Clinical Study of *Sarivadi Lepa* and *Gunja Taila* in the Management of Migraine

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**Abstract**

Migraine is a complex neurological disorder which affects more than 10% of people worldwide. The clinical presentation of migraine varies from patient to patient and even in the same patient from time to time and exact pathophysiology of migraine is not known though unifying theory is postulated. Therefore, one of the aims of the present study is to look for the pathophysiological sequence of the disease. Moreover, no standard treatment is available that is common for all migraine patients. Many migraine patients self-diagnose and self-medicate themselves using over-the-counter analgesics. Many allopathic drugs are used that only provide symptomatic relief to the patient and have irreversible side-effects. Moreover, migraine surgery is a field which is still under its very initial stages. Therefore, to eradicate the problem of migraine and to test the efficacy of Ayurvedic formulations in the management of migraine, Sarivadilepa and Gunjatala have been selected from ayurvedic texts which are mentioned for the treatment of migraine in the present clinical study. Results regarding pathophysiology of migraine showed that both vascular and neural factors are responsible for migraine. Both the drugs selected for present clinical study will show suppra additive potentiated synergistic effect which will act as an important hallmark for curing migraine. Thus the present clinical study is valuable to evaluate safe and effective drug for treating the migraine which is a major health hazard in the present modern era.

**Keywords**

Aura, Vascular, Neurogenic, Triggers, Lepa
INTRODUCTION

Any episodic paroxysmal headache is referred as migraine. However, migraine is paroxysmal headache associated with nausea, and/or vomiting and an aura of focal neurological events (usually visual). Patient with all three of these features are said to have migraine with aura (classical migraine). Those with paroxysmal headache (with or without vomiting) but no ‘aura’ are said to have migraine without aura called common migraine\(^1\). It is about three times more common in women than in men and family history is present in more than 60% of cases. Attacks often begin in late childhood, adolescence and early twenties. Approximately 80% of patients have migraine without aura and 15-20% has migraine with aura. Some patients may suffer both types of attacks at different times. The two basic theories postulated to explain the mechanism of migraine are vascular and neurogenic. The unifying theories consider both these responsible for pathophysiology of migraine. Stress triggers changes in the brain. These changes cause serotonin and/or histamine to be released. Blood vessels constrict and dilate. Chemicals including substance P irritate nerves and blood vessels causing neurogenic inflammation and pain. There is no standard treatment available that is common for all migraine patients. Many migraine patients self-diagnose and self-medicate themselves using over-the-counter analgesics. Commonly used drugs are analgesics like aspirin or paracetamol, often combined with antiemetics such as metoclopramide and domperidone, codeine containing analgesic preparations, NSAID’s, ergotminetartarate, dihydroergotamine, sumatriptan and corticosteroids are also used which have dangerous side-effects. Also the major problem with migraine preventive drugs such as beta blockers, calcium channel blockers, anticonvulsants, antidepressants, serotonin antagonists is, apart from their relative inefficiency, their unpleasant side effects are common. The usual side effects are insomnia, sedation or sexual dysfunction.

Procedures like arterial surgery, in which cauterization of the terminal branches of external carotid or PFO (patent foramen ovale) close for migraines are performed. But ample evidences exists which consider these procedures to be dangerous. Other therapies like biofeedback and neurostimulators are not found effective in migraine totally.
Migraine is selected for this research project as presently no satisfactory prophylactic, conservative and surgical treatment is available for the problem and is among the major health hazards. At the same time present study is aimed to select and clinically analyse the drugs from ancient texts to manage the migraine and without any side-effects. Therefore, Sarivadilepa (Su.Utt.ch.26/34-35)\(^2\) and Gunjataila (BhaishyaratnavaliSiroghchikitsaparakarn 65/158-161)\(^3\) are selected for the present research work.

AIMS AND OBJECTIVES

➢ To analyze exact pathophysiology of migraine.
➢ To study the efficacy of SarivadiLepa and GunjaTaila in the management of migraine (Ardhavabheda) as no satisfactory and safe drug is available in other systems of medicines.

MATERIAL AND METHODS

➢ Knowledge about migraine was collected and upgraded from the modern textbooks, internet and dictionary.

AIMS AND OBJECTIVES

➢ Ancient texts like Sushrutasamhita, AstangaHrdaya, Charakasamhita, Laghutriyagranths, BhaishajyaRatnavali were studied regarding samprapti (Pathology) and Lakshans (Clinical features) and to trace the treatment modalities.
➢ Textbooks of Dravagunavigyan and Rasshastra were reviewed to gain the knowledge about the herbs and ingredients of the remedies mentioned in the texts. Textbooks of Pharmacology were undergone through, to establish mode of action of the therapies mentioned in Ancient Texts.

❖ Trial Drugs

➢ Administration

1. SarivadiLepa- Application in the scalp, forehead and temporal region.
2. GunjaTaila- Application as pratimarsanasya.

➢ Dosage

1. SarivadiLepa- Dose which is sufficient to cover the scalp, forehead and temporal region.

2. GunjaTaila- Six drops each nostril once a day.

➢ Ingredients

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<th>Ingredient</th>
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<td>Neelotpal</td>
<td>Nymphaenouchalii</td>
<td>Panchang</td>
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<tr>
<td>3.</td>
<td>Kuth</td>
<td>Sausserealappa</td>
<td>Root</td>
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4. Mulethi Glycyrrhizaglabra Root
5. Kanji - -
6. TilTaila Sesamumindicum oil
7. Ghrita - -

2. Gunja Taila

<table>
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<th>Ingredient</th>
<th>Latin Name</th>
<th>Part used/Form</th>
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<tbody>
<tr>
<td>1.</td>
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<td>Eclipta alba</td>
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<td>Abrusprecatorius</td>
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<td>4.</td>
<td>kanji</td>
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**DISCUSSION**

- **Regarding pathophysiology of migraine**
  Vascular as well as neural influences cause migraine because both of them act as trigger factors. These trigger factors cause serotonin and/or histamine to be released. This results into constriction and dilation of blood vessels. This leads to release of Substance P which further irritates nerves and blood vessels causing neurogenic inflammation and pain.

- **Regarding Treatment**
  - **Treatment modalities and their mode of action**
    - Lepa prepared from Sariva Root (Hemidesmusindicicus), NeelotpalPanchaang (Nymphaenouchalii), Kuth Root (Sausserealappa), Mulethi Root (Glycyrrhizaglabra), should be taken. Medicinal lepa is prepared by treating the powder of the mentioned medicines with Kanji, TilTaila oil (Sesamumindicum) and cow ghritam. This medicated preparation should be applied in the scalp, forehead and temporal region as Lepa.

  **Mode of Action** - Application of Lepa will remain in contact with the scalp, forehead and temporal region for prolonged duration and high concentrations are attained at the desired site and the absorption of the medication will occur for more time. Additionally, potentiation synergistic effect will increase the efficacy of the medication.
when administered along with nasya therapy. Thus application of Sarivadilepa will prevent migraine aura, headache, nausea, vomiting, photophobia, phonophobia, light sensitivity, dizziness and numbness.

- Snuffing (pratimarsanasya karma) should be done with BhringrajPanchang and seed (Eclipta alba), Gunja seed, root and patra (Abrus precatorius), TilTaila (Sesamum indicum) and kanji is useful.

**Mode of Action** - Nasya karma will be helpful in providing nutrition through the medicated oil as nose is considered gateway to the head and brain\(^5\), thus medication administrated as nasya karma will be useful for the head and brain. Moreover, inhalation provide vast surface for absorption producing rapid action thus, nose can readily absorb the medicated oil and thus will provide synergistic effect of potentiation type for the head and brain. Therefore, this therapy is highly recommended for the management of migraine.

**CONCLUSION**

- It is concluded regarding pathophysiology that both vascular and neural influences are responsible for causing migraine. Both of these cause release of several chemicals due to which neurological inflammation and pain occurs.

- The Ayurvedic formulations mentioned in Ayurvedic texts will definitely be effective. Medicinal lepa and snuffing (nasya karma) will effectively cure the migraine. Medicinal lepa prepared from herbal drugs will cure the migraine through potentiation synergistic effect by increasing efficacy of the medication.

Snuffing (nasya karma) will alleviate/cure the signs and symptoms of migraine as it will provide nutrition to head and brain. Further rapid action will be achieved through the present procedure as inhalation provide vast surface for absorption. Thus snuffing (nasya karma) will provide both relaxation and nutrition and will also be useful for combating trigger factors. SarivadiLepa and GunjaTaila when administered together will show suppraadditive potentiated synergistic effect. Mode of action of these therapies is based on the principles of pharmacodynamics of Modern Pharmacology.
REFERENCES
4. Dravyaguna Vigyan, Edited by Sharma P.V.: Chaukhamba Visvabharti Academy, Varanasi; Reprint; Year 2005.
5. Astanga Hrdayam Sutrasthana Chapter-20/1, P-244, Edited by Tripathi Brahmanand, Chaukhamba Sanskrit Pratishth.