



## ORIGINAL RESEARCH ARTICLE

### CLINICAL EVALUATION OF JATAMANSI SIDDHA TAILA SHIRODHARA ON ANXIETY-NEUROSIS

ANUP JAIN<sup>1</sup> SURENDRA VEDPATHAK<sup>2</sup> ASHOK KUMAR SINGH<sup>3</sup> ARUN GUPTA<sup>4</sup> UMESH SAPRA<sup>5</sup>

#### Abstract

**Context:** Prevalence of Anxiety Neurosis in modern era is increasing due to high levels of stress at work and personal fronts. In the recent studies it has been found that Anxiety patients form 30% of total psychiatric patients and about 5% of total population suffers from it. The present study was undertaken to assess the efficacy of *Shirodhara Chikitsa*, as it acts on *Manovaha Srotasa*. **Aims and Objectives:** To assess the effect of *Jatamansi Siddha Taila Shirodhara* on Anxiety neurosis by clinical trials. To find out the efficacy, dose, any side effects of *Shirodhara*. **Settings and Design:** Randomized single blind control group study design was adopted. **Materials and Methods:** Total 60 patients of Anxiety Neurosis were selected and divided into two groups of 30 patients each and given *Shirodhara by Jatamansi siddha taila* and *TilaTaila*. Patients were evaluated with Hamilton's Anxiety Rating scale. **Statistical Analysis Used:** By using paired-t test and unpaired-t test, reduction in Anxiety level was measured. **Results:** By giving *Shirodhara with JatamansiSiddhaTaila* for 14 days, we get promising results 73.33% in Anxiety Neurosis and no relapses were seen in a follow up of 6 months. No significant results were found in group given *Shirodhara with TilaTaila* and also relapse was seen. No serious adverse effects were found. Total 73.33% symptoms of Anxiety Neurosis patients were relieved. **Conclusions:** *Shirodhara by JatamansiSiddhaTaila*, proved to be good treatment modality in the view of long term relief of Anxiety Neurosis as it acts by strengthening *Manovaha srotasa* and not just by suppressing vitiated *Dosha*.

**Key Words:** Anxiety Neurosis, Jatamansi Siddha Taila, Shirodhara, Tila Taila

<sup>1</sup>Clinical Registrar, <sup>4</sup>Head, Dept. of Panchkarma, Ch. Brahm Prakash Ayurved Charak Sansthan, NEW DELHI

<sup>2</sup> Head, Department of Panchkarma, College of Ayurveda, Bharati Vidyapeeth Universtiy, PUNE

<sup>3,5</sup> Assistant Professor, Dept. of Roganidan evam vikruti vigyan, Ch. Brahm Prakash Ayurved Charak Sansthan, NEW DELHI

Corresponding Email id: [dr.anupjain@gmail.com](mailto:dr.anupjain@gmail.com)

Access this article online: [www.jahm.in](http://www.jahm.in)

Published by Atreya Ayurveda Publications under the license CC-by-NC.

## INTRODUCTION

In modern era, fast and more techno-savvy lifestyle, results in reduced time of relaxation which leads to stress and related disorders like anxiety, insomnia etc. Increase in the need of consistently performing better at work and in personal life has brought with it the fear of failure. It puts extra psychological burden on a human being.

Anxiety states are one of the most common neurotic syndromes. They consist of a combination of physiological manifestations of anxiety, not attributable real danger, which occur either in attacks (Panic disorder) or as a persisting state (Generalized anxiety disorders).

Anxiety is defined as a vague, objectless fear; an uneasy, fearful feeling. Neurosis is a psychological disorder, less severe than psychosis, in which a person is unusually anxious, miserable, troubled, or incapacitated in his work and relations with other people. The person often attempts to ward off anxiety by using defence mechanism.

**Need of the study:** In the recent studies it has been found that Anxiety patients form 30% of total psychiatric patients and about 5% of total population suffers from it. Anxiety medications can be habit forming and cause many side effects. Therefore, it is needed to establish a standard, effective and non habit

forming Ayurvedic treatment for Anxiety neurosis for which this study was done.

*Taila dhara*<sup>[1]</sup> has the properties like *Manasthairyakara, imparts strength, induces sound sleep, increases intellect*, etc. hence is the therapy of choice. *Jatamansi*<sup>[2]</sup> is one such drug which can be used here as it acts on the *Manovaha srotasa*. It is *Tridoshaghna, Balaprada and Medhya* hence helps in breaking the *Samprapti*. *Jatamansi* acts on *Tridosha* and also acts on the *Srotasa* involved. It is also called as *Tapiswini* which suggests it is *Sattwa guna Pradhana* in nature. Hence it works on the *Sattwa guna* present in our mind which is decreased in this disease.

## AIM AND OBJECTIVES

1. To assess the effect of *Jatamansi Siddha Taila Shirodhara* on Anxiety neurosis.
2. To compare the efficacy of *Jatamansi Siddha Taila Shirodhara and Tila Taila Shirodhara* on Anxiety Neurosis

## MATERIALS AND METHODS

Approval of the study was taken after presentation from institute's ethics committee received vide letter number BVU/Exam/2473/2006-07. The cases were enrolled after describing the treatment and obtaining informed consent in English and local language.

**Materials:** *Jatamansi*<sup>[2]</sup> was used here as it acts on the *Manovaha srotasa*. It pacifies all the three *dosha's* (*Tridoshaghna*), *increases strength* (*Balaprada*) and *improves intellect* (*Medhya*) hence helps in breaking the *Samprapti* (Pathogenesis). *Jatamansi* acts on *Tridosha* and also acts on the *Srotasa* (channels of the body) involved. It is also called as *Tapiswini* which suggests it is *Sattwa guna Pradhana* in nature. Hence it works on the *Sattwa guna* present in our *manas* (mind) which is decreased in this disease.

**Procurement of the drug:** Ingredients of the study which are: *Jatamansi* and *Tila Taila* were purchased from local market of Pune. Raw material was authenticated at Department of Botany, Pune University, Pune.

**Method of Preparation:** *Taila siddhi* was done according to *Sharangadhara Samhita*<sup>[3]</sup> at Ayurvedashram Pharmacy, Pune.

**Standardization of Investigational drug:** Analysis and standardisation of prepared oil was done at Indian Drug Research Institute, Pune.

**Table 1. Properties of Medicine used**

<i>Dravya</i>	<i>Rasa</i>	<i>Virya</i>	<i>Vipaka</i>	<i>Guna</i>	<i>Karma</i>	<i>Doshaghata</i>
<i>Jatamansi</i> <sup>[2]</sup>	<i>Tikta, Madhura, Kashaya</i>	<i>Shita</i>	<i>Katu</i>	<i>Laghu, Snigdha, Teekshna, Sugandhi, Shita</i>	<i>Bhutaghna (Manasadoshahara) Medhya</i>	<i>Tridoshaghna (Mainly Kaphaghna, Pittaghna)</i>
<i>Tila Taila</i> <sup>[4]</sup>	<i>Madhur, Katu, Tikta Anurasa - Kashaya</i>	<i>Ushna</i>	<i>Madhura</i>	<i>Sukshma, Vyavayi</i>	<i>Tvachya, Keshya, Balya</i>	<i>Param Vatahara</i>

**Study Design:** Interventional, single blinded randomized controlled efficacy trial.

**Study Population:** An accessible population having achieved adulthood and capable of giving detailed feedback was obtained from

OPD of Bharati Vidyapeeth Medical Foundation's Ayurveda hospital irrespective of gender or profession.

**Study Sample:** Patients diagnosed with Anxiety neurosis, as per the diagnostic criteria were obtained from OPD of Bharati Vidyapeeth Medical Foundation's Ayurveda hospital, Pune, with initial HAM A score being above 17.

**Sample Size:** Total 63 patients were randomly selected and counselled of which 3 were drop outs. Proper plan of treatment was made and after taking written consent, trial was conducted.

**Study Setting:** Study was carried out in Panchakarma department of Bharati Vidyapeeth Medical Foundation's Ayurveda hospital, Pune, Maharashtra, India, from July 2007 to December 2008.

**Diagnostic Criteria:** Anxiety Neurosis is diagnosed if at least three of the following symptoms are present for more than 3 months<sup>[5]</sup> according to diagnostic and statistical manual of mental disorders<sup>[6]</sup>.

1. Restlessness or feeling keyed up or on edge
2. Being easily fatigued
3. Difficulty concentrating or mind going blank
4. Irritability
5. Muscle tension

6. Sleep disturbance.

#### **Inclusion criteria**

1. Patients diagnosed with Anxiety neurosis according to Hamilton Anxiety rating scale<sup>[7][8][9]</sup> and having a total score of above 17 in the scale were included
2. Not suffering from any other psychiatric disorder.
3. Patients in the age Group of 20-60 yrs.
4. Patient not on any other medication for the same disease.

#### **Exclusion criteria**

1. Patients having Ham – A score under 17.
2. Patients below age of 20 and over 60 years of age.
3. Suffering from any other psychiatric disorder.
4. Alcoholism or any other drug abuse.
5. Suffering from severe medical illness.
6. Patient taking any other treatment for Anxiety Neurosis.

**Grouping:** Patients were divided randomly into two groups of 30 patients each. Group A was treated with *Jatamansi siddha taila shirodhara* while group B was treated with *tila taila shirodhara*. Both groups were given similar *purva karma* in form of *abhyanga* and *sarvanga vashpa svedana*.

**Intervention:** Single blind control group study design was adopted. For clinical study a special case paper was prepared which included Ham – A scale. *Shirodhara* was given for 30 minutes daily for 14 days and patients advised to take rest post treatment and to bath with warm water only after 1 hour of treatment.

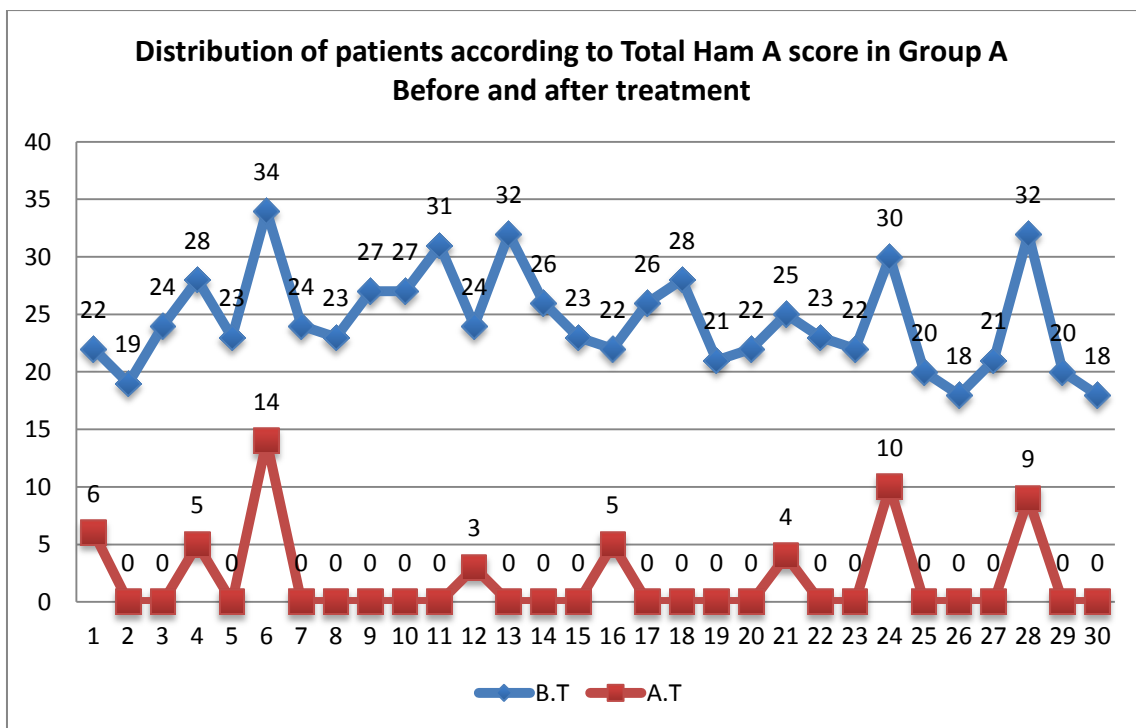
Assessment was done using HAM – A scale, before treatment and after 14 days i.e. end of treatment and follow ups were taken on 30<sup>th</sup>, 45<sup>th</sup> and 60<sup>th</sup> day to check for relapse if any.

**Assessment criteria:** Assessment was done using Hamilton Anxiety rating scale or HAM–A. No other laboratory investigations were done in this study.

**OBSERVATIONS AND RESULTS**

Observations were done according to total score of 14 point Hamilton anxiety rating scale which includes all Symptoms and their Gradations. They are mentioned below.

**Graph 1. Distribution of patients according to Total anxiety score Before and After treatment in Group A**



**Table 2. Statistics of results in Group A acc to total HAM – A score at the end of treatment**

	B.T.	A.T.	t cal	t table	P-value	Result
Mean	24.5	1.8667	24.5	2.0452	0.0000032	Reject Ho

S.D.	4.2091	3.5752				
------	--------	--------	--	--	--	--

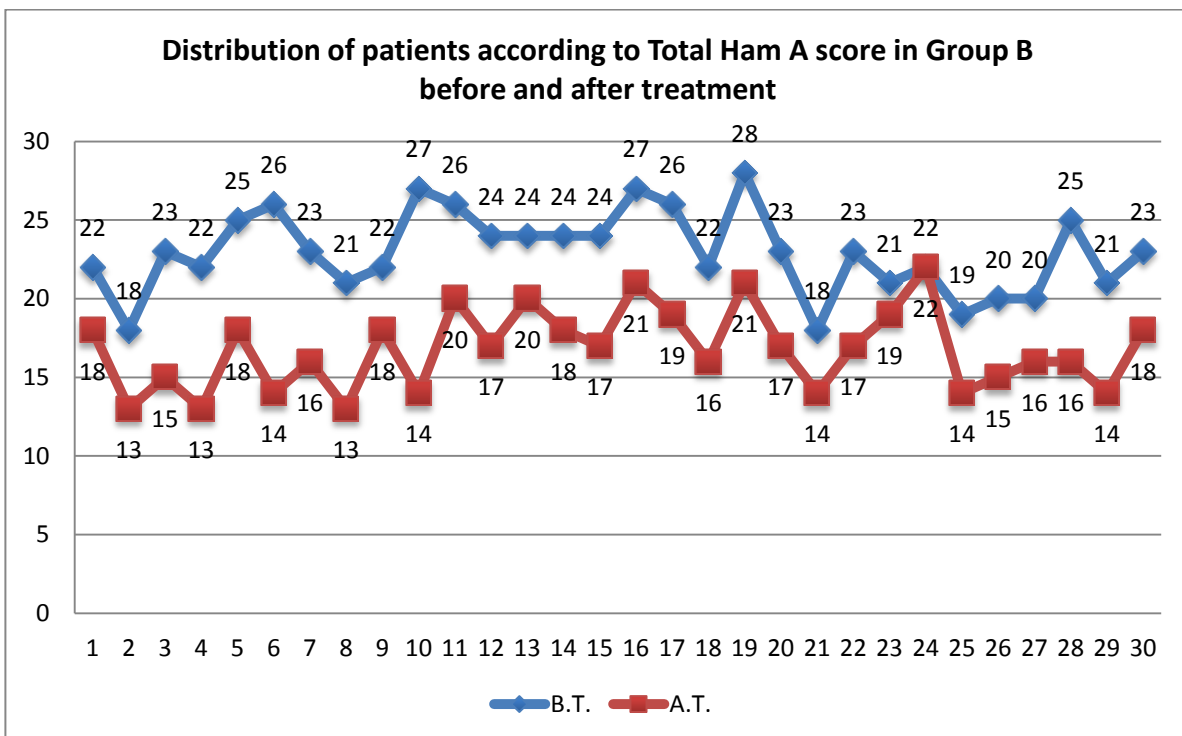
**Table 3. Statistics of results in Group A acc to total HAM – A score at the end of follow up**

	B.T.	F.U.	t cal	t table	P-value	Result
Mean	24.5	1.7	24.5	2.0452	0.0000043	Reject Ho
S.D.	4.2091	3.3975				

**Table 4. Statistics of results in Group A acc to total HAM – A score from end of treatment and follow up**

	A.T.	F.U.	t cal	t table	P-value	Result
Mean	1.8667	1.7	1.8667	2.0452	0.036	Reject Ho
S.D.	3.5752	3.3975				

**Graph 2. Distribution of patients according to Total anxiety score before and after treatment in Group B**



**Table 5. Statistics of results in Group B acc to total HAM – A score at the end of treatment**

	B.T.	A.T.	t cal	t table	P-value	Result
Mean	22.967	16.767	22.967	2.0452	0.00023	Reject Ho
S.D.	2.5623	2.5256				

**Table 6. Statistics of results in Group B acc to total HAM – A score at the end of follow up**

	B.T.	F.U.	t cal	t table	P-value	Result
Mean	22.967	23.1	22.967	2.0452	0.23	Accept Ho
S.D.	2.5623	2.5736				

**Table 7. Statistics of results in Group A acc to total HAM – A score from end of treatment and follow up**

	A.T.	F.U.	t cal	t table	P-value	Result
Mean	16.767	23.1	16.767	2.0452	9E-17	Reject Ho
S.D.	2.5256	2.5736				

**Table 8. Comparison between the two Groups**

	Group A	Group B	t cal	t table	P-value	Result
Mean	22.633	6.2	19.867	2.0017	0.000028	Reject Ho
S.D.	3.7548	2.5351				

It was also noted that most of the patients who were not able to sleep properly started to get deep sleeps within three days of treatment and levels of concentration and retention were reported to increase significantly in the

patients given *Shirodhara* with *Jatamansi Siddha Taila*. *Tila Taila Shirodhara* gives *Upashaya*, but it is not long lasting and when compared to *Jatamansi Siddha Taila Shirodhara*; the results are also low.

*Shirodhara* with *Jatamansi Siddha Taila* is having excellent results on Anxiety Neurosis. No relapse was seen in the trial Group whereas in the Group with *Tila Taila Shirodhara* symptoms started to appear again by the end of final follow up.

The causative factors observed during the study include Stress, *Vata* aggravating diet and less sleep. It concludes that increase in *Vata* is mainly by *Chala* and *Ruksha guna*. *Prana*, *Udana*, *Vyana* and *Samana Vata* are largely found to be affected. The major *Dushyas* in this condition appears to be *Mana* and *Rasa* and *Majja dhatu*. Amongst the *Manasa bhavas*, *Dhruti* was found to be affected in majority of patients. *Lakshana Sammurchaya* observed was : *Chinta*, *Bhaya Prachiti*, *Anidra*, *Hrudadrava*, *Chimchimayan*, *Bhrama*, *Angamarda*, *Krodha*, *Tamahpravesha*, *Tandra*, *Shawasa*, *Jadya*, *Shirogaurava*.

## DISCUSSION

It is seen that the occurrence is more in the age group of 20 – 40 years which can be due to higher studies and increased work pressure i.e. increased mental stress. The main causes observed in the present study were worries because of career instability or financial crisis, loss of some family member and sexual insufficiency. Anxiety Neurosis is found more in highly educated people.

## Probable mode of action of *Shirodhara*:

*Shirodhara* acts by trans-cutaneous penetration of medicine through the skin and absorption by capillary infiltration. It may also acts through extro-receptors, which are located near the surface of forehead and scalp. Its action may also mediated by tactile and thermo-receptive sensations. Receptors involved being root hair plexuses, free nerve endings, etc. Warm liquids used in *Shirodhara* procedure causes increased infiltration of blood in scalp region thus relaxing muscle and nerve endings. *Shirodhara* causes tranquility of mind and induces natural sleep by prolonged and continuous pressure. *Shirodhara* acts on 7 out of a total of 10 *Marmas* present in *Shiro Pradesh*.

In this study we have used *Jatamansi* in the form of *Siddha Taila*. Therefore, the treatment is external *Snehana*, even though; it involves a very mild form of *Svedana*. *Snehana*<sup>[10]</sup> and *Svedana*<sup>[11]</sup>, basically, are the major procedures for *Vatashamana*<sup>[12]</sup>. Thus, *Shirodhara* takes care of the *Vataprakopa* element of the *Samprapti*. The site of *Dhara* is *Shira*, which in turn is the major *sthana* of *Prana Vayu*<sup>[13] [14]</sup>, *Majja Dhatu* and most of the *Indriyas*. Therefore, *Shirodhara* helps in balancing the *Prana Vayu* and nourishes *Majja dhatu* and *Indriyas*. *Jatamansi* is an excellent *Medhya Dravya* and its synonym is *Tapaswini* which indicates the dominance of *Sattwa*



*Guna* in it which helps in restoring the strength of *Mana*, especially the *Dhruti* part. *Jatamansi* has been described as *Balakantida* (improves *Bala* i.e. strength and *Kanti*) which highlights its actions on *Udana Vayu*<sup>[15]</sup> (which is associated with *Bala* and *Varna*). Thus, *Taila Dhara* with *Jatamansi Siddha Taila* balances the *Vataprakopa* – especially *Prana* and *Udana*, restores the strength of *Mana* – thereby taking care of *Sthanavaigunya* and improves the quality of *Rasa* and *Majja Dhatu* due to its *Snigdha Guna*. Therefore, it cures most of the stages of *Samprapti* of this condition and hence one can safely say that it helps in the *Samprapti-bhanga* process here. Nardostachyn and Jatamansone; the acting principles of Nardostachys Jatamansi (Jatamansi) may be acting as Antidepressant and Anxiolytic in patients suffering from Anxiety Neurosis.

In the group treated with *Tila Taila Shirodhara*, we see the initial effects of *Taila Dhara* which causes *Vata-Shamana* especially that of *Prana Vayu* because it is *Snigdha*, *Ushna* and *Vatashamana* in nature, but as it is not having the *medhya guna* of *Jatmansi Siddha Taila* the *Sthanavaigunya* is not treated hence the relapse is seen.

**Adverse Reactions:** During the treatment it was noted that if the *Shirodhara* was given for more than 30 minutes with *Jatamansi siddha taila*, patients complained of going blank, i.e.

they were not able to think for a few minutes. So it is suggested that *Jatamansi Siddha Taila Shirodhara* should not be given for more than 30 minutes. No other side effects were noted.

#### CONCLUSION:

- *Shirodhara* by *Jatamansi Siddha Taila* is effective in Anxiety Neurosis in comparison to *Tila Taila Shirodhara*.
- *Shamana Chikitsa* by using *Jatamansi Siddha Taila Shirodhara* is proven to be a good treatment modality in the view of long term relief of Anxiety Neurosis
- No serious adverse effects were noted.
- Total 73.33% relief was observed after giving *Jatamansi Siddha Taila Shirodhara* in patients suffering from Anxiety Neurosis. No patient was seen as having complete relief in the Group treated with *Tila Taila Shirodhara*.

#### REFERENCES:

1. Panditrao, D.V, Nayar, S, Arya, M.S. (editors). Sahasrayoga; Chapter 13 Dharakalpadhyaya, verse no. 2; Delhi: CCRAS; 1990, 518.
2. Chunekar, K. C. (editor). Bhavaprakasha Nighantu. Karpooradi Varga; verse no. 89; Varanasi: Chaukhamba Bharti Academy; 2002; 240.
3. Shastri, P. (editor) Sharangadhara Samhita with Dipika and Gudhartha dipika commentaries. Madhyakhanda Chapter 9 Snehakalpana adhyaya, verse no. 1-6; Varanasi: Chaukhamba Surbharti Prakashan; 2006; 212.

4. Tripathi, B. (editor) *Charaka Samhita with Charaka Chandrika*. Sutrasthana; Chapter 27 Anapanavidhi adhyaya; verse no. 30; Varanasi: Chaukhamba Surbharti Prakashan; 2001; 505
  5. Bouleward, W, Arlington. Diagnostic and Statistical Manual of Mental Disorders DSM-IV-TR. (4th ed.). America: American Psychiatric Association; 2000.
  6. Arlington, Diagnostic and Statistical Manual of Mental Disorders, American Psychiatric Association. (5th ed.) American Psychiatric Association; 2013. p. 189–195
  7. Hamilton, M. The assessment of anxiety states by rating. *British Journal of Medical Psychology*. 1959;32(1): 50-55.
  8. Maier W, Buller R, Philipp M, Heuser I. The Hamilton Anxiety Scale: reliability, validity and sensitivity to change in anxiety and depressive disorders. *Affect Disord* 1988;14(1):61–68.
  9. Borkovec, T, Costello E. Efficacy of applied relaxation and cognitive behavioral therapy in the treatment of generalized anxiety disorder. *Clinic Consult Psychology* 1993; 61(4):611–619
  10. Tripathi, B. (editor) *Charaka Samhita with Charaka Chandrika*; Sutrasthana; Chapter 22 Langhanabrahaniya adhyaya; verse no. 10; Varanasi: Chaukhamba Surbharti Prakashan; 2001; 412
  11. Tripathi, B. (editor) *Charaka Samhita with Charaka Chandrika*; Sutrasthana; Chapter 22 Langhanabrahaniya adhyaya; verse no. 11; Varanasi: Chaukhamba Surbharti Prakashan; 2001; 412
  12. Vaidya, L. (editor) *Ashtanga Hridayam with Sarvanga sudari vyakhya*; Sutrasthana, Chapter 13 Doshopkramniya adhyaya; verse no. 1; Delhi: Motilal Banarasi Das; 1999; 109
  13. Tripathi, B. (editor) *Charaka Samhita with Charaka Chandrika*. *Sutrasthana*, Chapter 12 Vatakalakaliya adhyaya; verse no. 8; Varanasi: Chaukhamba Surbharti Prakashan; 2001; 254-255
  14. Vaidya, L. (editor) *Ashtanga Hridayam with Sarvanga sudari vyakhya*; Sutrasthana Chapter 12 Doshbhediya adhyaya; verse no. 4; Delhi: Motilal Banarasi Das; 1999; 97
  15. Vaidya, L. (editor) *Ashtanga Hridayam with Sarvanga sudari vyakhya*; Sutrasthana Chapter 12 Doshbhediya adhyaya; verse no. 5; Delhi: Motilal Banarasi Das; 1999; 97
- Cite this article as:** Anup Jain, Surendra M. Vedpathak, Ashok Kumar Singh, Arun Gupta, Umesh Sapra. Clinical evaluation of Jatamansi Siddha Taila Shiro-Dhara on anxiety-neurosis, *J of Ayurveda and Hol Med (JAHM)*. 2016;4(2):16-25
- Source of support: Nil
- Conflict of interest: None Declared.