

THERAPEUTIC EFFICACY OF SHIRODHARA IN PSYCHOSOMATIC DISORDERS

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ABSTRACT

Shirodhara is a form of Ayurveda therapy that involves gently pouring liquids over the forehead and can be one of the steps involved in *Panchakarma*. The name comes from the Sanskrit words *shiro* (head) and *dhara* (flow). Psychosomatic disorders may affect almost any part of the body, though they are usually found in systems not under voluntary control. Emotional stress is assumed to aggravate existing illnesses, and there is some evidence that it may precipitate illnesses not usually considered to be psychosomatic (e.g., HTN, diabetes, Psoriasis, IBS). *Shirodhara* facilitates to counterbalance the *Manasika* and *shareerikadoshas* which occurs simultaneously and this is potentiated by Psychoneuroimmunology (PNI) mechanism, hence the effect may be seen instantly.

Keywords: *Shirodhara, Panchakarma, Psychosomatic disorders.*

INTRODUCTION

Shirodhara is a procedure in which certain liquids like oil, butter milk, etc. are poured over the forehead & scalp from a distance of 4 *Angula* for a period of 30 to 60 minutes for 7 to 21 days as per requirement. 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. It is quite recently that Japanese inves-

tigators have initiated state-of-the art studies on *Shirodhara* for its effects on psycho-neuroimmunology.[1] Psychosomatic disorders resulting from stress may include hypertension, respiratory ailments, gastrointestinal disturbances, migraine and tension headaches, pelvic pain, impotence, frigidity, dermatitis, ulcers and so on. *Shirodhara* is a well-established *upakarma* procedure for centuries. It is widely practiced in India and also in *Panchakarma* centres abroad. Besides its therapeutic usage and its *shamana karma*, its general

relaxing and calming effects are well-known and worth exploring with modern tools. However, there have been very few studies of *Shirodhara* in volunteers employing markers of psychosomatic relaxation [2] in some studies *Shirodhara* treatment showed a reduction in their anxiety levels as per the mood assessment scores. It changes in vital signs, EEG, ECG, salivary cortisol, and urinary catecholamines as putative correlates of stress [3]. The changes in the EEG records confirmed the subjective relaxant effect scored by the V.A.S. for stress relief. For example, the nature of the EEG waves changed more to alfa, and even theta waves. However, the EEG changes, the baseline values of salivary cortisol and urinary catecholamines were not significantly affected by *Shirodhara* in the fractional samples. There is a need to conduct the programme of several sessions of *Shirodhara* in a group of patients with anxiety neurosis to evaluate the effects on salivary cortisol and urinary catecholamines.

Effect of Shirodhara on body and Mana (Mind):

Dhara is not only used in psychic diseases but also used in psychosomatic diseases like IBS (Irritable Bowel Syndrome), Psoriasis, EHT, etc. Continuous pouring of *dhara* on forehead for a specific period has Tranquilizing effect & regulates rhythm *Mana & Prana Vayu* it also induces Sleep. In *Dhara* therapy, prolonged and intermittent stimulation by the dripping oil may provide afferent inputs to the cerebral cortex, leading to a tranquilizing effect.

1. Effect on Marmas

Marmas are the *Pranas* may be correlated with vital energy of body on stimulation they activate immune system.

2. Sthapani Marma: Just below this area inside the skull lies the venous reservoir of

the brain the superior Sagittal and Cavernous Venous Sinuses.

3. Shankha Marma: It corresponds to temporal bone of the skull underneath which lies the temporal lobe of cortex arterial branches and at the base is also some of the important structures of the brain.

4. Utkshepa Marma: Intracranial cavity and venous sinuses the wall of which are made of coverings of the brain lie in this region

5. Adhipati Marma: This location is well known as the anterior fontanelle on the vertical groove of the frontal bone. Underneath this point, there is saggital sinus of the brain and also the sulcus between two hemispheres of the cortex. *Shirodhara* stimulates these *Marmas* and improves circulation; liquid used for *Shirodhara* is always luke warm which causes vasodilatation of all the channels and Thereby improving their circulation which in turn improves the blood circulation of brain. This improves the higher intellectual functions also. So an improvement in psychic symptoms is achieved. Improvement in circulation to hypothalamus also improves the function of Autonomic Nervous System as its stimulation during stress causes many physiological disturbances.

6. Effect on Chakras

Shirodhara may stimulate *Acharya Chakra* thereby improving the functions of mind which is vitiated in Stress as it is the place of subtle mind. Structures like Pituitary gland, pineal body, subcortical structures of mid brain are related with mental functions like anger, grief, pain, fear, memory and other higher intellectual functions. *Shirodhara* acts at this level correcting their functions.

7. Effect on Autonomic Nervous System

Shirodhara may also have Alpha Adrenergic blocking effect and can thus block certain actions of adrenaline and nor adrena-

line. It may also act on the adrenergic neuron probably produce their effects by modifying the synthesis storage and uptake mechanisms of nor-adrenaline.

8. Effect on Endocrine system

The effect of *Shirodhara* on hormone secretion can also be postulated considering the effect on hypothalamus as hypothalamus is the main controller of endocrine secretions. The hypothalamic Neurons which secrete the regulatory hormones are themselves under the control of specialized Monoaminergic, neurotransmitter neurons which arise in the mid brain. These latter release Dopamine, nor-adrenaline and Serotonin. In turn, these mid brain nuclei are under the control of visceral brain and are responsive to stress and emotional disturbances.

Regulation of emotional and behavioural patterns

Together with the limbic system with the hypothalamus regulates the feeling of rage, aggression, pain and pleasure and behavioural patterns of sexual arousal ultimately it can be postulated that *Shirodhara* may be having some effect on hypothalamus resulting in decrease of most of the psychic and somatic disorders like psoriasis. Psychoneuro Immunology Researchers have conducted two human clinical trials on the psychoneuroimmunologic effects of *Shirodhara*. In the first study a group of healthy females were randomly assigned to receive a *Shirodhara* treatment (with plain sesame oil) or remain in a supine position (control group), while being monitored for numerous physiologic, biochemical, immunologic and psychometric parameters. The second study had a similar design, with the addition of a third group that received *Shirodhara* with a medicated sesame oil containing essential oil of lavender. Both the treatments resulted in decreased anxiety and promoted ASC (al-

tered state of consciousness). After the plain sesame oil treatment there was a significant decrease in plasma noradrenaline and urinary serotonin excretion vs. the control group. A correlation with natural killer cell (NK cell) activity and anxiolytic effect within the *Shirodhara* group was also observed [4]. The ultimate aim of the *Shirodhara* therapy is to restore the equilibrium of *Sharira* and *Manasikadoshas* through the psycho-somatic axis, which in turn facilitates 'manoprasannatah' or tranquillity of mind, a positive sign of healthy state of the body. Researchers have recently investigated the effect of *Shirodhara* in psycho-physiological profile of healthy volunteers [5] and also in patients of generalized anxiety disorder [6] and found that the promising results in both the cases. In simple words Ayurveda treats the body through the medium of mind or *manas*. Modern drugs promote relaxation by blocking awareness of a stressful event, or by diminishing the importance one attaches to it. Under the influence of drug, one is not actively thinking about the problem for the time being. On the other hand the Ayurvedic approach makes one to realize the situation and adopt suitably to solve the stress problems in a refreshing way forever [7].

CONCLUSIONS

Shirodhara is deeply relaxing and induces a relaxant state; these effects are mediated by the brain wave coherence, alfa waves, and a down regulation of the sympathetic outflow. *Shirodhara* helps to heal the body at the root level of disease, by calming imbalances in our mind and disturbances in our emotions it leaves you feeling in a heavenly state. The centre of the forehead, which was evolution wise related to the third eye, is connected atavistically to the pineal gland. This spot is known as *Agnya Chakra* in the yoga tradition. Focusing on

agniyachakra with closed eyes during meditation leads to psychosomatic harmony. As the oil drips on the *agnya chakra*, it is proposed that the meditation-like effect is a consequence of stillness of mind leading to adaptive response to the basal stress. *Shirodhara* facilitates to counterbalance the *Manasika* and *shareerika-doshas* which occurs simultaneously and this is potentiated by Psychoneuroimmunology (PNI) mechanism and shows good results in psychosomatic disorders.

Acknowledgement:

The author is thankful to all publishers, authors, articles from where literature of this article has been reviewed and discussed.

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Source of Support: Nil

Conflict of Interest: None Declared