 % respectively with P value <0.001. 42.169 % was the improvement seen in the Schober's test. The outcome measures like walking for 30 feet, duration of 10 sit ups, time taken to climb 10 steps, and distance between finger and floor showed an improvement of 54.667 %, 51.329%, 59.827 %, and 48.669 % respectively, each having a P value < 0.001. It was found that 75 % of patients had major improvement, 20 % had moderate improvement, 5 % had mild improvement and none of the patients had the symptoms unchanged. [Table No. 1, 2 and 3]

Vaitarana Basti Group - The study proved that there was 58.93 % improvement in *stambha*, 90.30 % improvement in *toda* and *aruchi*, 40.00 % improvement in *spandana*, 143.59 % improvement in the pain which were statistically highly significant with P value < 0.001. Neurological deficit was improved by 53.334 % with P < 0.001, Functional ability increased by 24.359 and functional disability decreased by 44.240 %. The improvement in SLR test Active and Passive was by 85.33 % and 74.71 % respectively with P value <0.001. 23.82 % was the improvement seen in the Schober's test. The outcome measures like walking for 30 feet, duration of 10 sit ups, time taken to climb 10 steps, and distance between finger and floor showed an improvement of 37.66 %, 37.66 %, 37.66 %, and 37.66 % respectively, each having a P value < 0.001.

32.55 %, 29.397 %, and 24.742 % respectively, each having a P value < 0.001. It was found that 10 % of patients had major improvement, 60 % had moderate improvement, 25 % had mild improvement and 5 % of the patients had the symptoms unchanged.[Table No. 1, 2 and 3]

Comparison between the groups shows that Lashuna Rasayana Group had more improvement compared to Vaitarana Basti Group which was statistically significant.

DISCUSSION

Vatavyadhi is elaborated in the literature and has its etiology explained as specific *nidana*, *dhatukshaya* as well as *margavarana*. The line of treatment explained in the literature is also specific in this regard, i.e., *apatarpana* for the *margavarana* *vatavyadhi* and *santarpana* treatment procedures for *dhatukshaya* *vatavyadhi*. In the whole treatment protocol explained for *vatavyadhi*, *lashuna rasayana* stands as an exception as it is indicated in the *margavarana* and *dhatukshaya* *vatavyadhi* specifying that it is targeted irrespective of the cause. *Vata prakopa* in *gridhrasi* is evidenced by the severe pain experienced by the patient along with the altered sensations over the affected limb and restricted movement of the limb causing inability to elevate the same. As these symptoms and signs are markedly reduced in both the groups, it is clear that *Lashuna Rasayana* is efficacious in reducing the morbidity of the *vata dosha*. *Snayu* is considered as one of the important *pratyanga* of the body. It is responsible for the *utkshepana*, *apakshepana* and other movements. In case of *gridhrasi*, it is the ambulation which is affected and this in turn is pathognomic of *gridhrasi shula* and *gridhrasi snayu* being afflicted by morbid *vata*

dosha. The improvement in the functional ability, reduction in the functional disability, improvement in time taken for sit ups and walking and climbing stairs denote that there is a definite improvement in the functionality of the *snayu* by the treatment. The improvement noticed in the neurological deficits makes it evident that there is a definite increase in the functionality of the *karmendriya (pada)* and it is owing to the effect of treatments adopted here in this study. *Lashuna* is said to possess *ushna* and *tikshna* properties which may precipitate morbidity of the *pitta dosha*. As emphasized in the literature the morbidity of *pitta dosha* is cleared at the completion of the *lashuna rasayana* treatment course. The single dose of *eranda taila* given at the end of *lashuna rasayana* therapy induces purgation in milder form to attain *mrudu virechana* there by mitigating the morbid *pitta dosha*. It is worth mentioning that by following this dosage of *lashuna rasayana* as indicated in the literature (12 g of freeze dry powder is equivalent to 48 g of crude *lashuna*), there is no untoward effect pathognomic of *pitta dosha* justifying the safest dosage of *lashuna rasayana*. *Vaitarana Basti* is regarded as a *shodhana basti* by the addition of *gomutra*. The addition of *tikshna dravya* like that of *gomutra*, *saindhava lavana* and *chinchha* may lead to the *atiyoga* as a risk factor. And the risk is doubled if the prescription is without the alternating *anuvāsana basti*. The study conducted revealed that the administration of the *basti* consecutively for a period of 3 days was safe. The amount of 335 ml is the safest dosage as there were neither the features of *atiyoga* of *basti* as mentioned in the literature nor the symptoms of colitis and hence considered as effective and safe.

Gridhrasi is rendered to the specific nidana like that of the excessive *vyayama* and *abhighata* which can in turn result in the *dhatukshaya* to the *gridhrasi nadi* or *kandara* and the presentation is the *gridhrasi shula*. During the course of the illness affliction of the same *snayu* by any of the pathological factors entraps the *gridhrasi nadi* leading to the *avarana* pathology. From the present study it is evident that the patients have shown best response in remission of the functional disability and neurological deficits; and other symptom parameters along with the improvement in the functional ability. This proves the efficacy of *lashuna rasayana* beyond doubt in rectifying the etiopathogenesis of *gridhrasi* irrespective of its cause as *dhatukshaya* or *margavarana*. Similar is the outcome related to *vaitarana basti*. Though *vaitarana basti* has reduced the symptom complex has shown better response in the outcome measures irrespective of the cause, its efficacy is less than that of the *lashuna rasayana* proving the fact that *lashuna rasayana* has to be considered as supreme over *vaitarana basti* in the treatment of *gridhrasi*.

CONCLUSION

Lashuna Rasayana and *Vaitarana basti* are effective in the remission of the symptoms of *Gridhrasi* as evidenced by statistically significant reduction in the symptom score of various subjective and objective parameters. The effectiveness of the *Lashuna Rasayana* is supreme comparing to that of *Vaitarana basti* as evidenced by the various outcome measures and the statistical analysis shows that it is significant.

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| Group | TABLE NO. 1: EFFECT OF LASHUNA RASAYANA AND VAITARANA BASTI ON THE SYMPTOMS OF GRIDHRASI | | | | | | | | | |
|--|---|-------------------|-------|----------|-----------------|-------|--------|--------|-----------|--------|
| | Mean | | BT-AT | % Relief | Paired 't' test | | | | Un-paired | |
| | BT (±SD) | AT (±SD) | | | SD | SEM | t | P | t | P |
| Effect of Treatment on Stambha | | | | | | | | | | |
| LR Group | 2.750 (±0.099) | 0.250 (±0.099) | 2.500 | 90.58 | 0.688 | 0.154 | 16.245 | <0.001 | 3.955 | <0.001 |
| VB Group | 2.800 (±0.092) | 1.150 (±0.150) | 1.650 | 58.93 | 0.671 | 0.150 | 11.000 | <0.001 | | |
| Effect of Treatment on Toda | | | | | | | | | | |
| LR Group | 2.500 (±0.827) | 0.000 (±0.000) | 2.500 | 100 | 0.827 | 0.185 | 13.516 | <0.001 | 4.182 | <0.001 |
| VB Group | 2.800(±0.156) | 1.350 (±0.182) | 1.450 | 51.79 | 0.759 | 0.170 | 8.542 | <0.001 | | |
| Effect of Treatment on Spandana | | | | | | | | | | |
| LR Group | 2.050 (±0.170) | 0.050 (±0.050) | 2.000 | 97.56 | 0.795 | 0.178 | 11.255 | <0.001 | 5.082 | <0.001 |
| VB Group | 2.500 (±0.154) | 1.500 (±0.185) | 1.000 | 40.00 | 0.725 | 0.162 | 6.164 | <0.001 | | |
| Effect of Treatment on Aruchi | | | | | | | | | | |
| LR Group | 0.150 (±0.082) | 0.00 (±0.00) | 0.150 | 100 | 0.366 | 0.082 | 1.831 | =0.083 | 0.467 | =0.643 |

| | | | | | | | | | | |
|---------------------------------------|--------------------|----------------------|--------|-------|-------|--------|-------|--------|-------|--------|
| | | 00) | | | | | | | | |
| VB Group | 0.1000 (±0.068) | 0.00 0 (±0.00) | 0.1000 | 100 | 0.308 | 0.069 | 1.453 | =0.163 | | |
| Effect of Treatment on Tandra | | | | | | | | | | |
| LR Group | 0.100 (±0.08) | 0.000 (±0.000) | 0.100 | 100 | 0.308 | 0.0688 | 1.453 | =0.163 | 0.00 | =1.00 |
| VB Group | 0.100 (±0.08) | 0.000 (±0.000) | 0.100 | 100 | 0.308 | 0.0688 | 1.453 | =0.163 | | |
| Effect of Treatment on Gaurava | | | | | | | | | | |
| LR Group | 0.300 (±0.164) | 0.0500 (±0.050) | 0.250 | 83.33 | 0.550 | 0.123 | 2.032 | =0.056 | 1.506 | =0.140 |
| VB Group | 0.1000 (±0.068) | 0.0500 (±0.050) | 0.0500 | 50.00 | 0.224 | 0.0500 | 1.000 | =0.330 | | |

| Group | TABLE NO. 2: EFFECT OF LASHUNA RASAYANA AND VAITARANA BASTI ON VARIOUS OUTCOME MEASURES | | | | | | | | | |
|--|--|--------------------|--------|----------|-----------------|-------|--------|--------|----------|--------|
| | Mean | | BT-AT | % Relief | Paired 't' test | | | | Unpaired | |
| | BT (±SD) | AT (±SD) | | | SD | SEM | t | P | t | P |
| Effect of Treatment on Pain | | | | | | | | | | |
| LR Group | 17.400 (±1.658) | 45.100 (±1.487) | 27.70 | 159.2 | 4.868 | 1.088 | 25.449 | <0.001 | 5.614 | <0.001 |
| VB Group | 13.650 (±1.508) | 33.250 (±1.156) | 19.60 | 143.6 | 4.235 | 0.947 | 20.697 | <0.001 | | |
| Effect of Treatment on Neurological Deficit | | | | | | | | | | |
| LR Group | 32.000 (±2.865) | 12.750 (±2.099) | 19.250 | 60.156 | 9.072 | 2.029 | 25.449 | <0.001 | 3.256 | <0.001 |
| VB Group | 22.500 (±1.721) | 10.500 (±1.950) | 12.000 | 53.334 | 4.104 | 0.918 | 13.077 | <0.001 | | |
| Effect of Treatment on Functional Ability | | | | | | | | | | |
| LR | 16.350 | 21.950(±0.3) | 5.60 | 34.25 | 2.113 | 2.029 | 25.44 | <0.001 | 3.58 | <0.0 |

| | | | | | | | | | | |
|---|-----------------|-----------------|-------|--------|-------|-------|--------|--------|-------|--------|
| Group | (±0.418) | 03) | 0 | 1 | | | 9 | | 1 | 01 |
| VB Group | 15.600 (±0.387) | 19.400 (±0.387) | 3.800 | 24.359 | 0.768 | 0.172 | 22.134 | <0.001 | | |
| Effect of Treatment on Functional Disability | | | | | | | | | | |
| LR Group | 31.750 (±1.265) | 11.200 (±0.919) | 20.55 | 64.724 | 3.605 | 0.806 | 25.492 | <0.001 | 5.141 | <0.001 |
| VB Group | 32.550 (±1.175) | 18.150 (±0.779) | 14.40 | 44.240 | 3.952 | 0.884 | 16.294 | <0.001 | | |

| Group | TABLE NO. 3: EFFECT OF LASHUNA RASAYANA AND VAITARANA BASTI ON VARIOUS TESTS FOR SCIATICA | | | | | | | | | |
|--|--|-----------------|-------|----------|-----------------|-------|--------|--------|----------|--------|
| | Mean | | BT-AT | % Relief | Paired 't' test | | | | Unpaired | |
| | BT (±SD) | AT (±SD) | | | SD | SEM | t | P | t | P |
| Effect of Treatment on SLR Test Active | | | | | | | | | | |
| LR Group | 34.250(±1.894) | 80.500 (±1.983) | 46.25 | 135.04 | 10.371 | 2.319 | 19.943 | <0.001 | 3.582 | <0.001 |
| VB Group | 37.500 (±2.251) | 69.500 (±2.562) | 32.00 | 85.33 | 14.455 | 3.232 | 9.900 | <0.001 | | |
| Effect of Treatment on SLR Test Passive | | | | | | | | | | |
| LR Group | 39.750 (±2.336) | 87.500(±1.230) | 47.75 | 120.13 | 10.696 | 2.392 | 19.965 | <0.001 | 4.291 | <0.001 |
| VB Group | 43.500 (±2.409) | 76.000 (±2.847) | 32.50 | 74.71 | 11.754 | 2.628 | 12.365 | <0.001 | | |
| Effect of Treatment on Lasegue's test | | | | | | | | | | |
| LR Group | 34.250 (±1.894) | 80.500 (±1.983) | 46.25 | 135.04 | 10.37 | 2.319 | 19.943 | <0.001 | 3.582 | <0.001 |
| VB Group | 37.500 (±2.251) | 69.500 (±2.562) | 32.00 | 85.33 | 14.45 | 3.232 | 9.900 | <0.001 | | |
| Effect of Treatment on Schober's test | | | | | | | | | | |
| LR Group | 5.800 (±0.418) | 8.600 (±0.303) | 2.800 | 48.270 | 2.596 | 0.580 | 12.061 | <0.001 | 4.620 | <0.001 |
| VB Group | 5.400 (±0.598) | 7.900 (±0.626) | 2.500 | 46.290 | 1.191 | 0.266 | 15.208 | <0.001 | | |

| GRADINGS | |
|--------------------------------------|-----|
| 1. Stambha (Stiffness): | |
| i. No stiffness | - 0 |
| ii. Mild stiffness | - 1 |
| iii. Moderate stiffness | - 2 |
| iv. Severe stiffness | - 3 |
| 2. Toda (Pricking Sensation): | |
| i. No pricking sensation | - 0 |
| ii. Mild pricking sensation | - 1 |

| | | | |
|----------------------------------|-----------------------------|---|---|
| iii. | Moderate pricking sensation | - | 2 |
| iv. | Severe pricking sensation | - | 3 |
| 3. Spandana (Twitchings): | | | |
| i. | No twitching | - | 0 |
| ii. | Mild twitching | - | 1 |
| iii. | Moderate twitching | - | 2 |
| iv. | Severe twitching | - | 3 |
| 4. Aruchi (Anorexia): | | | |
| i. | No anorexia | - | 0 |
| ii. | Mild anorexia | - | 1 |
| iii. | Moderate anorexia | - | 2 |
| iv. | Severe anorexia | - | 3 |
| 5. Tandra (Drowsiness): | | | |
| i. | No drowsiness | - | 0 |
| ii. | Mild drowsiness | - | 1 |
| iii. | Moderate drowsiness | - | 2 |
| iv. | Severe drowsiness | - | 3 |
| 6. Gaurava (Heaviness): | | | |
| i. | No heaviness | - | 0 |
| ii. | Mild heaviness | - | 1 |
| iii. | Moderate heaviness | - | 2 |
| iv. | Severe heaviness | - | 3 |

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Source of Support: Nil

Conflict of Interest: None Declared