



A CASE STUDY ON AYURVEDIC MANAGEMENT OF CEREBRAL ATROPHY

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ABSTRACT

Cerebral atrophy refers to the progressive loss of brain cells over time. It can happen in either the entire brain or in just one part of the brain and can lead to decreased brain mass and loss of neurological function. Treatment for cerebral atrophy focuses on treating the symptoms and complications of the disease. Ayurveda can provide a more comprehensive approach to this disease and also improve the quality of life of the patient. Present article focuses on a case diagnosed with cerebral atrophy in a young male subject who was effectively treated with ayurvedic therapeutic modalities like abhyanga & sweda, shirobasti and rajayapana basti. Positive result was achieved in the post treatment status of the patient.

KEYWORDS- Cerebral atrophy, Abhyanga, Shirobasti, Rajayapana basti.

INTRODUCTION

Cerebral atrophy refers to the progressive loss of brain cells over time. It can happen in either the entire brain or in just one part of the brain and can lead to decreased brain mass and loss of neurological function. The symptoms of cerebral atrophy depend on the cause and location of cell death.^[1] Rather than being a primary diagnosis, it is the common endpoint for range disease processes that affect the central nervous system. Though often no identifiable cause is found, certain patterns of atrophy can be helpful in certain clinical scenarios, most notably in neurodegenerative diseases.^[2]

There are a variety of causes of cerebral atrophy. It may be the consequence of a progressive neurological disease, brain damage, infection or be present at birth. Symptoms of cerebral atrophy include dementia, seizures, loss of motor control, and difficulty with speaking, comprehension or reading. Dementia, which is marked by memory loss and an inability to perform daily activities, may be mild or severe and may worsen with increasing atrophy. Seizures can range from absence seizures (sudden loss of responsiveness) to convulsive seizures. Depending on the underlying cause, cerebral atrophy may progress very slowly or very rapidly.

Cerebral atrophy is life threatening, and there is no known cure in contemporary medical system. Treatment for cerebral atrophy focuses on treating the symptoms and complications of the disease.^[3] Hence Ayurveda can provide a more comprehensive approach to this disease and also improve the quality of life of the patient.

According to Ayurveda, cerebral atrophy is caused due to disruption in the vata dosha, which controls the motor and sensory activities in the body. Since it is a degenerative neurological condition, Ayurvedic preview for cerebral atrophy would be “dhatukshayaja vatavyadhi”. Below is a cerebral atrophy case treated effectively with ayurvedic protocol.

CASE REPORT

Male patient aged 29 years approached to OPD of SDM Institute of Ayurveda and hospital, Bangalore with the chief complaints of gradual onset of imbalance and loss of coordination, slurring of speech, a sense of reduced strength and blurred vision since 2 years. Patient also had history of epilepsy with onset of seizures one year back. Patient had consulted neurologist and had undergone MRI brain (plain) which was suggestive of diffuse cerebral atrophy. He was advised tab levipil 500 mg 1OD. Since the administration of tab levipil, patient did not experience any symptoms of epilepsy. But rest of the above mentioned complaints persisted and hence he approached the hospital.

On examination, all the vitals were within normal limit. Patient was conscious and oriented with intact memory. There was motor dysphasia. Cranial nerve functions were normal. Power in the upper B/L extremities was 5/5 whereas in the lower it was 4/5; coordination was affected in both upper and lower extremities.

Assessing the subject on Ayurvedic parameters revealed him of vata kapha prakruthi (constitution) with madhyama samhanana (medium build) and normal

Jatharāgni (appetite). Dosha involved was primarily prana and vyana vata with involvement of majjavaha srotas.

INTERVENTION

Patient was advised with Ajamodadi churna 5 gm BD with warm water B/F orally for 3 days on OPD basis. On admission patient underwent shirobasti with dhanwantara

taila + ksheera bala taila for 10 days along with sarvanga abhyanga and bashpa sweda with balashwagandhadi taila. Following this patient was advised mustadi rajayapana basti in the yogabasti pattern. Abhyanga and sweda was continued along with basti. Additional balance exercises were given to the patients under the supervision of physiotherapist. Tab levipil was discontinued with the start of ayurvedic intervention.

Table 1: Showing the details of Rajayapana basti (*A- anuvasana basti, N- niruha basti)

Number of basti	1	2	3	4	5	6	7	8
Type of basti	A	N	A	N	A	N	A	A

During the time of discharge, patient was prescribed with kalyanaka grutha 1 tsf HS a/f with milk along with tab mahavata vidhwamsa rasa 1BD B/F, saraswatharista 3tsf TID A/F for two months. Avarita ksheera bala 101 was prescribed for pratimarsha nasya in the dosage of 2 drops to each nostril daily in empty stomach.

RESULTS

On follow up visit, patient showed marked improvement in speech. There was improvement in the balance also. Power of the patient still remained 4/5 in lower extremities. But there was significant improvement in the quality of life of the patient and no fresh episodes of seizures was reported.

DISCUSSION

Cerebral atrophy is a neuro degenerative disorder and dhatu kshaya (degeneration) can be considered as its prime pathology. Considering that prana and vyana vata are deranged, therapies and medicines to counter act on the same was administered to the patient. With the above mentioned intention, patient was given abhyanga and sweda with balashwagandhadi taila. This oil is known to improve the strength of the patient and is well know formulation for degenerative diseases of vata dosha.^[4]

Head is the seat for pranavayu and shiro basti has a tremendous effect in controlling this dosha. In shirobasti, oil poured over head is absorbed transversally into the scalp through the roots of hairs. In the loose areolar tissue of scalp, emissary veins are present. These are valve less and connect the superficial veins of the scalp with the diploic veins of the skull bones and with the intracranial sinuses. This might be the route of absorption of the shiro basti oil.^[5]

Mustadi rajayapana basti has balya (strengthening) and rasayana (rejuvenation) and dhatu vridhikara (strengthening dhatus) properties.^[6] The gastrointestinal system has a network of nerve fibers, which is known as 'Enteric nervous system (ENS). The ENS has extensive, two-way, connections with the central nervous system (CNS), and works in concert with the CNS to control the digestive system in the context of local and whole body physiological demands. Because of its extent and its degree of autonomy, the ENS has been referred to as a second brain.^[7] Stimulation with basti (either by chemo

or mechano receptors) may lead to activation of concerned part of CNS.^[8] One of the oil used for the procedure, dhanwantara taila contains mostly vata specifying drugs and is known to increase the strength.^[9]

The other formulation ksheerabala taila has a specific indication for all varieties of vata disorders and the key ingredient being bala (*Sida Cordifolia*) which promotes strength.^[10]

Kalyanaka grutha which was prescribed for oral intake is indicated in apasmara (epilepsy) and gadgada (speech abnormality) and hence was advised to this patient.^[11]

Here kalyanaka grutha is used as a brumhana snehapana (strengthening variety of snehapana) and is prescribed to be taken at night as indicated for neurological disorders^[12] avarita ksheera bala taila is advised here as it has specific indication for diseases of vata dosha and speech abnormalities.^[13] Administration of saraswatharista was done based on its indication for disorders of vata. It is also known to improve the strength and voice of an individual.^[14] Mahavata vidhwamsa rasa too pacifies vata dosha and is indicated in apasmara.^[15]

With the administration of drugs specifically targeting the degenerative pathology of cerebral atrophy, patient found relief in the subjective symptoms. There was significant reduction noted in complaints of imbalance and dysphasia. No episodes of seizures were noted even after discontinuing Tab Levipil.

CONCLUSION

In summary, the present study is a preliminary report of the subjective evaluation of the efficacy of Ayurvedic therapy in cerebral atrophy. The results are encouraging and warrant further structured studies to objectively assess the efficacy of different modalities of Ayurvedic treatment in cerebral atrophy where till date contemporary medicines do not have much to offer.

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