

EFFECT OF *SHIRODHARA KARMA* IN TENSION TYPE HEADACHE: A CASE STUDY

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ABSTRACT

The incidence of tension type headache (TTH) in childhood and adolescence is 10-25%. Causes of TTH are stress, anxiety, tiredness, dehydration, bright light, noise, sleep deprivation, bad posture, irregular feeding time etc. In Ayurveda the symptom *shool* (pain) is mainly because of *Vata dosha*. Vitiated *vata* is the triggering factor for *manasik dosha*; *raja* and *tama*. The *Keraliya Panchakarma* therapy *Shirodhara* is indicated in *shiroroga* like headache, anxiety disorder etc. In the present case report a total 21 day therapy of *Shirodhara karma* with *Jyotishmati tail* was carried out along with preparatory procedure of *sarvanga abhyanga* and *swedan* with *bala tail* in an 11 year old boy suffering from frequent episodic tension type headache. Objective and subjective parameters were taken for assessing the efficacy of treatment. Frequency, intensity and duration of headache

and use of oral or topical analgesic was assessed and charting was done at the time of registration, day 7th, 14th and after completion of therapy. Encouraging result was observed with significant reduction in symptoms of diseases and general condition of patient also improved.

KEYWORDS: *Celastrus paniculatus*, *Jotishmati taila*, *Keraliya Panchakarma*, *Shirahshool*, *Shirodhara karma*, Tension type headache.

INTRODUCTION

Headache is a common complaint in today's stressful life. Unless it is accompanied by other systemic or localised sign and symptoms, is seldom associated with significant neurological diseases.^[1] Headache is characterised as primary and secondary headaches.^[2] Primary headaches are those in which the symptoms of headache and its associated features are the disorder in itself, whereas secondary headaches are those caused by exogenous disorders.^[3] Primary headaches causes considerable disability, lessens the efficacy of work power and decreases the patients quality of life. Primary headaches accounts for 88% of total cases of headaches registered. Out of which majority (69%) are of Tension type headaches (TTH). The prevalence of tension type headache in childhood and adolescence is 10-25%.^[4] In TTH patients complains of bilateral tight band like discomfort, typically progresses slowly, fluctuates in severity, may persists more or less for many days and is completely without accompanying features such as nausea, vomiting, photophobia, phonophobia, throbbing and aggravation with movement.^[5] Causes of TTH are stress, anxiety, tiredness, dehydration, bright light, noise, certain smell, sleep deprivation, uncomfortable position, bad posture, irregular feeding time and work exerting excessive strain to eye; the most common being stress. There are two kinds of tension headaches; episodic and chronic type. The episodic type is caused by stress, tension and anxiety which accounts for majority of headaches. Treatment of such headaches consists of attention to any removable underlying cause, altering lifestyle and relaxing technique.^[6]

In Ayurveda the symptom *shirahshool* (headache) is included in eighty types of *Vatavyadhi*.^[7] There are five types of *Shiroroga* (headaches).^[8] In *vataj shiroroga*, the accession of the pain is sudden, its intensity increases at night and is relieved by bandaging, oleation and sudation. Vitiating *vata* is the triggering factor for *manasik dosha*; *raja* and *tama*. Ayurveda described 107 *marma* points in the body which represents the vital spots. In description of *trimarmas*; *shir* (head), *hridaya* (heart), *basti* (kidney/bladder) are considered the most important vital part susceptible to injury and should be protected cautiously.^[9] *Murdha* (head) is included under ten *pranayatana*s.^[10] There are 6 main *chetna Kendra* (*nadichakra*) situated in the body. These *nadichakra* are connected to each other and work in harmony and collaboration with each other.^[11] The therapy *Shirodhara* is indicated in *shiroroga* like headache, anxiety disorder, lack of concentration etc. *Shirodhara* pacifies *vata dosha* due to its *snehan* property and *medhya* effect of medicated oil used.

CASE REPORT

The patient, 11-year old male, Hindu by religion, studying in 7th standard, Registration number 870, was registered at OPD of *Kaumarbhritya/Balroga*, Uttaranchal Ayurvedic Hospital, Dehradun, Uttarakhand on 7th January, 2015. He had complain of pressure or tightness in head and feeling of discomfort, which increases slowly in intensity from mild discomfort to moderate pain in head region bilaterally. The condition is not associated with any other systemic feature like fever, nausea, vomiting, giddiness, photophobia, tingling sensation etc. The attack lasts from hours to one or two days in an average, 14 to 16 episodes per month since two years. He had taken local medication and therapies for temporary cure during the period of attack like oral analgesic (Asprin, Paracetamol etc.), home remedies and counter irritant ointment etc. Patient had got mild symptomatic relief for small time being but is not temporarily cured. The above symptoms were indicative of *Frequent episodic tension-type headache*.^[12] Provisional diagnosis was made on the basis of diagnostic criteria of International headache society 3rd edition of International Classification of Headache Disorder (ICHD beta version); based on sign, symptoms and associated features. Routine blood investigations (Complete Blood Count, Liver Function Test, Renal Function Test and Random Blood Sugar) were done to exclude chronic systemic illness. The investigation reports were within normal limit. Birth history of patient is not accessed up to the mark as no documented proof was produced by the parents. According to attendant of patient, the boy had birth history of spontaneous vaginal delivery at home with spontaneous cry at the time of birth. Patient has no significant past history, was admitted in hospital at age of 3 year for correction of dehydration due to acute diarrhoeal attack. He has history of frequent upper respiratory infection at time of seasonal variation and is sensitive to dust particles. Vaccination history was completed proper up to the age. Patient had mix type of food habit, normal appetite which gets significantly reduced at the time of attack. Bowel habit is often irregular and had complained of hard stool occasionally. Micturition is normal with frequency of 6 to 8 times per day without any associated features. Patient had disturbed sleeping pattern and frequently associated with lack of proper and complete sleep of 6 hours per night.

Treatment

Depending upon the diagnosis, an *Ayurvedic* therapeutic module *Shirodhara*^[13] was planned after proper counselling and commenced after obtaining informed consent. The therapy was given for 21 days. First day it was done for one hour and subsequently from second day the

duration was increased by 5 minutes daily till seventh day. After which it was maintained at one and half hour from seventh to fourteenth day. After fourteenth day it was reduced by 5 minutes per day till twenty first days. Prior to *shirodhara karma* (*Pradhan karma*) *sarvangabhyanga*^[14] by *bala taila*^[15] followed by *sarvanga swedana* was done for 15 minutes as preparatory procedure (*purva karma*). *Jyotishmati* (*Celastrus paniculatus*)^[16] *taila* was taken as *shirodhara dravya* and pre-warmed before pouring it in *dhara patra*. Patient was taken over *shirodhara* table in supine position and his eyes were covered by eye band, to avoid trickling of *dhara dravya* in eyes. The hairs of patient were cut prior to the commencement of procedure. A cotton towel was folded, wrapped round and placed beneath the shoulder to support the head. The *dhara dravya* was slowly released vertically from opening of *dhara patra* in a continuous pattern over middle of forehead two fingers above the nasion. The *dhara dravya* after being poured over the head was collected in a separate bowl, again warmed and recycled in the *dhara patra*. After completion of *dhara karma* the head of patient was wiped and gentle massage was given followed by luke warm water bath (*sukhoshna udaka snana*).

RESULT

Objective and subjective parameters were taken for assessing the efficacy of treatment. General condition (GC) of patient, discomfort felt by the patient, frequency, intensity, duration of headache and use of oral or topical analgesic was assessed and charting was done at the time of registration, seventh day, fourteenth day and after completion of therapy.

- Frequency of attack of headache prior to the beginning of therapy was noticed on every 2nd or 3rd day for 2-18 hour was reduced on subsequent days of treatment.
- On 7th day of assessment 2 attacks occurred during this period and it was for 1 to 2 hour. There was reduction in intensity of pain and irritability i.e., GC was also improved. Patient has taken oral analgesic once in a day which was previously twice along with topical ointment.
- On 14th day of assessment patient told about the improvement and reduction in tension or discomfort he was feeling previously. The intensity of pain was negligible and only for few minutes, three times in total next seven days.
- On completion of therapy the intensity, duration and frequency of pain was reduced significantly, GC was improved and need of analgesic either topical or oral was reduced to nil.

DISCUSSION

Majority of headaches are of primary type and TTH accounts for a large portion. The treatment modalities of TTH are symptomatic and consist of mostly stress relieving technique like *Yoga*, meditation, physical manipulation and local massage etc. *Shirodhara* is a sort of relaxation therapy which reduces mental tension, release anxiety and results in calmness without any marked degree of sedation, hypnosis and altered consciousness. It is a type of passive meditation counteracting psychomotor agitation. Due to constant flow of *dhara dravya* over head region a vibration area is generated which stimulates nerve endings. When nerve endings of autonomic nervous system are stimulated they in turn liberate acetyl choline (Ach) in small quantity. This small amount of Ach produced lowers the blood pressure, leading to reduced activity of central nervous system resulting in tranquillising effect. From Ayurvedic point of view vitiated *vata dosha* is the triggering factor for pathogenesis of disease symptom produced in *shirahshool* (TTH). *Shirodhara* pacifies *vata dosha* due to *snehan* property of oil used and *medhya* effect of drugs by which medicated oil is prepared. There are ten main *chetana Kendra* (*nadi chakra*) situated in the body which are connected to each other. The two chakra situated in the head region i.e., *Aagya chakra* (between two eyebrows) and *brahma randhra* (upper part of forehead) are stimulated by *shirodhara*.

CONCLUSION

Shirodhara karma has shown encouraging result in this case. On the basis of above result it can be adopted as an alternative therapy for the management of TTH. There is need of further researches on large number of cases to derive some more inferences based on data to prove the efficacy of procedure and its mechanism of action.

REFERENCES

1. Colledge Nicki R, Walker Brian R, Ralston Stuart H, editor Davidson's Principles and Practice of Medicine, chap. 2nd, 21st edition, Churchill Livingstone Elsevier Limited, China, 2012; 1148.
2. Longo Dan L et al. (J. Olesen et al: The Headaches, Philadelphia, Lippincott, Williams & Wilkins, 2005), editor Harrison's Principles of Internal Medicine, Part-2, chap-14, edition 18th, The McGraw-Hill Companies, United States of America, 2012; 112.
3. Longo Dan L, Fauci Anthony S, Kasper Dennis L, Hauser Stephen L, Jameson J Larry, Loscalzo Joseph, editor Harrison's Principles of Internal Medicine, Part-2, chap-14, edition 18th, The McGraw-Hill Companies, United States of America, 2012; 112.

4. Pirjo Anttila, (The tension type headache in childhood and adolescence), The Lancet Neurology, 2006; 5(3): 268-74.
5. Longo Dan L, Fauci Anthony S, Kasper Dennis L, Hauser Stephen L, Jameson J Larry, Loscalzo Joseph, editor Harrison's Principles of Internal Medicine, chap-14, edition 18th, The McGraw-Hill Companies, United States of America, 2012; 120.
6. Das K.V. Krishna, editor Text book of Medicine, chap. 186th, edition 5th, Jaypee Brothers Medical Publishers (P) Ltd, New Delhi 110002, India, 2008; 1221.
7. Pandey KN, Chaturvedi GN, editor Charaka Samhita, Vidyotini Hindi commentary, Vol-I, Sutrasthana, Chap. 20th, verse 11, 1st edition (reprint), Chaukhambha Bharti Academy, Varanasi, 221001, India, 2001; 400.
8. Pandey KN, Chaturvedi GN, editor Charaka Samhita, Vidyotini Hindi commentary, Vol-I, Sutrasthana, Chap. 17th, verse 17, 1st edition (reprint), Chaukhambha Bharti Academy, Varanasi, 221001, India, 2001; 333.
9. Sharma PV, editor Charaka Samhita, with english commentary, Vol-II, Chikitsasthana chap. 26th, verse 3, 1st edition (reprint), Chaukhambha Orientalia, Varanasi, 221001, India, 2008; 420.
10. Pandey KN, Chaturvedi GN, editor Charaka Samhita, Vidyotini Hindi commentary, Vol-I, Sutrasthana, Chap. 29th, verse 3, 1st edition (reprint), Chaukhambha Bharti Academy, Varanasi, 221001, India, 2001; 576.
11. Sharma Tarachand, editor Ayurvediya Sharir Rachana Vigyan, Vol-I, chap. 6th, 1st edition (reprint), Nath Pustak Bhandar, Rohtak, 124001, India, 1983; 368-372.
12. Headache Classification Committee of the International Headache Society, (The International Classification of Headache Disorders, 3rd edition), Cephalgia, Sage publications Ltd., London (U.K.), 2013; 33(9): 659.
13. Sharma Ajay, editor The Panchakarma treatment of Ayurveda including Keraliya Panchakarma, Chap. 10th, edition 1st, Shree Sadguru Publications Indological and Oriental publishers, Dehi, 110007, India, 2002; 311.
14. Singh RH, editor Panchkarma Therapy, chap. 6, edition 2nd, Chaukhamba Sanskrit Series, Varanasi, 221001 India, 2002; 190.
15. Tewari PV. editor Kashyap Samhita *Vridhdha jeevak tantra* with english commentary, Chikitsa sthana chap. 18th verse 34, edition 1st (reprint), Chaukhambha Visvabharti Oriental publishers and distributors, Varanasi, 221001, India, 2002; 249.
16. Anonymous. Medicinal Plants of India. Vol.1. Indian Council of Medical Research, New Delhi, 1976; 215-6.