ISSN 2456-3110
Vol 5 · Issue 2
Mar-Apr 2020

Journal of Ayurveda and Integrated Medical Sciences

www.jaims.in

JAIMS

An International Journal for Researches in Ayurveda and Allied Sciences

Charaka Publications

Indexed

Journal of
Ayurveda and Integrated Medical Sciences
ISSN 2456-3110
CASE REPORT Mar-Apr 2020

Dementia associated with seizure disorder - A Case Report

Anagha P[1], Jithesh Madhavan[2], Vinod R[3], Aparna PM[4]

[1]Post Graduate Scholar, [2]Professor and Head, [3]Associate Professor, Department of Kayachikitsa and PG Studies in Manasroga. VPSV Ayurveda College, Kottakkal, [4]Specialist Manasika Medical Officer, Government Ayurveda Research Institute for Mental Diseases, Kottakkal, Kerala, INDIA.

ABSTRACT

Dementia is the loss of cognitive functioning including thinking, remembering, reasoning and behavioral abilities to such an extent that it interferes with a person's daily life and activities. These functions include memory, language skills, visual perception, problem solving, self-management, and the ability to focus and pay attention. Several people with dementia cannot control their emotions, and their personalities may change. Dementia ranges in severity from the mildest stage, when it is just beginning to affect a person's functioning, to the most severe stage, when the person depends completely on others for their basic activities of living. This condition is to be discussed under the condition of *Unmada* in Ayurvedic classics for the reason that it starts as *Smriti Vibrama* and ends in the eight types of *Vibrama*s observed in *Unmada*. A 52 year old female patient hailing from Odisha was admitted in the IPD of our institute in the month of June 2019. She presented with complaints of not able to remember things, crying without any cause and rigidity in both upper and lower limbs with difficulty in walking. She was completely dependent to her family. She had history of repeated absent mindedness followed by a jerky awakeness and was later diagnosed to have absence seizures. The case was diagnosed as *Unmada* considering the status of *Dosha* and the disease condition. Considering the manifestations, the principles of management of *Apasmara* was also incorporated while managing. A protocol with *Siropichu*, *Udwartana*, *Patrapodala Sweda* followed by *Snehapana*, *Snehavasthi* and *Nasya* were administered accordingly. Considering the progressive nature of disease, *Rasayanas* were also prescribed after the *Sodhana* therapy.

Key words: *Dementia, Seizure, Unmada, Apasmara, Sodhana, Rasayana.*

INTRODUCTION

Latin origin of the word dementia suggests, a departure from previous mental functioning.[1] Dementia is one of the major causes of disability and dependency among older people worldwide. It is a syndrome with progressive nature in which there is deterioration in cognitive function beyond what might be expected from normal ageing.[2] It affects memory, thinking, orientation, comprehension, calculation, learning capacity, language and judgment.[3] While dementia is more common as people grow older (up to half of all people aged 85 or above may have some form of dementia), it is not a part of normal ageing.[4]

In the year 2010, there were an estimated 35.6 million people with Alzheimer's disease and other dementias worldwide, according to the World Alzheimer Report published in 2009. This number will increase with an ageing world population and will reach almost 66 million by the year 2030 and 115 million by 2050.[5]

The causes of dementia vary depending on the types of brain changes that takes place in the individual.

Address for correspondence:
Dr. Jithesh Madhavan
Professor and Head, Department of Kayachikitsa and PG Studies in Manasroga. VPSV Ayurveda College, Kottakkal, Kerala, INDIA.
E-mail: drjitheshm@gmail.com

Submission Date: 09/03/2020 Accepted Date: 15/04/2020

Access this article online

Quick Response Code

Website: www.jaims.in

Published by Maharshi Charaka Ayurveda Organization, Vijayapur, Karnataka (Regd) under the license CC-by-NC-SA

ISSN: 2456-3110 CASE REPORT Mar-Apr 2020

Alzheimer's dementia is the most common cause of dementia in older adults. Other dementias include lewy body dementia, fronto-temporal dementia and vascular dementia. It is common for people to have mixed dementia - a combination of two or more types of dementia.[6]

In Ayurveda, psychiatric disorders are explained under *Unmaada*, *Apasmara* and *Bhootagraha*. *Unmada* is the disorder in which *Vibrama*s or distortion of *Manas, Budhi, Samnja* (consciousness), *Smrithi, Bhakti* (desire), *Sheela* (manner), *Chesta* (behavior) and *Achara* (conduct) are manifested.[7] *Smriti Vibramsa* is the initial symptom in any type of dementia. As the disease progresses the other seven *Vibramas* are also gradually manifested.

Available management in modern medicine is effective in reducing a few aspects of cognitive decline, but they are reported not to greatly influence the course of the disease. Ayurvedic approach helps to slow down the progression of disease and also improves the quality of life in those affected with dementia. In the management of *Unmada*, the individual should be managed with *Sneha* and *Sweda* followed by *Sodhana* therapies such as *Vamana*, *Virechana* and *Nasya*, depending on the condition of the individual. A known case of dementia with cortical dysplasia and seizure disorder managed with selected Ayurvedic modalities in the context of *Unmada* and *Apasmara* is being discussed here.

Clinical Profile

A 52 year old female patient, a primary school teacher from Odisha was admitted in the IPD of Government Ayurveda Research Institute for Mental Health in the month of June 2019. She was complaining of difficulty in remembering things, emotional instability, rigidity in all four limbs more on right upper limb and disturbances in sleep. Also she had jerking movements in all the limbs more on upper limbs, walking difficulty and bowel movements were irregular. By then, she was completely dependent on the family for her daily activities and she became very lean due to less food intake, since several years. There was no history of any known psychiatric illness in her family.

History of the present illness

While detailing the history, it was noticed that she was a known case of childhood seizures since four years of her age, but was not undergoing any continuous medications for the same. She had an insidious onset of memory disturbances since 2008, first observed by the family members in the form of misplacing things and would take considerable quantity of time searching for the same. She would forget to put salt or spices into the food while cooking. She would every now and then forget that she has kept milk on the gas stove, only to switch it off after having the smell of burning milk. These incidences became frequent over a period of time. Since 2011 she became more apathetic, showing loss of interest in day to day activities, family conversations and was sitting idly. She would go to school and will not take classes or forget to take classes but happened to do so, if reminded. But over a period of time, she was forgetting to make preparations and the subjects expected to be taught by her. She had taken Voluntary retirement scheme due to the resultant events. She would not even cook properly by herself.

Meanwhile, socially she became withdrawn since 2011, would not greet anyone in functions, and was not interested to talk, if somebody tries to talks with her. She started having naming defects but would recollect the names, if reminded by someone. She developed slowness of gait and activities since 2011. Since 2015, gradually she became dependent on family members for activities of daily living. She would go to bathroom and come back without recognising what to do. If asked to bring a glass of water she would go to kitchen and return empty handed or brings something else, instead of water. She had to be fed because she would not indicate her need for food and was clueless how to make use of a spoon for eating. She would also wake up early morning by 3- 4 am and would not go back to sleep.

ISSN: 2456-3110 CASE REPORT Mar-Apr 2020

Since 1 year, her walking had become slower and hands were having a tilt to the right. She would keep on murmuring by herself. She would watch TV but she does not understand the content of the programme. When asked questions, she was responding in an irrelevant manner. Since 8 months, she had irregular jerky movements in right upper limb more than lower limb. Since 2018, she had undergone treatment from National Institute of Mental Health and Neuro Sciences. But the symptoms were of progressive in nature. At present, she had disturbances in sleep, emotional instability and also chronic constipation.

Past medical history

Last attack of seizures occurred in August 2018 following the stoppage of levitracetam. She was under levipil 500 mg and tab fluoxetine 20mg.

Clinical findings: Vitals

Pulse : 70/min

Heart rate : 71bpm

BP : 110/70mmHg

Respiratory rate: 18/min

Mental status examination

Patient was lean in appearance, eye contact was not maintained and rapport was not established. Speech was not clear, she murmurs quite often. She can't understand anything. Mood swings were also present. Thought and perception can't be assessed. Patient was conscious. Orientation to time, place, and person was impaired. She had impaired attention and concentration. Her ability for abstract thinking and judgment was also impaired. Insight was of grade 1 and her Mini Mental Status Examination score was 0/30.

Systemic examination

Patient was confused and can't follow the commands for examining the cranial nerves and couldn't recognize her right and left. Jaw jerk was normal. Bradykinesia was also present. She walked with short steps with tilt to right and swinging arms. Muscle wasting was also observed which was bilaterally symmetrical. Muscle tone was of grade 2 on the upper limb, rigidity was present at the end of the movement. Reflexes were exaggerated on left side with Grade 3+.

Dasavidha Pareeksha

Sareera Prakriti was of *Kaphavata* and *Manasa Prakriti* was of *Tamasa* type. The *Dosha* involved was *Vata*. She belongs to *Jangala Desa* and *Kaala* was *Sisira*. Her *Satva Bala* was of *Avara* in nature. *Jarana Sakthi* and *Abhyaharana Sakthi* was also *Avara*. *Srotas* involved were *Rasavaha, Manovaha* and *Samnjavaha Srotus.*

Investigations

MRI report dated 25/02/2019 revealed as transmantle cortical dysplasia. Findings were suggestive of Focal cortical dysplasia involving the left frontal lobe with associated periventricular nodular heterotropia.

MR PET - Brain dated 19/02/2019 - The pattern of MR findings suggests an advanced dementia in terms of extensive atrophy. Overlapping features of FTD and AD were noted

Based on these findings, the case was diagnosed from NIMHANS, as transmantle cortical dysplasia with seizure disorder and dementia, overlapping features of AD and FTD were noted. Levipil 500mg and fluoxetine 20mg once daily were continued since last February.

Table 1: Management Protocol

Procedure	Days	Medicine	Rationale
Siro Pichu	3 days	Dhanwantara Taila[8]	*Vatahara*
Udwartana	7 days	Kulatha Churna	*Rookshana*
Patrapotala Sweda	3 days	Dhanwantara Taila	*Vatahara*
Udwartana and *Abhyanga*	Alternate 6 days	Kolakulatha Churna[9] Dhanwantara	*Vatakaphahara* Stimulation of body

ISSN: 2456-3110 CASE REPORT Mar-Apr 2020

		Taila	
Rukshana	2 days	Shadharana[10] Tab 2- 0-2 Pippalyasava[11] 25ml Bd Ashtachurna[12] 5gmbd	*Rukshana* before *Snehapana* *Agni Deepana*
Snehapana	7 days	Panchagavya Ghrita[13]	*Kaphapradhana Tridosahara, Srotosodhana, Apasmarahara*
Abhyanga & Ooshma Sweda	3 days	Dhanwantara Taila	*Vata Samana*
Snehavasthi	2 days	Pippalyadi Anuvasana[14]	*Vata Anulomana*
	3 days	Panchagavya Ghrita	*Kaphapradhana Tridosahara*
Nasya	7 days	Dhanwantara Taila 41 Avarthi	*Vatahara, Brimhana,*
Rasayana		Sankupushpi Churna[15]	*Medhya*
Siropichu	3 days	Ksheerabala Taila[16]	*Vatahara, Indriyaprasadana*

Condition on discharge

She was able to walk a few distances without support, right side rigidity had decreased, there was improvement in sleep, unsatisfactory bowel movements improved occasionally, slight improvement in food intake and frequency of crying had reduced. She tried to understand the given commands.

Discharge medicines

- *Churna* of *Sarpaganda* + *Swethasankupushpi* + *Gokshura* - 10gm twice daily with lukewarm water after food.
- *Churna* of *Swetha Sankupushpi* + *Yashti* + *Vacha* – ½ teaspoon twice daily with milk after food.
- *Panchagavya Ghrita* 1 teaspoon on empty stomach.
- *Somalatha Churna* 1 teaspoon with lukewarm water after food at bedtime.
- *Sankupushpi Taila* for application on head.

Table 2: Condition on follow-up

Period	Changes noticed	Medicines advised
After 2 months	She was expressing her emotions, rigidity in right hand was reduced, sleep and appetite improved. Difficulty in walking, rigidity in lower limbs increased, she can't keep her legs straight in the night.	*Ashtavarga Kwatha*[17] 15 ml twice daily before food *Ksheerabala* (101) 10 drops with *Kasaya*, *Abhyanaga* with *Dhanwantara Taila,* *Panchagavya Ghrita* 5ml at morning.
After 4 months	Legs were kept straight at the time of sleep, rigidity of lower limbs decreased.	Continued the same medicines
December	Jerking movements were totally relieved. She was trying to speak more, was emotionally stable.	Continued the same medicines

Discussion

Focal cortical dysplasia (FCD) is a congenital abnormality of brain development where the neurons in an area of the brain failed to migrate in the proper formation in utero. Focal cortical dysplasia is a common cause of intractable epilepsy in children and is a frequent cause of epilepsy in adults. No specific

ISSN: 2456-3110 CASE REPORT Mar-Apr 2020

treatment is required for cortical dysplasia, and all management is aimed at the improvement in resulting symptoms (typically seizures). When a cortical dysplasia is the cause of epilepsy, anticonvulsants are the first line treatment. If anticonvulsants fail to control seizure activity, neurosurgery is kept as an option to remove or disconnect the abnormal cells from the rest of the brain (depending on where the cortical dysplasia is located and the safety of the surgery relative to the continued seizures).[18]

Dementia

Dementia describes a clinical syndrome that includes difficulties in memory, language and behavior that leads to impairments in activities of daily living. It definitely affects the quality of life of the affected subjects. Consciousness may not be impaired. Dementia produces an appreciable decline in intellectual functioning and usually some interference with personal activities of daily living such as washing, dressing, eating, personal hygiene, excretory and toilet activities.

This condition was categorized under *Unmaada* because all the eight *Vibhramas* were observed in the subject. It was started as *Smriti Vibrama* then it progressed gradually to all the eight *Vibramas*. So the management principles of *Unmaada* as mentioned in classics, were adopted. Vitiation of *Vata* was addressed initially. Here *Vata Kopa* is resulting due to *Dhatukshaya* and also *Avarana* by *Kapha* in the pathogenesis.

Pichu was done on *Siras* to address *Vata* but patient was having shivering, so *Pichu* was stopped inferred as *Anupasaya*. *Udwartana* with *Kulatha Churna* was done for 7 days, so as to address *Avrutha Vata,* resulting from *Kapha*.[19] After *Udwartana*, the rigidity of limbs was reduced. Then *Patrapodala Sweda* was advised, but the condition was worsened. So the treatment was shifted to *Rookshana* as *Udwartana* and *Snehana* as *Abhyanga* on alternate days to address the *Vata* and *Kapha* together. After completing these treatments rigidity of right upper limb decreased, improvement in gait and sleep was observed.

Internal medicines as *Deepana*, *Pachana* were administered for the first five days. Then *Ajamoda Arka* was prescribed because it is *Srotosodhaka* and *Agni Deepana* in nature. *Mahakalyanaka Ghrita* and *Abhraka Bhasma* capsule were also administered. Before *Snehapana*, *Rookshana Karma* was planned with *Shadharana* tablet and *Ashta Churna* internally.

After the *Rookshana* was attained, *Snehapana* was conducted with *Panchagavya Ghrita* because it has effect in both seizure disorder and enhances cognitive functions. After *Sweda Karma*, *Virechana* with *Avipatikara Churna* 25 gram was performed. For attaining *Vataanulomana*, *Snehavasthi* with *Pippalyadi Anuvasana Taila* was done for 2 days followed by *Panchagavya Ghrita* for 3 days. *Nasya* was done with *Dhanwantara Taila* at a dose of 2ml for 7 days as it is *Vatahara* and *Brimhana*.

This was followed by *Rasayana* therapy which offers longevity, memory and good health. Among the *Medhya Rasyanas, Sankupushpi* is mentioned as the best for enhancing *Medha*, hence *Sankupushpi Rasayana* was selected, as there was reported clinical efficacy. The starting dose of 3gm was increased by 2gm daily upto 16gm per day and then reduced by 2gm daily to the initial dose of 3gm. After the *Rasayana* therapy, *Siropichu* was done for 3 days with *Ksheerabala Taila* which has *Indriya Prasadana* and *Vata Samana* property.

CONCLUSION

Dementia is a major global health problem; in the absence of a cure there is increasing focus on risk reduction, timely diagnosis, and early intervention. This gives burden to patient as well as the family. It affects memory, thinking, orientation, comprehension, calculation, learning capacity, language and judgment. Because the global population is rapidly ageing, dementia has become a global concern.[20] Any improvement in dementia, is being appreciated by the subject as well as the family and even society. Ayurvedic management principles

ISSN: 2456-3110 **CASE REPORT** Mar-Apr 2020

from the context of *Unmaada* as well as *Apasmara* are to be incorporated on a conditional basis for the management of such conditions of dementia and associated illness, with *Sodhana* and *Samana* aspects followed by *Rasayana*. The case showed promising results and there is scope of further studies in this regard.

REFERENCES

1. "Dementia". Medline Plus. U.S. National Library of Medicine. 14 May 2015. Archived from the original on 12 May 2015. Retrieved 6 August 2018. Dementia also called: Senility Cunningham EL, Mc Guinness B, Herron B, Passmore AP. Dementia. Ulster Med J. 2015; 84 (2):79–87.
2. Hales, Robert E. (2008). The American Psychiatric Publishing Textbook of Psychiatry. American Psychiatric Pub. p. 311. ISBN 978-1-58562-257-3. Archived from the original on 2017-09-08.https://www.nia.nih.gov › health › what-dementia-symptoms-types-and-diagnosis
3. Rafii MS, Aisen PS (February 2009). "Recent developments in Alzheimer's disease therapeutics". BMC Medicine. **7**: 7. doi:10.1186/1741-7015-7-7. PMC 2649159. PMID 1922837
4. Lleó A, Greenberg SM, Growdon JH (2006). "Current pharmacotherapy for Alzheimer's disease". Annual Review of Medicine. **57** (1): 513–33
5. Charaka Samhita, Nidanasthana, Sharma RK, (trans) (eng),Varanasi: Chaukambha Orientalia; vol II; 2015; p 89:7/5
6. Vagbhata's Astangahrdaya, Chikitsa stana, Murthy Srikantha KR, (trans.) (eng.),Varanasi: Chowkhamba Krishnadas academy; vol 2; 2010; 511: 21/73-81
7. Charaka Samhita, Sutrasthana, Sharma RK, (trans) (eng), Varanasi: Chaukambha Orientalia; vol 1; Ed.6; 2000; p 21;2/18
8. Vridha Vaghbata, Ashtanga Sangraha, Chikitsa – Kalpa sthana, Rao Pandit DV, (trans.) (eng.), CCRAS, NewDelhi; vol 2; 1998; 215:21/42
9. Sarngadhara Samhita, madhyama khanda, Murthy Srikantha KR, (trans.) (eng.),Varanasi: Chowkhamba Krishnadas academy; 2006; 139: 10/28-33
10. Vagbhata's Astanga hrdaya, Chikitsa stana, Murthy Srikantha KR, (trans.) (eng.),Varanasi: Chowkhamba Krishnadas academy; vol 2; 2010; 406:14/35
11. Vagbhata's Astanga hrdaya, Uttara stana, Murthy Srikantha KR, (trans.) (eng.),Varanasi: Chowkhamba Krishnadas academy; vol 3; 2008; 70: 7/18-19
12. Vagbhata's Astanga hrdaya, Chikitsa stana, Murthy Srikantha KR, (trans.) (eng.),Varanasi: Chowkhamba Krishnadas academy; vol 2; 2010; 320: 8/88-89
13. Vagbhata's Astanga hrdaya, Uttara stana, Murthy Srikantha KR, (trans.) (eng.),Varanasi: Chowkhamba Krishnadas academy; vol 3; 2008; 388: 39/44-45
14. Vagbhata's Astanga hrdaya, Chikitsa stana, Murthy Srikantha KR, (trans.) (eng.),Varanasi: Chowkhamba Krishnadas academy; vol 2; 2010; 521: 22/45-46
15. Sahasrayoga, sujanapriya vykhyana, pilla Gopalan S,2011; 78: 25/2
16. Schofield P (2005). "Dementia associated with toxic causes and autoimmune disease". International Psychogeriatrics (Review). 17 Suppl 1: S129–47.
17. Vagbhata's Astangahrdaya, Chikitsa stana, Murthy Srikantha KR, (trans.) (eng.),Varanasi: Chowkhamba Krishnadas academy; vol 2; 2010; 521: 22/49
18. Robinson Louise, Tang Eugene, Taylor John-Paul. Dementia: timely diagnosis and early intervention BMJ 2015; 350 :h3029
19. Raina P, Santaguida P, Ismaila A, Patterson C, Cowan D, Levine M, et al. (March 2008). "Effectiveness of cholinesterase inhibitors and memantine for treating dementia: evidence review for a clinical practice guideline". Annals of Internal Medicine. 148 (5): 379–97
20. Seitz DP, Adunuri N, Gill SS, Gruneir A, Herrmann N, Rochon P (February 2011). "Antidepressants for agitation and psychosis in dementia". The Cochrane Database of Systematic Reviews (2): CD008191

How to cite this article: Anagha P, Jithesh Madhavan, Vinod R, Aparna PM. Dementia associated with seizure disorder - A Case Report. J Ayurveda Integr Med Sci 2020;2:282-287.

Source of Support: Nil, **Conflict of Interest:** None declared.

****