

EFFECTIVENESS OF ASHWAGANDHA SIDDHA TAILADHARA IN MANAGEMENT OF AVASADA (DEPRESSION) IN ELDERLY PERSONS-A PILOT STUDY

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ABSTRACT

Introduction: In Indian culture and tradition there is much more importance given to elderly people. But many of them suffer from psychological problems due to mental changes, breakdown in family values and support, economic insecurity, Social isolation which leads to Depression. *Shirodhara* especially *Tailadhara* is a well-known *Ayurvedic Panchakarma* procedure in which medicated oil pour over the forehead of the patient. It is used popularly in *Ayurveda* practice for the management of headache, insomnia, hypertension and depression. **Material and methods:** This pilot study has been taken to evaluate the efficacy of *Ashwagandha Siddha Tailadhara* in the management of *Avasada* (Depression). For the present study, 10 patients fulfilling the diagnostic criteria of *Avasada* (depression) were selected from O.P.D. and I.P.D. of *Roga Nidana Evam Vikriti Vigyan*

department of National Institute of Ayurveda Jaipur. The efficacy of *Tailadhara* was evaluated on the basis of improvement in subjective sign and symptom of *Avasada* and decrease in HDRS (Hamilton Depression Rating Scale) score. **Result:** The *Ashwagandha Siddha Tailadhara* showed statistically highly significant ($P < 0.0001$) improvement in *Dukhatva*, *Atmano Ashaktataa*, *Apraharsha* and in terms of HDRS it showed statistically highly significant result in Insomnia: middle of the night ($P = 0.0005$), Insomnia: early hours of the morning improvement ($P = 0.0005$). It is a quite effective and non-habit forming procedure. **Conclusion:** The *Ashwagandha Siddha Tailadhara* is very effective in

management *Avasada* (depression). The study reveals that *Tailadhara* has a great stress relieving and tranquilizing effect.

KEYWORDS: Depression, Avasada, Ashwagandha, Tailadhara.

INTRODUCTION

The human being in the current scenario breathing under various stress, anxiety depression. Mental disorder in person above the age of 60 years is very common; due to retirement from job, breakdown in family values and support, economic insecurity and less physical and mental activity. According to 2011 census 7.7% of total population is above 60 years. Mental disorders comprise a broad range of problems with different symptoms. However they are generally characterized by some combination of abnormal thoughts, emotions, behavior and relationship with others. Examples of mood swings are schizophrenia, depression, mental retardation etc. Among them depression is a common mental disorder worldwide. Depression has prevalence of 10-15% in general population.^[1] In India it is much higher i.e. 15.9%.^[2]

Emotions are the basic feelings of human beings. All of us have felt unhappy, “down,” or discouraged at times in our lives. Often the result is caused by a change either in the form of a setback, a loss, or simply as Freud said, “Everyday misery.” The painful feelings that accompany these events are usually appropriate, necessary, and transitory. Depressed feelings that persist and impair one’s daily life, however, may be an indication of a depressive disorder. Depression is defined as an abnormality down mental state typically characterized by feeling of despair and weakness, lack of confidence and concentration, lack of sleep, or frequent excessive sleeping, negative thoughts, suicidal thinking, feeling of guilty, hopelessness or pessimism, appetite and weight changes and inability to make decisions

In *Ayurveda*, *Avasada* can be correlated with depression which is caused by the increase in the *Tama* and *Raja* of the mind with vitiation of *Kapha* and *Vata Dosha*. Depression is also caused by a flare-up in *Sadhaka Pitta*. The *Pitta* aggravation causes imbalance in *Tarpaka Kapha*, which is responsible for coordinating the heart and the mind. When *Tarpaka Kapha* is off, it leads to a third imbalance one in the *Prana Vata*. This imbalance leads to depression.

Physical body and psyche together constitute the substrata of disease and happiness.^[3] *Raja* and *Tama* are the two pathogenic factors in mental disorders. *Raja* is responsible for all the activities, while *Tama* regulates and at times inhibits the actions.^[4,5] In depression, all

activities are reduced that may be due to improper functioning of *Raja* and excess functioning of *Tama*.

At present many modern drugs are available for the different mental disorders. But they are not safe to use because they cause various serious adverse effects and toxic effects including precipitation of certain other metabolic disorders, sexual disorders, and liver diseases. Hence the necessity of the safe drug and therapy is required. There are many drugs and measures are described and practiced for depression in *Ayurveda*. *Shirodhara* is one of them in which there is no oral intervention and as it has less side effects *Ashwagandha Siddha Tailadhara* is selected for this study.

The etymology of *Shirodhara* is from *Shira* = head and *Dhara* = a steady flow. This procedure induces a relaxed state of awareness, which results in a dynamic psycho-somatic balance. A total feeling of wellness, mental clarity, and comprehension is experienced in this process. *Shirodhara* is based on the principle of stimulating the mind bringing on essence in the body. *Shirodhara* works not only on the forehead to calm the nerves but also nourishes the brain tissues beneath the skull. It also helps to enhance blood circulation to the brain and there by helps to combat insomnia and calms the mind and body.^[6]

MATERIAL AND METHODS

This is a Prospective single grouped pilot study. This pilot study has been taken to evaluate the efficacy of *Ashwagandha Siddha Tailadhara* in the management of *Avasada* (depression). For that 10 patients fulfilling the diagnostic criteria of depression were selected from O.P.D. and I.P.D. of *Roga Nidana Evam Vikriti Vigyan* department of National Institute of Ayurveda, Jaipur. A written information and consent form had been given to the patients. The patients were explained about the purpose, and procedures of the trial.

AIMS AND OBJECTIVE

To evaluate the efficacy of *Ashwagandha Siddha Tailadhara* in the management of *Avasada* (Depression).

Criteria for the selection of the patient

Inclusion criteria

- Patient of age above 60 years, irrespective of sex, religion, occupation and economic status.

- Patients having clinical features of *Avasada* (Unipolar Depression).
- Known case of Unipolar Depression who were willing to give informed consent.

Exclusion Criteria

- Patients of psychotic depression
- Patients of bipolar depression
- Patients of schizophrenia
- Uncooperative

Diagnostic Criteria for depression

Clinical Diagnosis

Patient were assessed on the basis of features of *Avasada* (depression) which are mentioned in the classical text of *Ayurveda* and HDRS (Hamilton Depression Rating Scale).

Evaluation of parameters for assessment of therapeutic efficacy

The subjective sign and symptom of *Avasada* scored according to the severity and considered as the assessment criteria for the study.

Grading of *Avasada* patients

1. *Dukhatva*

0	No feeling of sadness, feeling sad at reasonable cause when something going on in an opposite way
1	Feeling of sadness at morning/ evening/ night
2	Feeling of sadness in most situations without any reasonable cause
3	Feeling sad in all situations without any reasonable cause

2. *Atmano Ashaktata*

0	Able to do a desired work with full confidence, express himself in a proper way
1	Feeling of incapable to accomplish/perform a desired work in some situations, not able to express himself properly,
2	Fear of failure, not able to complete the desired work with full of confidence in most situations
3	Fear of failure in all situations, cannot complete even the simple task

3. *Ati Chintan/ Abhikshnam Dhyayati*

0	Does not think unnecessarily, think on reasonable situations
1	Think while watching T.V., reading newspaper, books etc.
2	Most of time excessive thinking while performing daily routine activities
3	Think unnecessarily all time, in all situations, ability to do routine work is affected

4. Anavasthita Chitta

0	Mind is stable, concentrate easily
1	Instability of mind, concentrate with little difficulty
2	Instability of mind in most situations, can hardly concentrate
3	Instability of mind at all situations, cannot concentrate at all even for a short duration

5. Apravrutti

0	Doing satisfactory work with proper vigor & in time
1	Doing satisfactory work/late initiation, feels tired, relieve by itself
2	Doing unsatisfactory work/late initiation, feels tired, relieve by rest
3	Don't want to do work, have no enthusiasms, Always feels tired, does not get relieve by rest

6. Apraharsha

0	No
1	Sometimes
2	Often
3	Most of time

7. Vaka Avasada

0	No decreased talk
1	Sometimes decreased talk
2	Decreased talk often
3	Decreased talk most of the time, Irrelevant talk

Hamilton Depression Rating Scale (HDRS)

The assessment of severity of depression was done with the help of HDRS (Hamilton Depression Rating Scale).

1. Depressed Mood

(Gloomy attitude, pessimism about the future, feeling of sadness, tendency to weep)

0	Absent
1	Sadness, etc.
2	Occasional weeping
3	Frequent weeping

2. Feelings Of Guilt

0	Absent
1	Self-criticism,
2	Ideas of guilt
3	Present illness is a punishment;
4	Hallucinations of guilt

3. Suicide

0	Absent
1	Feels life is not worth living
2	Wishes he/she were dead
3	Suicidal ideas or gestures
4	Attempts at suicide

4. Insomnia – Initial (Difficulty in falling asleep)

0	Absent
1	Occasional
2	Frequent

5. Insomnia–Middle (Complains of being restless and disturbed during the night, walking during the night)

0	Absent
1	Occasional
2	Frequent

6. Insomnia–Delayed (Waking in early hours of the morning and unable to fall asleep again)

0	Absent
1	Occasional
2	Frequent

7. Work And Interests

0	No difficulty
1	Feelings of incapacity, listlessness, indecision and vacillation
2	Loss of interest in hobbies, decreased social activities
3	Productivity decreased
4	Unable to work

8. Retardation (Slowness of thought, speech, and activity; apathy; stupor)

0	Absent
1	Slight retardation at interview
2	Obvious retardation at interview
3	Interview difficult
4	Complete stupor

9. Agitation (Restlessness associated with anxiety.)

0	Absent
1	Occasional
2	Frequent

10. Anxiety – Psychic

0	No difficulty
1	Tension and irritability
2	Worrying about minor matters
3	Apprehensive attitude
4	Fear

11. Anxiety–Somatic (Gastrointestinal, indigestion Cardiovascular, palpitation Headaches Respiratory, Genito- urinary, etc.)

0	Absent
1	Mild
2	Moderate
3	Severe
4	Incapacitating

12. Somatic Symptoms – Gastrointestinal (Loss of appetite, heavy feeling in abdomen; constipation)

0	Absent
1	Mild
2	Moderate

13. Somatic Symptoms – General (Heaviness in limbs, back or head; diffuse backache; loss of energy and fatigability)

0	Absent
1	Mild
2	Severe

14. Genital Symptoms (Loss of libido, menstrual disturbances)

0	Absent
1	Mild
2	Severe

15. Hypochondriasis

0	Not present
1	Self-absorption (bodily)
2	Preoccupation with health
3	Querulous attitude
4	Hypochondriacal delusions

16. Weight Loss

0	No weight loss
1	Slight
2	Obvious or severe

17. Insight (Insight must be interpreted in terms of patient's understanding and background.)

0	No loss
1	Partial or doubtful loss
2	Loss of insight

Scoring:^[7] For 17-item, scores ranges from 0 to 54.

S. No.	Total Score	Levels of Depression
1	0-7	Normal (no depression)
2	8-13	Mild depression
3	14-18	Moderate depression
4	19-22	Severe depression
5	>22	Very Severe depression

Statistical analysis

All the calculations were calculated through 'Graph Pad' Software. The results obtained from trial were being presented after statistically analysing the data for non-parametric variables before trial and after trial data were subjected to Wilcoxon matched pair signed rank test.

Effect of *Ashwagandha Siddha Tailadhara* on Symptoms of *Avasada*

Variable	N	Mean		Dif.	% of Change	SD	SE	W	P
		BT	AT						
<i>Dukhatva</i>	10	1.60	0.70	0.90	56.25	0.32	0.10	136	<0.0001
<i>Atmano ashaktataa</i>	9	1.67	0.78	0.89	53.33	0.33	0.11	190	<0.0001
<i>Ati Chintana</i>	10	1.50	1.10	0.40	26.67	0.52	0.16	36	0.0078
<i>Anavasthita Chitta</i>	9	1.44	0.89	0.56	38.46	0.52	0.17	55	0.0020
<i>Apravritti</i>	9	1.33	0.78	0.56	41.67	0.53	0.18	55	0.0020
<i>Apraharsha</i>	9	1.44	0.67	0.78	53.85	0.46	0.15	136	<0.0001
<i>Vaka Avasada</i>	10	1.40	1.00	0.40	28.57	0.52	0.16	36	0.0078

Effect of *Tailadhara* on subjective parameters showed that there was a statistically highly significant ($P < 0.0001$) improvement in *Dukhatva*, *Atmano Ashaktataa*, *Apraharsha*. Statistically very significant improvement was found in *Ati Chintana* ($P = 0.0078$), *Anavasthita Chitta* ($P = 0.0020$), *Apravritti* ($P = 0.0020$), *Vaka Avasada* ($P = 0.0078$).

Effect of *Ashwagandha Siddha Tailadhara* on HDRS

Variable	N	Mean		Dif.	% of Change	SD	SE	W	P
		BT	AT						
Depressed Mood	9	1.44	1.22	0.22	15.38	0.44	0.15	45	0.0039
Guilt	5	1.20	1.00	0.20	16.67	0.45	0.20	15	0.0625
Suicide	3	1.00	0.67	0.33	33.33	0.58	0.33	00	####
Insomnia: early in the night	8	1.13	0.75	0.38	33.33	0.52	0.18	45	0.0039
Insomnia: middle of the night	8	1.13	0.63	0.50	44.44	0.53	0.19	78	0.0005
Insomnia: early hours of the morning	9	1.00	0.56	0.44	44.44	0.53	0.18	78	0.0005
Work and activities	10	1.20	1.10	0.10	8.33	0.32	0.10	6	0.2500
Retardation	10	1.20	0.90	0.30	25.00	0.48	0.15	21	0.0313
Agitation	8	1.13	0.88	0.25	22.22	0.46	0.16	15	0.0625
Anxiety(psyche)	8	1.38	0.88	0.50	36.36	0.53	0.19	21	0.0313
Anxiety(somatic)	9	1.22	1.00	0.22	18.18	0.44	0.15	15	0.0625
Somatic general	7	1.14	0.86	0.29	25.00	0.46	0.17	21	0.0313
Somatic (GIT)	3	1.00	1.00	0.00	0.00	0.00	0.00	00	###
Hypochondriasis	4	1.11	1.11	0.00	0.00	0.00	0.00	00	###
Insight	3	1.00	1.00	0.00	0.00	0.00	0.00	00	###

Effect of *Tailadhara* on HDRS showed that there was a statistically highly significant result in Insomnia: middle of the night Insomnia ($P=0.0005$), Insomnia: early hours of the morning improvement ($P=0.0005$). Very significant result in depressed mood ($P=0.0039$), Insomnia: early in the night ($P=0.0039$). Statistically significant improvement was found on Anxiety (psyche) ($P=0.0313$), Retardation ($P=0.0313$), Somatic general ($P=0.0313$). While Work and activities ($P=0.2500$), guilt ($P=0.0625$), Agitation ($P=0.0625$), Anxiety (somatic) ($P=0.0625$), considered statistically not quite significant.

DISCUSSION

In *Ayurvedic* Psychiatry, there is no specific disease that can be directly link with major depressive disorder. *Vishada* and *Avasada* are two conditions which are closely similar to depression in *Ayurveda*. *Acharyas* like *Charaka* and *Sushruta* highlighted the topic at various places and the commentators like *Chakrapani* and *Dallhana* elaborated the terminologies.

In this pilot study we got highly significant relief in symptoms characteristic of *Dukhatva*, *Atmano Ashaktataa*, *Apraharsha*. Insomnia: middle of the night Insomnia, Insomnia: early hours of the morning improvement. These effects were may be noticed due to the anti-stress properties, central muscle relaxant and tranquillising, sedative, and hypnotic effect of *Ashwagandha*.

Probable mode of action of *Ashwagandha Siddha Tailadhara*

Shirodhara is a procedure which comes under the external application of oil used for neuromuscular relaxation and nourishment. It is a relaxation therapy which relieves mental exhaustion as well as pacifies the aggravated *Vata Dosha* in head. It helps to normalise the function of central nervous system by relaxing the nervous system and balancing the circulation of blood in the head.

When a stream of liquid is poured on centre point of forehead, a specific wave like sensation of touch is produced. This effect lead a person to a state of concentration in turn relaxes the mind. The state of concentration enhances the release of serotonin, a neurotransmitter which is responsible for pleasant feeling and relieving the stress. During the process, the patient concentrate on the stream of fluid which is falling on his head, which increases the intensity of alpha brain waves and decrease the brain cortisone and adrenaline level. Thus it induces relaxation and natural sleep.^[8] During the procedure patient feels relaxed physically as well as mentally. Relaxation of the frontalis muscle tends to normalise the entire body and achieve a decrease activity of CNS with lowering of brain cortisone and adrenaline level.^[9] In the condition of mental stress, there is aggravation of *Vata Dosha* and *Raja Dosha*. By the application of oil over the head, the dryness of skin subsides. The ingredient of this oil, the *Ashwagandha* have *Vata-Kapha Shamaka*^[10] and nutritive properties acting on senses, mind and Brain. Moreover, this drug is anti-stress, tranquiliser and sedative, which helps in pacifying the pathogenesis of insomnia. By this way it corrects the mechanism of sleep in an individual suffering of sleeplessness or disturbed sleep.

CONCLUSION

The *Ashwagandha Siddha Tailadhara*, is very effective in management of *Avasada* (depression) in elderly people. The study reveals that *Tailadhara* has a great stress relieving and tranquilizing effect. *Tailadhara* is a better and safe treatment, which normalizes the different aspects of Depression i.e. sleeplessness, *Dukhatva*, *Atmano Ashaktataa*, *Apraharsha*.

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