



Review Article

ROLE OF SHIRODHARA IN THE MANAGEMENT OF DEPRESSION

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ABSTRACT

Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behaviour, tendencies, feelings, and sense of well-being. It is also a symptom of some physical diseases and a side effect of some drugs and medical treatments. It is one of the most common mental disorder affecting a large number of people worldwide. It can be caused due to various factors including unfavourable environmental conditions, psychological conditions, biological causes or some genetic cause. Overwhelming sadness or isolation, headaches or migraine, anxiety over everyday activities, moodiness, irritability and agitation, chronic fatigue, low self-esteem are main symptoms of depression. On reviewing the symptoms of depression, we can say that according to Ayurveda there are two conditions which can be correlated to Depression- namely- *Vishada* and *Avsada*. Sometimes it has also been correlated to *Kaphaj Unmada*. Modern medicine use antidepressants which on long term use have serious side effects. On the other hand, Ayurveda follows a multidimensional approach with the use of proper diet, lifestyle, *Yoga*, *Rasayana* therapy along with classical medications. *Panchakarma* therapies especially *Shirodhara* play an important role in enhancing the patient's condition with depression. *Shirodhara* is a *Panchakarma* therapy that is quite popular nowadays, and this review article has focused on how it can be used to treat mental illnesses like depression. In numerous investigations, *Shirodhara* was found effective on subjective as well objective criteria.

INTRODUCTION

Depression is a condition in which a person feels very low and see's negativity around himself, which left untreated may start affecting everyday routine activities. According to the WHO, depression can be caused by multiple factors including social, psychological, environmental and biological factors. Studies show that life events like childhood adversity, loss of something valuable, unemployment, poverty, death of a loved one, physical illness, abuse etc may trigger the symptoms of depression. For some, the risk is also hereditary.^[1] Depression and depressive symptoms are the most common psychological problems in the world, impacting over 300 million people of all ages (4.4% of the world's population),

with an 18.4% increase in people suffering from depression between 2005 and 2015.^[2] The World Health Organisation (WHO) predicts that depression will be the leading cause of disability and a significant contributor to the global disease burden by 2030.^[3] According to a report, in the year 2022 the prevalence rate of depression in India is 4.50% and the cases stand at 56,675,969.^[4] According to a study, 26 per cent respondents were suffering from mild depression, 11 per cent were feeling moderately depressed, and six per cent were facing severe symptoms of depression.^[5] Approximately 15% of the population experiences a major depressive episode at some point of in life.^[6] A person should have at least five of the following symptoms for continuous fifteen days to be diagnosed major depression. At least one of the five symptoms must be either (1) depressed mood or (2) loss of interest or pleasure.^[7]

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Symptoms include

- Depressed mood most of the day, nearly every day.
- Markedly diminished interest or pleasure in activities most of the day, nearly every day.
- Changes in appetite that result in weight losses or gains unrelated to dieting.
- Changes in sleeping patterns
- Loss of energy or increased fatigue
- Restlessness or irritability
- Feelings of anxiety
- Feelings of worthlessness, helplessness, or hopelessness.
- Inappropriate guilt
- Difficulty thinking, concentrating, or making decisions.
- Thoughts of death or attempts at suicide

Treatment in modern medicine includes Talk therapy with a trained counsellor or psychotherapist, exercise and support groups are among the options available. Antidepressants are also sometimes prescribed.^[8]

Ayurvedic Review

In Ayurveda we can say that *Vishada* has close resemblance to depression. Dalhana defines "*Vishadaas Asiddhibhayat Dvididheshu Karmeshu Apravrutti Vishada*";^[9] a condition originating from apprehension of failure resulting in the incapability of mind and body to perform their functions properly.

According to *Shabda Kalpadruma* and *Vachaspatyam*, *Vishada* is referred as *Avasada*.

According to *Vachaspatyam*, *Vishada* is a condition when the mind is not able to perform the routine activities properly.^[10]

Monier Williams gives the meaning of *Vishada* as drooping state, lassitude, depression, languor.^[11]

Vishada is *Vata nanatmaja vikara*.^[12]

Since, the causative factors of *Vishada* have not been mentioned separately, we can consider the common causes of *Manas roga*:

1. Lack of coordination between mental functions of *Dhi* (learning), *Dhriti* (fortitude) and *Smriti* (long time memory).^[13]
2. Weakness or imbalance of the life force or *Prana Shakti*.^[13]
3. *Pragyapradha* (violation of nature and virtues).^[14]

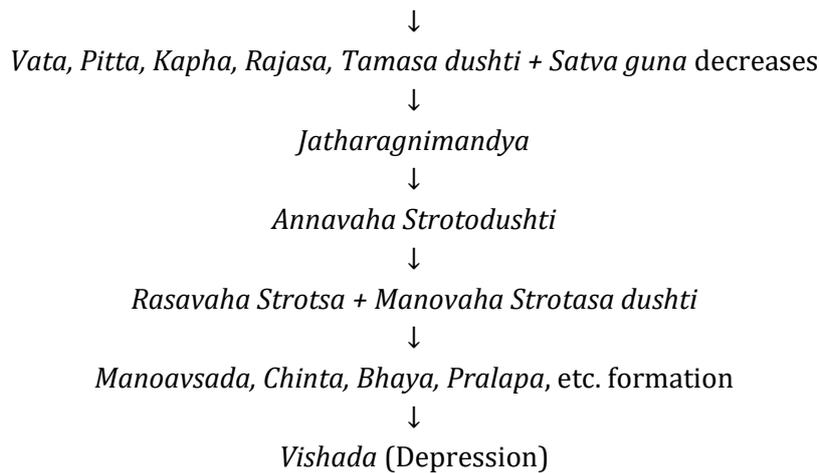
Vishada is witnessed in the *Arjuna Vishada Yoga*, the first chapter of Bhagavat Gita (verse 14), where Arjun – the mighty warrior described his helpless condition. He said that he could feel weakness in his limbs and they were getting loose, his mouth had dried up with heat, he could feel tremors and horripilation all over his body, he could feel burning sensation over his skin and his bow was slipping from his hand, his brain was whirling and he was unable to stand there.^[15] This lead Arjun in a state of reduced physical and mental activities, finally refusing to perform his duties on the battle field. This description clearly reflects the symptoms of *Vishada*.

Table 1: Shows the Samprapti Ghataka of Vishada^[16]

Dosha	<i>Manas – Tamas, Rajas (Predominantly Tamas)</i>
	<i>Sharira - Vata, Pitta, Kapha (Predominantly Vata)</i>
Dushya	<i>Manas, Sarvadhatu</i>
Srotasa	<i>Manovaha Srotas</i>
Agni	<i>Jatharagni</i>
Udbhavasthana	<i>Manas (Hridaya)</i>
Adhishthana	<i>Hridaya (Shirohridaya)</i>
Vyaktisthana	<i>Manas, Sarvasharira</i>
Purvarupa	<i>Alpavyakta</i>
Rupa	<i>Manas - Mano bhrama, Anavasthitachitta, Avasada, Atmano Ashakta Jananam, Chittodvega, Asiddhi bhayat, Karmeshu apravrutti, Kheda, Dukkhatvam, etc.</i>
	<i>Sharira- Vepathu, Prasveda, Romaharsha, Gatrasada, Mukhshosha, etc.</i>
Rogamarga	<i>Madhyam</i>

Shows the *Samprapti* of *Vishada* ^[17]

Hetu Sevana- Malina, Ayogya Aahara, Ayogya Vihara, Pradnyaparadha, Manoaghata, Grahabadha
Asatmendriyarthasanyoga, etc



Ayurveda has holistic approach in the treatment of any disease and it does not just include the use of medications but also lays stress on the role of proper diet, lifestyle changes, *Yoga*, exercises, meditation, *Rasayana* therapy, *Panchakarma* etc.

Ayurvedic Management

1. *Nidana Parivarjana* (Removal of causative factor)

This the foremost principal in treating any disease in Ayurveda. Any disease cannot be cured unless its causative factor is removed. If not done, the disease is certain to reoccur. So, while making the diagnosis the main reason causing depression should be searched and then suitable steps should be taken for its removal.

2. Ayurvedic management mainly includes *Daivavyapashraya Chikitsa*, *Yuktivyapashraya Chikitsa*, and *Satvavajaya chikitsa*.^[18]

a) *Daivavyapashraya Chikitsa* (Spiritual Therapy)

It includes the recitation of *Mantras*, medications, use of gems and roots, *Bali* (offering), *Homa*, *Upahara* (gift), *Prayascita* (atonement), *Upavasa* (fasting), *Pranipata*, and *Yatragaman* (pilgrimage). These techniques make a person strong from inside.

b) *Yuktivyapashraya Chikitsa* (Physical Therapy)

It includes the use of medicine in different forms. It is of 3 types (*Antarparimarjana*, *Bahirparimarjana*, and *Shastaprananidhana*)

Antarparimarjana (Internal cleansing)

- *Samshodhana* (purification)- That is elimination of vitiated *Doshas* by throwing them out of the body.
- *Samshamana* (alleviation)- It includes different type of drugs, diet activities used to alleviate the vitiated *doshas*.

Bahirparimarjana (External cleansing)

It includes procedure like *Snehana* (oleation), *Swedana* (sudation), *Lepa* (liniment), and *Parisheka* (Fomentation), *Shirodhara* etc.

Shastrapranidhana (Surgical or para-surgical procedures)

Surgical procedures like bloodletting have been recommended for a number of different mental problems.

c) *Satvavajaya Chikitsa* (Mental therapy)

Keep the mind away from negative thoughts. Through this treatment modality the patient is treated through counselling.

3. *Yoga and Pranayama*

Through *Yoga* and *Pranayama* we can completely relax our body and mind and get rid of many physical and mental ailments. *Yoga Asana* like *Padmasana*, *Shavasana*, and *Surya Namaskara*, *Bhujangasana*, *Paschimottanasana*, *Sarvangasana* and *Pranayama* like *Kapalabhati*, *Bhastrika*, and *Anuloma Villoma* are very helpful in reducing symptoms of depression.

4. *Aahara and Vihara*

The patient should be given complete nutritious food rich in all the components of a balanced diet. Fresh fruits and vegetables help to heal quickly. *Medhya* (brain tonics) *Dravya* should be given with priority. Modifying one's lifestyle helps in the treatment of depression, like indulging in some activities, music etc.

5. *Rasayana*

Rasayana are used to rejuvenate the body, increase longevity and improve the quality of life. *Rasayana* improves immunity levels as well as enhance the function of endocrine, psychological and neurological system. Example; *Shilajatu Rasayana*, *Kalpa*, *Amalaki Rasayana*, *Brahmi Ghrita*, *Panchagavya Ghrita*.^[19]

6. **Panchakarma**

It is a potent Ayurvedic therapy that balances the *Doshas* by removing harmful toxins from the body, increasing metabolic rate, and improving digestive fire. *Snehapana*, *Virechana*, *Sarvanga Abhyanga* followed by *Bashpa Sweda*, *Shirodhara*, *Shiropichu*, results in induction of relaxation stage of mind, which results in dynamic psycho-somatic balance. A total feeling of mental clarity, happiness and comprehension is experience in this process.^[20,21]

7. **Herbs**

Certain herbs can be given to a person suffering with depression. *Ashwagandha* has anxiolytic and anti-depressant activity.^[22] Few drugs like *Vacha*^[23], *Jatamansi*^[24], *Brahmi*^[25], and *Shankhpushpi*^[26] have demonstrated anti-depressant activity.

We can say that the holistic approach of Ayurveda is a complete package in treating the diseased condition of a patient. Among external therapies *Shirodhara* plays an eminent role in relaxing a patient suffering from depression.

DISCUSSION

Shirodhara is a type of *Murdhataila* where suitable medicated oil, *Kwath*, milk, buttermilk etc is heated and then poured over the forehead of the patient lying in supine position. The selected liquid is then allowed to flow over the scalp from a specific height in oscillatory movement at regular interval.

Shirodhara is a very efficient kind of treatment, and in this part, the findings of some research works on its role in managing mental disorders like stress and depression are being discussed.

1. *Shirodhara* demonstrates a sympatholytic effect and encourages the decline of noradrenaline, which activates the peripheral foot skin circulation and shows enhancement of immune response.^[27]
2. In their study, Xu et al. hypothesized the mechanism by which the physiological action of *Shirodhara*, which involves drizzling sesame oil on the forehead, would trigger a somato-autonomic reflex via thermosensors or pressure sensors in the skin or hair follicles via the trigeminal cranial nerve. This process brought about a state of relaxation that keeps the psycho-physiological balance intact.^[28]
3. *Shirodhara* showed significant improvement in serum biomarkers of stress, which are reduced after *Shirodhara*. It showed appropriate responsiveness to the stress system. Since

prolonged stress leads to depression, we can refer this study.^[29]

4. *Dhara* therapy, specifically, *Takradhara* has shown a significant role in relieving stress-induced disorders.^[30]
5. *Shirodhara* combined with Ayurvedic treatment has neuroendocrine modulatory and anti-depressant effects in *Vishada* patients. After the therapy, cortisol levels significantly dropped.^[31]
6. *Takradhara* showed better improvement in depression and anxiety scores in the subjects. One of the modes of actions could be involvement of pH-sensitive receptors present on the forehead by *Takra*.^[32]

Probable Mode of action of *Shirodhara*^[33]

Shirodhara keeps the body and mind healthy. Imbalance of *Prana*, *Udana* and *Vyana Vayu*, *Sadhaka Pitta* and *Tarpaka Kapha* can produce mental issues like depression, stress and anxiety. Through its mechanical action, *Shirodhara* restores the functional integrity between these subtypes of *Dosha*.^[34]

➤ **Marma or the vital points**

Some of the *Marma*, mainly *Sthapni*, *Utshepa*, *Avarta*, *Shankha* and *Apanga Marma* are situated in forehead and head region.^[35] The region between both the eyebrows is the site of *Sthapni Marma*.^[36] The site of *Sthapni Marma* and the site of pituitary and pineal gland exist at the same level.^[33] The pituitary gland is the main controller of the endocrine system and regulates the hormones.^[37] During mental disorders like stress and depression a hormonal imbalance is seen. Through *Shirodhara* there is stimulation of *Sthapni Marma* and indirect stimulation of pituitary gland, which brings changes in psycho-somatic level. Hence helps in relieving symptoms of depression.

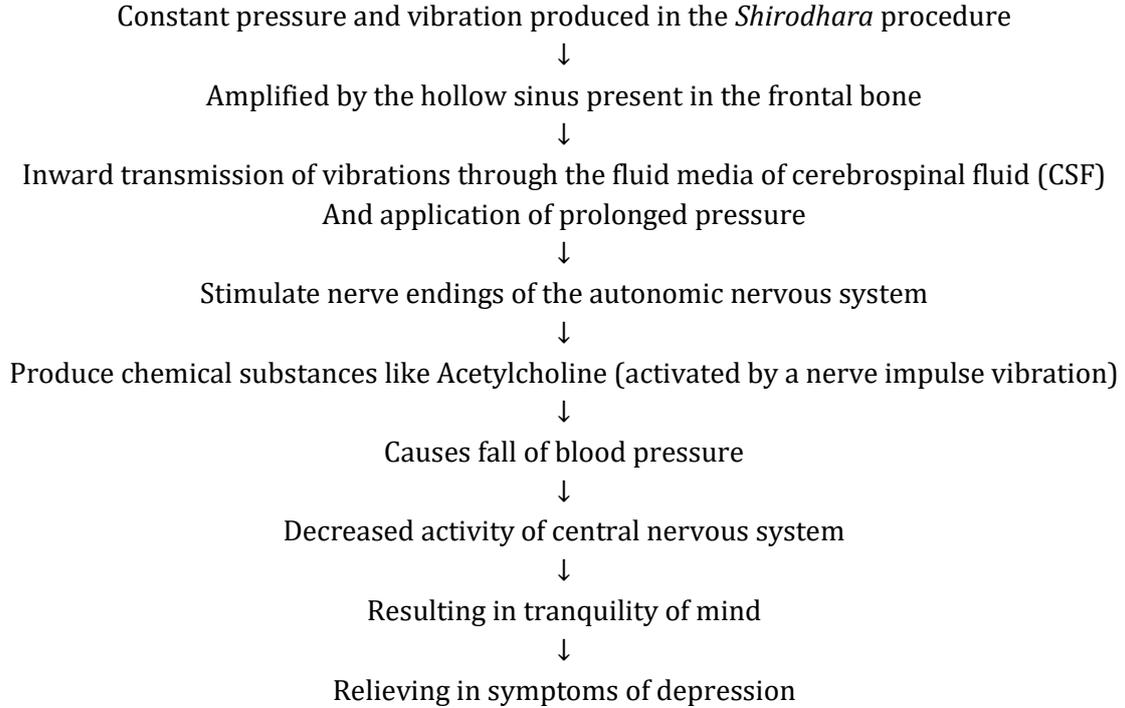
Effect of temperature in *Shirodhara*

Pouring warm liquid continuously on the forehead causes mild vasodilatation. This improves blood circulation and blood supply of the brain. The thalamus and the basal forebrain may be activated by vibration and warmth, bringing serotonin and catecholamine levels back to normal.^[33]

Effect of constant pressure in *Shirodhara*

During the procedure of *Shirodhara*, a constant pressure is being applied on the forehead due to the movement of the liquid continuously. This pressure brings some chemical changes which calm the mind and help in relieving the symptoms of depression.

Shows the effect of constant pressure on *Shirodhara*



CONCLUSION

The number of people suffering from mental disorders like depression is rising day by day in society and is affecting all age groups. So, it is the need of the hour to help the mankind by giving an effective remedy to this serious problem. From the above discussion we can conclude that *Shirodhara* is a boon to humanity and is very effective in relieving the symptoms of depression.

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