PHARMACODYNAMICS OF SHIRODHARA

Patel Dhananjay V.1, Mishra Rakeshkumar2
1Assi. Prof., Govt. Akhandanand Ayurved College, Ahmedabad, Gujarat, India.
2Asso. Prof., Govt. Ayurved College, Junagadh, Gujarat, India.

ABSTRACT: Shirodhara is a classical and a well-established Ayurvedic Panchakarma procedure, popular across the world for its stress relieving effect. This procedure induces a relaxed state of awareness that results in a dynamic psycho-somatic balance. It is useful in somatic as well as psychosomatic disorders. Still how Shirodhara execute its therapeutic effect, is unclear. Therefore, in this article an attempt has been made to understand the pharmacodynamics of Shirodhara procedure from Ayurveda, modern and other aspects.

Key words: Moordha Taila, Panchakarma, Pharmacodynamics, Shirodhara.

INTRODUCTION: Modern lifestyles of present era, lead to poor health in many ways. However, the use of simple and natural methods can significantly improve health and vitality. Shirodhara is one of such Panchakarma methods. Shirodhara is an ancient Ayurvedic healing therapy practiced in Bharat since ancient time. The word Shirodhara breaks down into two ideas: Shiro, meaning head, and Dhara, which means flow. Together they form a relaxing technique, in which person on whom Shirodhara is performed is lie down on the table and Abhyanga is performed as Poorvakarma. Afterwards medicated or nonmedicated lique is poured on the forehead from a specific distance and specific period in a specific manner as Prandhankarma and then his head is wiped out in Paschatkarma. There are specialized forms of Shirodhara called Tailadhara, Ksheeradhara, Takradhara and Jaladhara, depending on the medicament used to perform it.1

MATERIALS AND METHODS: The classical Samhitas, various Ayurvedic and modern books, thesises, published papers and e-media were used to compile literature for the work.

DISCUSSION: It is clinically proved by several research study that Shirodhara therapy is effective in various disorders, still there is some lacuna in understanding its pharmacodynamics, which can be explored in following ways.

Procedural effect of Shirodhara:
- In Ayurvedic texts, there are four type of technics of Moordha Tail have been described. It includes Shirah: Abhyanga, Seka, Pichu and Basti and said that “Uttarottara Gunaprada”.2 It means that each has different effect as each performed with different method, which indicates that there is a specific mechanical effect of therapy.
- The plain water without having chemical or therapeutic properties, is observed effective
- in Jaladhara due to its procedural effect.3
- The liquid is poured on a forehead in Shirodhara, induces the somato-autonomic reflex through thermosensors or pressure sensors of the skin or hair follicles via trigeminal cranial nerve and provides physiological effect of therapy.4

Effect of Shirodhara on Blood circulation:
Due to warm effect of the oil used for Shirodhara, there is local vasodilatation. Shirodhara lasts for 45 minutes. The continuous flow of warm fluid on the forehead for such a long period will cause mild vasodilatation. The region where Shirodhara is performed overlies mainly cortex arterial branches, venous sinuses, venous reservoir of the brain, superior sagittal and cavernous venous sinuses. Shirodhara improves the circulation in these areas and helps in regularizing the blood supply of brain.

Effect of Shirodhara on Neuro Transmeters:
- Shirodhara may have sedative effect on hyperactive limbic system, caused by stress. It leads to facilitate the inhibitory presynaptic action of GABA and also reduces high level of noradrenaline, which are found high in anxious state of mind.

Effect of Shirodhara on Tridosha:
- Stress and tension causes imbalance of Prana, Udana and Vyana Vayu; Sadhaka Pitta and Tarpaka Kapha. Shirodhara reestablishes the functional integrity between these three subtypes of Dosha through its positive effect.

Therapeutic effect of the medicament used for Shirodhara:
- The maximum absorption of drug is in the skin of scalp and oil is better absorbed compare water. It suggest that the medicament used for Dhara is definitely absorbed.

Effect of Shirodhara as per Yogic science:
- Shirodhara is performed in Savasana position, which is used for relaxation in Yogic science. During Shirodhara patients concentrate where Dhara is poured on the forehead. As the patient concentrates on a particular place, the thought process decreases and thus entire psycho-physiology relaxes.

Effect of Shirodhara on Shada Chakra:
- Dhara poured on Agna Chakra (space between two eyebrows), is the seat of pituitary and pineal gland. Shirodhara regulates their stimulation and helps to bring hormonal balance. It also normalized elevated cortisone & adrenaline, synchronizes the brain wave (alpha waves), strengthens the mind and this continues even after the relaxation.

Effect of Shirodhara as per Marma science:
- In forehead region, mainly Sthapani, Utkshep and Avarta Marma are located. As mentioned earlier it is also a place of Agna Chakra. According to Acharya Bhela, the location of Chitta (Mana) is Bhrumadhya and same is place of Sthapani Marma. Shirodhara makes the patient concentrate on this area by which the stability arrives in the functions of mind.

Effect of Shirodhara on Manomaya Kosha:
- Shirodhara works primarily on the mental sheath or "Manomaya Kosha" as it is referred to in Ayurveda.

CONCLUSION: On the basis the review article concluded can be drawn that Shirodhara is having significant procedural effect, which can be further improvised with adding therapeutic effect of medicament used in it. The pharmaco-physio-psychologic action of Ayurvedic Shirodhara treatment may be understood from the aspect of Ayurveda, mechanical, Marma, Chakra and Yoga science.
REFERENCES:

Corresponding Author:
Dr.Patel Dhananjay V. Assi. Prof.,Govt. Akhandanand Ayurved College, Ahmedabad, Gujarat, India.
Email: dhanvantarihcare@yahoo.com

Source of support: Nil
Conflict of interest:None Declared