

**ROLE OF *BRAHMI GHRITA* NASYA IN THE PREVENTION OF NEURODEGENERATIVE DISORDER: HUNTINGTON DISEASE.****Dhananjay V. Patel***

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ABSTRACT

Huntington disease is type of degenerative disorder occurs as a result of death of neurons. There is no any promising treatment for its cure or reverse the pathology the disease. So, prevention of the disease is only a feasible option. Here, Ayurveda science can play an important role with its mental health promoting and brain nutrient *Medhya* drug. The *Brahmi Ghrita* is one of the preparations advised by *Acharya* for strengthening the brain. To strengthen brain tissue nose is the path to enter the medicament. That's why the unique and ancient method of Ayurveda *Nasya* with *Brahmi Ghrita* is adopted for the preventive treatment of the disease in the study.

KEYWORD: *Brahmi Ghrita*, Huntington disease, *Nasya*, neurodegenerative disorder, *Medhya*.

INTRODUCTION

The human body faces wear and tear phenomenon on everyday basis, which is called as a degeneration of body. At the same time, the lacuna occurred due to wear and tear is fulfilled by the newer generated cell, which is called as a regeneration of the body.^[1] But, it is also a fact that all the tissue or cell does not have ability of regeneration. One of such type of cells are neurons i.e. the brain cell.^[2] If once they are dead, cannot be replaced with newer cell. This pathology is termed as Neurodegeneration. Many neurodegenerative diseases are occurred as a result of the progressive loss of structure or function of neurons, including the death.^[3] Such diseases are incurable.^[4] So it is wise to prevent these incurable neurodegenerative disorders. One of such disease is Huntington's disease.

Huntington's disease (HD): It is result of progressive breakdown of nerve cells in the brain.^[5] HD is mostly occurs in their 30s or 40s, but it may onset in early or later stage of life.^[6] HD has a profound negative effect on one's functional abilities and mostly results in poor control of movement and thinking abilities. The symptoms of HD may differ from person to person, but in the early stage there are problem in coordination and control of movements in most of the cases. When the disease progresses, uncontrolled and jerky movements become more noticeable, which are usually together with weakening of mental abilities and occurring of behavioral or psychiatric problems. Physical abilities are gradually impeded until coordinated movement becomes very difficult.^[7]

Importance of study: In the pathology of Huntington's disease, the nerve cells are degenerated. There isn't possibility of its regeneration as like other cell of the body. As well, there isn't found any treatment to stop or reverse the HD yet.^[8] Hence, prevention the disease is appropriate approach in case of Huntington's disease.^[9]

Considering these facts, it is a need to find out right preventive solution of the Huntington's disease.

Brahmi Ghrita^[10]

In ancient text of Ayurveda, *Medhya* drugs have described as molecular nutrient for the brain.^[11] The *Brahmi Ghrita* is one of the commonly used *Medhya* preparation of Ayurveda. With its *Medhya* effect, it has potency to normalize the function of *Prana vayu* and *Tarpaka kapha*, thus can be useful for the neurodegenerative disorders like Huntington disease.

The ingredients of *Brahmi Ghrita* are *Brahmi*, *Vacha*, *Kushtha*, *Shankhapuspi* and *Purana Ghrita*.

Bhrahmi^[12]

Latin Name: *Centella Asiatica*

Family: *Umbelliferae*

Parts used: Whole Plant (*Panchanga*)

Ayurveda Properties

Rasa: Tikta, Kashaya

Virya: Sheeta

Vipaka: Madhura

Doshaghnata: Kapha- Pitta vishesh Tridosha.

Prabhava: Medhya^[13]

Vacha^[14]

Latin Name: Acorus Calamus

Family : Araceae

Parts Used: Root

Ayurveda Properties

Rasa: Katu, Tikta

Virya: Ushna

Vipaka: Katu

Doshaghnata: Vata, Kapha

Prabhava: Medhya^[15]

Kushtha^[16]

Latin Name: Saussurea Lappa

Family: Compositeae

Parts used: Root

Ayurveda Properties

Rasa: Katu, Tikta

Virya: Ushna

Vipaka: Katu

Doshaghnata: Vata, Kapha

Prabhava: Medhya

Shankhapuspi^[17]

Latin Name: Convolvulus pluricaulis chois.

Family: Convolvulaceae

Parts used: Whole Plant (*Panchanga*)

Ayurveda Properties

Rasa: Tikta

Guna: Snigdha, Pichhila

Virya: Sheeta

Vipaka: Madhura

Doshaghnata: Tridosha

Prabhava: Medhya^[18]

Purana Ghrita^[19]

English Name: Ghee.

Ayurveda Properties

Rasa: Madhura

Guna: Guru, Snigdha, Pichhila

Virya: Sheeta

Vipaka: Madhura

Doshaghnata: Vata, Kapha

Prabhava: Medhya, Manasrogahara^[20]

Aim

- To prevent the neurodegenerative disorder: Huntington disease with the Ayurveda therapy: *Brahmi Ghrita Nasya*.

Objects

- To understand the neurodegenerative disorder as per Ayurveda and modern aspect.
- To understand the Huntington disease as per Ayurveda and modern aspect.
- To prove the preventive effect of *Brahmi Ghrita Nasya* in Huntington disease.

MATERIALS AND METHODS

A. Materials

- **Conceptual Material:** For the conceptual review, the material is collected from the various sources including Ayurveda *Samhita*, classical text, published article in international/ national journals, magazines, internet etc.

B. Methods: *Brahmi Ghrita Nasya* may be performed as per the following method.

- Drug: *Brahmi Ghrita*
- Drug administration route: *Nasya*
- Dose: 8 drops in each nostril every day.

- Duration: It can be performed for cycle of one, two or three weeks and after the gape of few days again the cycle can be repeated.^[21]
- Time: Empty stomach in the morning.
- *Nashya karma*: It is performed as per the classical method described in Ayurveda.^[22]
- Preparation: The *Brahmi Ghrita* prepared as per the method of *Ghrita* preparation described in *Shadangadhara Samhita*.^[23]

DISCUSSION

Selection of *Brahmi Ghrita*: On the basis of the symptoms of the Huntington disease, it can be said that there is involvement of *Prana vayu* and *Tarpaka kapha* in its pathology. Therefore, that kind of medicine selected for the prevention of Huntington disease which have *Medhya* effect. It can be accomplished by *Brahmi Ghrita*, which is advised in *Sahastrayogam* for its *Medhya* effect.^[24]

Selection of *Nasya* as a root of administration of medicine: It is said in the Ayurveda classics that if the pathology is in the *Urdhvajatru*, the root of administration of the medicine should be *Nasya*,^[25] because nose is root of head.^[26] In the neurodegenerative disorder including HD, the pathology of neuron death is happened in the Brain.^[27] Therefore *Shamana* type of *Nasya* is chosen for the administration of the *Brahmi Ghrita*, so it can reach to direct target organ.

CONCLUSION

Based on this review article, it can be recommended that *Brahmi Ghrita Nasya* is having potency to prevent the neurodegenerative disorder: Huntington disease.

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