



Review Article

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SHIRODHARA IN AYURVEDA PRACTICE FOR MANAGEMENT OF INSOMNIA: A CRITICAL ANALYSIS OF CLINICAL AND EXPERIMENTAL STUDIES

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ABSTRACT

Insomnia disorder affects a large proportion of population on a situational, recurrent or chronic basis and is among the most common complaints of medical practice. Shirodhara is considered as a highly effective treatment for this condition. The present review aimed to investigate the effect of shirodhara using different liquid medicaments on insomnia disorders and related clinical symptoms. We searched pubmed and google scholar for this critical review from 2010 to 2024. A total of 20 articles were included in the final review. Among the included studies five were single group pre-post-test studies, Three were triple group studies (one intervention, one medicine and one combined), Two were double group studies comparing one intervention with one medicine, Two studies evaluated different procedural variations such as shirodhara and shirovasthi or nasya and shirodhara, Five were double group studies with two different dhara liquids, One was triple group study with three dhara variations, one was a quasi experimental study with three groups and one study with lukewarm water to compare the two methods of shirodhara. The findings suggest that shirodhara significantly reduces the symptoms of insomnia disorders. In some studies, the effect of liquid medicaments were predominantly low and the effect mainly by the procedure of shirodhara. One study reported that single point drop method of shirodhara was shown beneficial than oscillatory method of shirodhara. To determine whether the effect of shirodhara irrespective of liquid medicaments used, further randomized controlled studies with larger sample sizes and objective assessments such as polysomnography (PSG) are required

Keywords: Insomnia disorders, Shirodhara, Polysomnography

INTRODUCTION

Insomnia disorder, also known as chronic insomnia, is a significant public health issue. It is defined as difficulty in initiating or maintaining sleep or unwanted early waking with inability to return to sleep for at least 3 days a week for at least 3 months, despite adequate sleep opportunity¹. These sleep difficulties must also lead to clinically significant distress or impairment in social, occupational, educational, academic, behavioural or other important areas of functioning. Chronic insomnia is associated with a range of adverse outcomes, including fatigue, cognitive impairments, mood disturbances, and diminished day time functioning, which significantly affects quality of life ². It is also associated with various somatic and psychiatric disorders such as cardiovascular disease, cancer, chronic pain, depression and anxiety³. Furthermore, sleep plays a vital role in the normal function of the endocrine and immune system.

Ayurveda considers nidra (sleep) as one of the most important dimensions of life and there are three factors, namely Ahara (diet), nidra (sleep), and Brahmacharya (abstinence) called Tryopastambha (three pillars). According to ayurveda, nidra occurs as a natural predominance of Tamas (darkness) at night coupled with a profound relaxation of the mind and intellect, induces sleep. Improper and irregular life style (Ahara and vihara) cause of vatha prakopa (Vitiation of vatha dosha) that travels through Manovaha srotas causing sleeplessness called Anidra or Nidra nasha.

Treatment principle for anidra is vathagna (vatha pacification) treatment. The drugs are selected for the treatment which are nidra janaka (sleep inducing) and vatha hara properties and External therapies like pada abhyanga (ayurvedic foot massage, murdhni taila (therapeutic procedures involving the application of medicated oil over the head) includes shiro abhyanga (head massage), shirodhara (continuous streaming of medicated oil over the forehead), shiro pichu (placement of an oil soaked cotton pad over the vertex) and shirovasthi (retention of medicated oil over the head for a specific duration).

The modern medical science is still not having a definite treatment for chronic insomnia. Although hypnotics, sedatives, tranquilizers, psychotropic are available, their long term use cause hazardous adverse effects, dependency and limited sustained efficacy. These medicines are unsafe for prolonged use and there is a need for safe and effective therapeutic alternatives. There are many drugs and approaches outlined and applied in ayurveda for managing sleep disorders. Among these, Shirodhara has been selected to assess its effectiveness based on scientific criteria through critical analysis among 20 clinical studies

Procedure of shirodhara

The procedure of Shirodhara may be divided into three parts: Purva Karma (pre operative procedure), Pradhana Karma (main procedure), and Pashchat Karma (post operative procedure)

Purvakarma: (Pre-operative Procedure)

Purva Karma is related to the preparation of the patient. First, it should be confirmed whether the patient is fit for Shirodhara or not. The necessary equipment includes Droni (Dhara table), Dhara Patra (Shirodhara pot), Dharavarti (a wick of loose cotton thread), Suitable oil (1.5 litres), cloth piece, cotton, pot, Rasanadichurna etc. The hair of the patient on the scalp should be removed if the patient permits. The patient should pass stool and urine. Baseline parameters such as pulse, temperature and blood pressure should be recorded.

The Proper posture of the patient for Shirodhara is supine position and Dhara Patra should be brought four inches above the forehead. The eyes and ears should be covered with cotton to prevent entry of oil. The head may be slightly elevated position, preferably on a wooden piece. A small quantity of oil (10ml) should be kept over the head of the patient and Abhyanga (oil massage) should be done over the face, neck, shoulder and chest

Droni (Dhara Table)

For Shirodhara, a special type of table is used and it is known as Droni (vessel). The table is made up of wood with raised edges on all four sides so that the oil may not flow out. In this table, arrangements are made at the head end so that the oil poured may be collected in another vessel and may be reused.

Dimension of Droni (Dhara Table)

The construction of Droni is explained here by converting the ancient measurements into contemporary ones. The length of the Droni can be 7 feet, width 2½ feet, height can be 2½ feet. A 3-inch height border is formed on all sides of the table towards the edge of the head, forming a horizontal midline strip of 2½ feet of wood, dividing the table into 2 parts. This small part of the table towards the tip of the head is used for Shirodhara. In the middle 3 inches from the horizontal line, a circular metallic plate having 6 inches diameter with a central hole may be fixed. This arrangement may be made to collect the oil in a vessel for its reuse.

Above the Shirodhara portion of the table, the Dhara Patra should be suspended with the help of a strong wire to enable liquid to fall from the proper distance Dharapatra (Shirodhara Pot).

Dhara Patra is a vessel in which liquids used for Shirodhara are put. It is prepared from brass, steel, clay etc. The mouth of the vessel should be wide and the sides are tapering gradually to a central point at the bottom. At this point, a hole may be made approximately of little finger size. The depth of the vessel may be 5 to 6 inches. The capacity of the vessel may be 2 litres. Inside the vessel, a small wooden bowl having a central hole should be put inversely to both holes of the vessel coming in the medial line. In this small vessel, a wick should be entered passing through both holes and hanging down from the big vessel to maintain a continuous flow of liquid. The length of the wick outside the vessel should be 4 inches. The upper end of the wick should have a knot to prevent slipping from the vessel. The Dharapatra should be hung just above the forehead of the patient. The lower end of the cotton wick should be 3 inches above the patient's forehead. The vessel is kept filled with re-collected liquid. On the upper edge of the vessel, 3 holes should be made to hang it in a horizontal plane to avoid spillage.

Aushadha (Drug): The medicine (Aushadha) should be selected according to the disease and condition of Doshas.

For Vata Dosha Tila Taila (sesame oil) or Vataghna liquid are indicated. For Pitta Dosha, Ghrita (ghee) or cold water are preferred. For Kapha dosha, Tila Taila and pitha raktha not too hot, not too cold water for Rakta Dosha Ghrita with cold water is indicated.

Pradhana karma (operative Procedure)

The selected liquid should be kept in the vessel and poured continuously and slowly on the forehead of the patient. A mild oscillation should be given to ensure uniform flow over the forehead. The liquid gets collected in the vessel, which is kept below the table, when the liquid in the vessel gets emptied, then it is replaced by the lower vessel. Oil should be heated up to 40°C and poured into the Dharapatra.

Dharakala: Timing of dhara

The patient has dryness and Pittayukta Vata, the period is 2½ Prahara or 2 Prahara and in Snigdha Kaphayukta Vata it is one Prahara, or it should be up to perspiration initiate. But nowadays generally it is to be done for 45-60 minutes depending on the condition of the patients. Depending on the nature of the disease and the physical condition of the patient, the treatment can be done daily for 7 to 14 days.

Period for Changing the Liquid

When milk is used for Parisechana it should be changed every day. When Dhanyamla is used, it can be used for up to 3 days. Oil should also be changed in 3 days. In the first 3 days, half of the oil is used, for the next 3 days later half of its used and on the 7th day all the first and second half are mixed, then it should be discarded.

Shirodhara can be performed daily or on alternate days in a person of strong strength (Uttama Bala Purusha), with an interval of two days in a person of medium strength (Madhya Bala Purush) and an interval of four days in a person of very weak strength (Heena Bala Purusha).

The temperature of The Drava is approximately 40°C or it should be Sukhoshna near about to body temperature.

Pashchata karma (Post-Operative Procedures)

After completing Shirodhara the oil from the head should be removed by a piece of cloth. Rasnadichoorna should be applied over the head. The eyes should be washed with cold water, and he should remove kapha if present. He should take the mild wind and should rest for some time. Then remaining oil of the Dhara should be massaged on the body and should take bath with hot water. He should take light diet, hot meal and Pathya for up to 7 days. For drinking purposes, warm water boiled with Dhanya jiraka, ginger and cumin seeds may be used. Only hot water should be used for washing purposes.

Pariharakala: Abstention Period

He should take Pathya and remain as Jitendriya up to the period which is taken for the completion of Dharakarma.⁴

Table 1: Studies on Shirodhara treatment in insomnia

Author, Year	No of subjects	Age in years	Medication	Duration	Parameters	Outcome
Pokhare & sharma, (2010) ⁵	30	16-60	milk	15	symptom rating scale	The patients of Group III treated with Tablet containing aswagandha, sarpagandha, jatamansi, tagara and parasika yavani along with Shirodhara showed highly significant improvements
Anil et al. (2011) ⁶	10	25-70	Dasamoola kwatha	21	Hamiltons Anxiety Rating scale (HARS), Hamiltons Depression Rating Scale (HDRS), Brief Psychiatry Rating Scale (BPRS)	Marked improvement (25%), Moderate improvement (50%), mild improvement in (25%)
Gotmare Ashish et al. (2013) ⁷	30	20-70	Godugdha	7	Nidra nasha rating scale (before and after treatment), Sleep efficiency index	Non- pharmacological therapy with Godugdha shirodhara relieved the clinical signs and symptoms of nidranasha without side effect
Sharma et al. (2015) ⁸	20	20-60	Aswagandha taila	Not mentioned	The efficacy was evaluated on the basis of characteristics of sleeplessness, sleep awake schedule, sleep quality, sleep time, feeling after awakening and associated symptoms. The effect of therapy was also evaluated at DASS (Depression Anxiety Stress Scale)	The overall result indicated that this intervention was encouraging and significantly effective
Angadi, Kattil & Aruna (2015) ⁹	40	20-60	Mahish ksheera	7	Pittsburgh Sleep Quality Index (PSQI)	Ksheera dhara showed highly significant results in 5/7 of PSQI Hence Jadamansi taila nasya and ksheera dhara administration for schedule for 7 days effective in insomnia
Singh Suneel Pal, (2016) ¹⁰	20	16-60	Dasamoola taila dhara, jala dhara	15	Subjective improvement by observing of patients and clinical improvement were employed for assessment of the impact of therapy by physician	Irrespective of the liquid used in shirodhara, it extends some additional therapeutic benefits as medication effects, enhancement of satva guna and balancing of raja and Tama doshas
Mukesh Kumar et al (2017) ¹¹	30	16-60	Ashwagandha oil	14	Insomnia Severity Index (ISI)	Shirodhara with aswagandha oil was beneficial for moderate and severe insomnia.
Suma Jambli et al (2017) ¹²	10	30-60(The age range in selected 10 patients)	Pancha Sugandha sadhitha takra dhara	14	Athens Insomnia scale (AIS) assessed by before and after treatment	The treatment showed a positive response by increasing duration of sleep and quality of sleep along with over wellbeing in terms of quality of life
Vasant Patil et al. (2017) ¹³	30	16-60	Lukewarm water	14	Athens Insomnia Scale (AIS), Objective parameters like pulse, B.P, R.R	Single point drip method shirodhara provided better clinical and statistical improvement compared to oscillatory drip method
Nirmal, Daldaniya & Jadeja (2017) ¹⁴	Not mentioned	Not mentioned	Ksheerabala taila	14	Brief Psychiatric Rating Scale (BPRS) Disorders of sleep wake (S-W) and relief of symptoms before and after treatment	Combined therapy (apamargadi vati and shirodhara) was found to be more effective than individual therapy done
Jaya et al (2018) ¹⁵	50	Not mentioned	Chakra taila	10 days consecutively and thrice in a period of 8 weeks with a gap of 10 days between two cycle	ayurveda parameters	An eleven month of intensive trial yielded encouraging results. 80-85% patients reported completed relief from the disease, while others experienced considerable improvement.
Hazarika et al (2018) ¹⁶	50	18-70	Tila taila	7	Athens insomnia scale (AIS), Pittsburgh sleep quality index and on the basis of improvement of signs and symptoms and laboratory investigations such as blood R/E	Symptomatic relief and significant improvement of ASI scores. overall, the results were favorable
Karthikeya Prasad & Gopidev (2018) ¹⁷	40	16-60	Mahisha ksheera, shudha bala taila	7	Subjective and objective parameters in the group and in between the groups	Shirodhara with sudhabala taila is more effective than shirodhara with mahisha ksheera
Arya R.V (2019) ¹⁸	40	20-60	Ksheera bala taila	14	AIS (Athens Insomnia Scale)	Comparative efficacy of therapies in both groups provided statistically insignificant results, the percentage of relief was observed more in shirodhara group
Rani Pooja et al (2021) ¹⁹	Total 131 groupA-66 GROUP B-60	16-50	Bala and Sathavari siddha ksheera, Tila taila	7	Insomnia Severity Index scale (ISI)	In this study both groups were equally effective. Therefore, It can be concluded that procedural effect may play a main role compared to drug effect
Radder et al (2021) ²⁰	40	25-60	Karpasasthyadi taila dhara, medicated takradhara	8	Athens insomnia scale, Sleep efficacy index (SEI)	Statistically both the groups have equal effect on insomnia, but clinically taila dhara showed slightly better results than takra dhara
Neclam et al (2023) ²¹	10	20-60	Bala aswagandhadi taila	8	Athens insomnia scale and subjective parameters	Shirodhara with balaaswagandhadi taila was found to be effective in the management of primary insomnia
Sain et al (2024) ²²	21	20-70	Jala dhara, Aswagandha kwatha, Tila taila	14	Athens Insomnia scale (AIS), Hamiltons Anxiety scale (HAS), Hamiltons Depression Scale (HDS), WHO -Quality of scale (Brief), Serum cortisol, Electroencephalogram (EEG)and anidra lakshanas	The efficacy of the all the three groups was almost similar, Evidencing the fact that the effect of liquid medicament is predominantly low.

Pawar <i>et al</i> (2024) ²³	63	60 and above	Tila taila	21	PSG Parameters like sleep latency, total sleep time, wake after sleep onset, arousal index, and sleep efficiency and PSQI, ISI, ESS (Epworth Sleepiness Scale)	Shirodhara procedure along with cap. aswagandha administration was very effective in management of insomnia in older population
Varshitha <i>et al</i> (2024) ²⁴	40	6-70	Takra dhara, Narayana taila dhara	7	Pittsburgh sleep quality index (PSQI) and subjective parameters were assessed before and after intervention	Taila dhara was found to be more effective than takra dhara

DISCUSSION

Mode of action of shirodhara

In shirodhara, the medicated liquid is poured continuously over the forehead which consist of some vital centers such as agya chakra, stapani marma. The sukshma indriya allows sneha to penetrates in the skin of forebrain. The penetration power depends on consistency and density of drugs. the lipid constitution which can be penetrated easily through cell walls.¹⁷ The neurophysiologic mechanism of the effect of shirodhara on the psycho-physiological changes may be related to tactile stimulation of skin or hair follicle innervated by the first branch of the trigeminal nerve (ophthalmic nerve)¹¹. Shirodhara normalizes the function of thalamus and forebrain which brings serotonin and catecholamine to normal stage, which induce sleep. It also stimulates the pineal gland which produces the hormone melatonin, thereby inducing nidrajanaka property.¹⁷ During the procedure particular pressure and vibration may get created over the forehead. These vibrations may get amplified by the hollow sinus present in the frontal bone and transmitted inward through the CSF (Cerebro Spinal Fluid). Along with a mildly increased temperature, may stimulate the higher centers.¹⁰ The constant pressure amplifies and create impulses, which are transmitted through the CSF. This impulse activates sleep regulating parts of the brain, leading to normalization of melatonin, GABA, and serotonin levels along with a reduction in histamine, acetylcholine, and dopamine levels.¹⁹ Shirodhara may also have alpha adrenergic blocking effect, thereby reducing actions of adrenaline and nor adrenaline. The continuous flow of lukewarm liquid may cause vasodilation and thus increase blood flow through the brain. The warmth may subsequently circulate and relax the rest of the body.¹⁰ Supine position maintained during shirodhara further enhances relaxation.⁹

Mode of action of drugs

Both human and animal study has shown that components of withanolide has antianxiety properties. The water extract of Withania somnifera has triethylene glycol as a key component, which has been used to induce sleep. This extract significantly increased non rapid eye movement sleep while slightly altering rapid eye movement sleep.²² Jatamansi possesses the properties like nidrajanaka, sapjastapaka, Medhya, vedanastapaka, anulomaka, Hridaya niyamaka, balavardhaka, etc. Jatamansone, the terpene from *N. jatamansi* was shown to exert transquilizing activity in experimental studies on mice and monkeys. The essential oil from its rhizomes has a depressant action on the CNS of guinea pigs and rats. Various extracts of *N. jatamansi* root showed both sedative and hypotensive activity in rats. Mahisha ksheera has the properties like vatha hara, tandra, nidra kara as explained by Haritha⁹ and Madhura rasa, snigdha guna, sita veerya, Madhura vipaka which subsides vatha and pitha doshas increases the kapha dosha and tamoguna in the shirahpradesha.¹⁷ Godugdha is snigdha, Madhura, guru, mrudu, shlakshna, vatha pitha samaka and also useful in manovikar.⁷ Takra medicated with amalaka, musta, rasna, and ksheerabala taila effective for anidra due to its vatha and pitha calming properties. It reduces stress, improves brain circulation, enhances memory, nourishes the scalp, and promotes relaxation.²⁴

CONCLUSION

This review concluded that shirodhara significantly reduces the symptoms of insomnia disorder. However, some studies showed that the effect of liquid medicaments was predominantly low, and the benefit was mainly derived from the procedure of shirodhara itself. To determine the effect of shirodhara irrespective of the liquid medicaments used, randomized controlled studies with larger sample sizes and investigations like polysomnography (PSG) are required.

Limitations and recommendation

The research on shirodhara for insomnia is limited, characterized by small studies, brief follow-ups, and inconsistency in study design, participant age, and treatment protocols (duration, dosage, and medication). For effective evidence synthesis, large-scale randomized controlled trials and extensive observational studies with rigorous investigations, such as polysomnography (PSG), are essential to determine its efficacy.

REFERENCES

- American Psychiatric Association. Diagnostic and statistical manual of mental disorders (5th ed). Arlington, VA: American psychiatric association; 2013
- Grandner M, Olivieri A, Ahuja A, Büsser A, Freidank M, McCall WV. The burden of untreated insomnia disorder in a sample of 1 million adults: a cohort study. BMC Public Health. 2023 Aug 3;23(1):1481
- Benz F, Knoop T, Ballesio A, Bacaro V, Johann AF, Rücker G, *et al*. The efficacy of cognitive and behavior therapies for insomnia on daytime symptoms: A systematic review and network meta-analysis. Clin Psychol Rev. 2020 Aug; 80:101873.
- Kuldeep, Shaizi layeeq, Amit. An Evidence-Based Review on Shirodhara: A Unique Panchakarma Therapy. International Journal of Ayurveda and Pharma Research. 2022;10(7):28-36.
- Pokharel S, Sharma AK. Evaluation of Insomrid Tablet and Shirodhara in the management of Anidra (Insomnia). Ayu. 2010 Jan;31(1):40-7.
- Singh AK, Chandola HM, Ravishankar B. Stress induced chronic insomnia (Anidra) and Its management with dashamoola kwatha shirodhara J. Drug Delivery Ther. [Internet]. 2013 May 13 [cited 2025 Aug. 11];3(3):42-7.
- Gotmare Ashish, Tawalare Kiran, Nanote Kalpana, Debankar Manish. Godugdha Shirodhara-A Nonpharmacological treatment of nidranasha (insomnia) Int J Res. Ayurveda Pharm. 2013;4(4):541-544
- Sharma UK, Kumar S, Kumawat VB, Yadav S, Chaudhary K. Role of shirodhara with ashwagandha taila in management of stress induced insomnia. Environment Conservation Journal, 2015;16(1):159-163.
- Angadi S, Katti A, Aruna. Effect of Jatamansi taila nasyaand kshiradhara in insomnia. Int J Health Sci Res. 2015; 5(11):205-210.
- Singh Suneel Pal. Efficacy of Dashmoola Taila Dhara and Jala Dhara in Management of Insomnia. Int J Ayurveda & Med Sc 2015; 1(1): 6-13.

11. Kumar Mukesh, Kumar Pankaj, Mangal Gopesh, Sharma Sreenivas. Role of shirodhara with Aswagandha oil in the management of Insomnia. International journal of Applied Ayurved Research, 2017;2(11):1696-1700
12. Suma Jambli, Chavan SG, Prashanth AS. The Management of Primary Insomnia through Pancha Sugandha Sadhita Takra Dhara - A Pilot Study. J Ayurveda Integral Med Sci [Internet]. 2017Feb.28 [cited 2025Aug.11];2(01):60-6.
13. Vasant Patil, Yogesh Godkar, Sanjay Gupta, KC Das. Clinical study on effect of Different methods of Shirodhara in patients of insomnia. International Journal of Ayurveda and Pharma Research. 2017;5(1):28-32
14. Dhamini A Nirmal, Himangini Daldaniya, Yashpalsinh A Jadeja. Clinical study of shirodhara and Apamargadi vati in the management of insomnia (anidra) International Journal of Applied Research 2017;3(6):896-898
15. Jaya Kala Saklani, Singhai Swapnil. A comparative clinical study of Kanamula churna and shirodhara with chakra taila in cases of anidra. An International Journal of current medical and Pharmaceutical Research, 2018;3(9):2416-2420
16. Jharna Hazharika, Om Prakash Gupta, Bishnu Prasad Sarma. A Clinical study in the management of anidra with Jadamansi churna and Shirodhara. Int J Ayu Pharma Chem 2018;9(2):24-35
17. Karthikeya Prasad & Gopidev TG. A Comparative study of Mahisha ksheera and shuddha bala Taila dhara in Nidranasha W.S.R. Insomnia. International Ayurvedic Medical Journal. 2018;6(9):1949-1955
18. Arya RV. A Comparative clinical study to evaluate the efficacy of shirodhara and shirobasti with Ksheerabala taila in anidra w.s.r to insomnia. International Ayurvedic Medical Journal, 2019;7(10): 1696-1700
19. Rani Pooja, Wetal R Vishakha, Gupta Aru Z. A Comparative study to evaluate the effect of bala and Shatavari siddha ksheera shirodhara and tila taila shirodhara in anidra (Insomnia). International Journal of Ayurveda and Pharma Research. 2021;9(12):1-10.
20. Radder, Jagdish Radder, GS Hadimani, G. Vinay Mohan. A Comparative clinical study of taila dhara and takra dhara in the management of anidra w.s.r to insomnia, International Research Journal of Ayurveda & Yoga, 2021;4(4):44-57
21. Singh Neelam, Yadav v Jyotsana, Kadam S. Sheetal. Management of nidranasha with shirodhara of Balaswagandhadi taila -A Pilot study; World Journal of Pharmaceutical research. 2023;12(19):1209-1218
22. Sain Kavita, Bhatted Santosh Kumar, Kumar Anil. Management of Anidra through Shirodhara with Jala, Ashwagandha Kwatha, TilaTaila: a comparative clinical study. Journal of Indian System of Medicine 2024;12(2):77-89
23. Sachin Pawar, Vinod Shende, Anuradha Khandekar, Sameer Yelwatkar. Polysomnographic evaluation of the effect of shirodhara and cap aswagandha on sleep in older adults suffering from insomnia. International Journal of Academic Medicine and Pharmacy. 2024;6(4); 92-96
24. Varshitha K, Vijayakumar B Math, VS Kanthi, GS Rakesh. A Comparative clinical study on the efficacy takradhara & taila dhara in anidra w.s.r. to insomnia, International Journal of Creative Research Thoughts. 2024;12(11):6459-6469

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