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CASE REPORT

Holistic Approach Toward Senile Dementia with *Ayurveda* – A Case Report

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Abstract

Neurological problems are a burning issue in today's Era. The brain is that vital organ which makes humans unique from other living beings. It is the site of all the intellectual powers humans have. Memory is an important aspect of this intellectual property. It gives us protection from harmful things. Here is a case of mild cognitive impairment. The patient, 68 years old came with his son to OPD with loss of memory for 2 years. He used to forget his meals, and juices from taking on time. He used to forget the flame of burners. He used to repeat the same phrases after a fraction of the time. The patient had taken many medicines, but the condition got worse. He felt sleepy and drowsy all day. The patient was well-oriented to time and place. The Mini-mental scale examination score of this patient was 22. This patient was treated with a holistic approach. Holistic means to treat all aspects of the patient. The patient was advised to take internal medicine (*Shatavari Ghanavati*), meditation, counselling, and diet. The internal medication was given for three months. Counselling was done every fortnight. The patient was advised to do meditation on a daily basis. Some food regimes were advised to the patient. Then after the complete course of medicine. The Mini-mental scale examination was performed, and the score was 25 which was satisfactory for that patient. The herbal medicine along with other aspects of surviving healthy life helped this patient to live normally.

Keywords: Holistic Approach, Mild Cognitive Impairment, Mini Mental Scale Examination, *Shatavari Ghanavati*

1. Introduction

The meaning of the holistic approach is to provide treatment in all aspects, not particularly mental health. The Holistic approach includes intellectual, physical, emotional, and spiritual treatment modalities[1]. *Ayurveda* is a holistic science which provides upbringing from all sides of an individual. Mental disorders can be tackled with *Ayurveda*.

Senility is a phase of life in which there is embracing old age[2]. In senility, all the normal functions get deteriorated. There are various types of disorders which come with the process of ageing. Sleep disorders, falls, osteoporosis, undernutrition, delirium, dementia, benign prostate hypertrophy, sensory loss, and urinary incontinence are the various problems faced by old age individuals[3]. The most terrible one is dementia. The prevalence rate of dementia is 0.49% in India[4]. It increases with age and is found to be 20% in the age above 80. Memory is the main component of intellectual power. It gives us the power to remember good and bad incidents. So that we can have a happy, safe and healthier life. But in senile dementia, this power gets diminished. This causes failure to take care of oneself and hazardous effects on personal social skills. Add to this, it is a challenging situation for caretakers. According to *Ayurveda*, an individual is healthy if he has *Sama Dosha* (equilibrium in bodily component), *Sama Agni* (equilibrium in digestive fire), *Sama Dhatu* (equilibrium in tissues), *Sama Malakriya* (equilibrium in excretion process), *Prasanna Atmendriya Manaha*

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(healthy soul, senses and mind). This means health also depends on the state of mind of an individual. In *Ayurveda*, there are various types of *Chikitsa* (treatments). *Trividha chikitsa* is one of them. It includes *Daivavyapashraya* (Faith therapy), *Yuktivyapashraya* (rational therapy) and *Satvavavjaya chikitsa* (psychotherapy)[5]. This *chikitsa prakar* (type of treatment) can be easily implemented in patients with mental disorders. In this case report we had a patient with mild cognitive impairment. The MMSE score of this patient was 22. He was treated with a holistic approach through *Ayurveda*. The patient was handled with internal medication, meditation, simple physical and mental exercises and counselling. This patient was advised to take *Shatavari ghanavati* 500 mg BD with lukewarm water for three months, meditation is advised to the patient. The counselling session is carried out once a fortnight. Simple physical and mental exercises were advised to the patient on a daily basis.

This treatment approach had a significant effect on the mental as well as physical health of that patient.

2. Case Report

An adult came to OPD of *Dirghayu ayurved chikitsalay* and *Panchakarma* Centre, Ramnagar, Wardha with his father 68 years on 8 October, 2021. He narrated the complaints of his father. He was having problem with memory loss for two years. He used to repeat the same phrases after a fraction of the time.

2.1 Family History

Mother – Mother had HTN and DM.
Father – no significant history found.
Siblings – no significant history found.

2.2 Past History

The patient was good a year ago. He was well-maintained on his regular drugs for Hypertension. Then he and his wife met with a car accident a year ago. He lost his wife in that accident. He just has small physical injuries. But it had a great impact on his mental health. The patient is a known case of HTN. He takes anti-hypertensive drugs daily.

2.3 Personal History

The patient was an engineer in the corporate sector for 33 years. His financial situation was upper middle class.

The patient has an addiction to tea, tobacco, betel nuts and alcohol occasionally.

Diet – Vegetarian, roadside spicy foods (samosa, kachori, idli, uttapam thrice a week), stale food was consumed daily, the timing of meals is not fixed. Dry food like snacks, chivda, farsan, and wafers was taken regularly as evening snacks.

Sleep – Disturbed sleep, sleeping hours are not fixed, most of the time wakes up at 2 am and then can't sleep.

Bowel – Constipation daily, poops two times a week with hard and lumpy stools.

2.4 Clinical Findings

The patient has loss of memory for one and a half years. He repeats the phrases continuously. He forgets small things in daily life. The patient was well-oriented to time

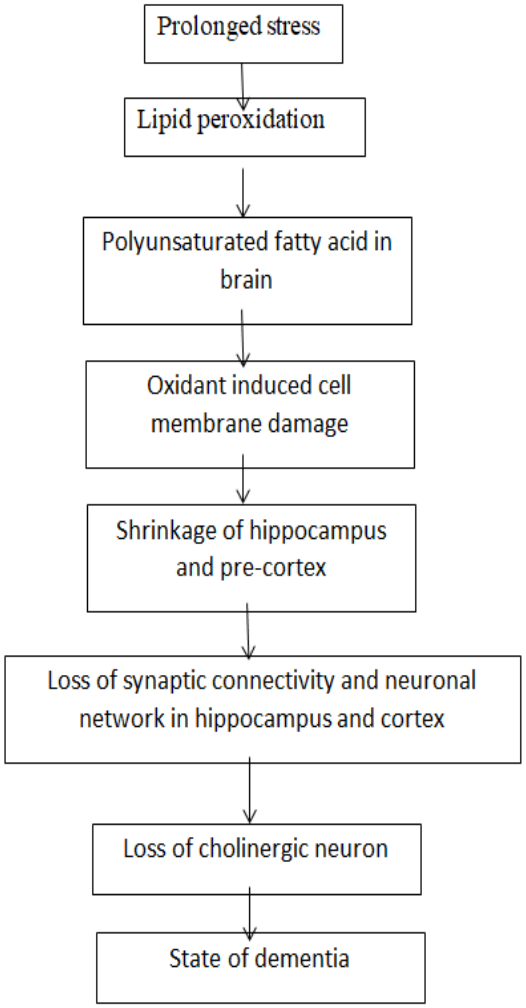

Figure 1. Pathophysiology of dementia.

and place. The patient can speak fluently but his son told his complaints as he was quite nervous at the time of the visit. Then after a couple of minutes, he spoke frankly about his problems.

2.5 General Examination

When the patient came to OPD, he was thoroughly examined, and complete history was taken.

Vitals – Temperature – 96.3°F, Pulse – 68 / min, Respiratory rate - 14 / min, Blood pressure – 160/80 mm of Hg.

Asthavidhaparisha (Eight vitals according to *Ayurveda*):
Nadi (Pulse) – 68/ min, *Sarpagati* (serpentine feeling)
Mutra (Urine) – *Prakrut* (Normal)
Mala (Stools) – Constipation
Jivha (Tongue) – *Sama*
Shabda (Speech) – Normal
Sparsha (touch) – Normal
Drik (Vision) – Normal with aspects
Akruti (Body) – *Madhyam*

Patient's Name: _____ Date: _____

Instructions: Score one point for each correct response within each question or activity.

Maximum Score	Patient's Score	Questions
5		"What is the year? Season? Date? Day? Month?"
5		"Where are we now? State? County? Town/city? Hospital? Floor?"
3		The examiner names three unrelated objects clearly and slowly, then the instructor asks the patient to name all three of them. The patient's response is used for scoring. The examiner repeats them until patient learns all of them, if possible.
5		"I would like you to count backward from 100 by sevens." (93, 86, 79, 72, 65, ...) Alternative: "Spell WORLD backwards." (D-L-R-O-W)
3		"Earlier I told you the names of three things. Can you tell me what those were?"
2		Show the patient two simple objects, such as a wristwatch and a pencil, and ask the patient to name them.
1		"Repeat the phrase: 'No ifs, ands, or buts.'"
3		"Take the paper in your right hand, fold it in half, and put it on the floor." (The examiner gives the patient a piece of blank paper.)
1		"Please read this and do what it says." (Written instruction is "Close your eyes.")
1		"Make up and write a sentence about anything." (This sentence must contain a noun and a verb.)
1		"Please copy this picture." (The examiner gives the patient a blank piece of paper and asks him/her to draw the symbol below. All 10 angles must be present and two must intersect.) 
30		TOTAL

Figure 2. Mini-Mental Scale Examination (MMSE).

Table 1. MMSE scale – response of the patient

Sr. no	Question	Maximum score	Patient's score
1)	1.	5	3
2)	2.	5	4
3)	3.	3	3
4)	4.	5	5
5)	5.	3	0
6)	6.	2	2
7)	7.	1	1
8)	8.	3	3
9)	9.	1	1
10)	10.	1	0
11)	11.	1	0
Total		30	22

2.6 Pathophysiology[6]

The flow chart Figure 1 explains the pathophysiology of dementia.

2.7 Diagnostic Assessment

Mini mental scale examination (MMSE)[7] scale was used to assess the patient's memory (Figure 2).

2.8 Interpretation

24 – 30 – No cognitive impairment
18 – 23 – Mild cognitive impairment
0 – 17 – Sever cognitive impairment

In this case, the patient scored 22 marks which shows that he has a mild cognitive impairment (Table 1).

2.9 Treatment

The treatment of internal medication and other supportive treatment are shown in Tables 2 and 3. Assessment of the MMSE is shown in Table 4.

Table 2. Internal medication

Type of treatment	Drug name	Dose	Administration time	Duration	*Anupana*
	Shatavari ghanavati	**500 mg**	**BD Before meal**	**3 months**	***Koshnajal***

Table 3. Other supportive treatment

1.	**Counselling sessions** **Person centered**	**Once in 15 days**
2.	**Meditation** Guided visual imaginary based	On daily basis
3.	**Diet – Satvik** Freshly prepared, Vegetarian, easily digestible, cereals	Regularly

Table 4. Assessment – MMSE scale[7]

Aspects	B. T	Course of treatment	T
ORIENTATION	07	Internal medication Counselling Meditation Diet	07
REGISTRATION	03		03
ATTENTION AND CALCULATION	05		05
RECALL	00		03
LANGUAGE	07		07
COPYING	00		00
TOTAL	22		25

The score of the patient before treatment was 22 and after the complete treatment, it came to 25 which means there is no cognitive impairment.

3. Discussion

In this case study, the history of impaired cognitive function started from a stressful event that occurred in the subject's life. He had lost his wife two years back in an accident and the disease condition propped up.

Stress has an effect on mental and physical health. In a study, it is found that stress induces memory impairment in subjects. Prolonged stress causes an increase in lipid peroxidation causing the release of reactive oxygen species (oxidative stress). This increase in free radical species causes an increase in nitric oxide production. The nitric oxide along with reactive oxygen species causes damage to the neurons which causes loss of connection between the neurons. This causes loss of cholinergic neurons causing a state of Dementia[6]. Shatavari is a well-known drug such as galactagogue. But there are various medicinal properties of *Shatavari*. According to *Ayurveda*, as age advances there is an increase in *Vata* component in the body. *Smritibhramsha* which is senile dementia is a neurological disorder which comes under *Vata* component vitiation[7]. *Shatavari* is *Madhur* (sweet) and *Tikta* (bitter) in taste. Its properties are *Snigdha* (oily) and *Guru* (heavy). These properties are exactly opposite to *Vata* properties[8].

Meditation is found effective in age-related senile dementia. It is found that the MMSE scale is widely used to assess memory in older individuals performing meditation. The patient was advised to perform guided visual imaginary-based meditation. In this type of meditation, the patient was advised to imagine peaceful places like mountains, chirping birds, God's idols etc. This helps to relieve stress. Along with this, the ageing brain and meditation are also reviewed in an article[9]. It is found that meditation can improve mood, relieve stress and improve cognitive functions in normal as well as diseased individuals. Hypothalamic pituitary adrenal axis control reaction to stress. It is connected with the network in the brain along with the hippocampus, amygdala and prefrontal cortex. Meditation increases the volume of the hippocampus and prefrontal cortex which shrink due to stress[10]. It can be correlated with *Daivayapashya chikitsa* (Faith therapy).

Counselling was done every fortnight for this patient. For this patient-centred counselling was done. Along with him, his son was also counselled as he was the caretaker. In *Ayurveda*, *Satvavjaya chikitsa* is described. It normalizes *manas dosha* (*Satva, Raja* and *Tama*). It lifts up the *Satva* of the patient[11]. In *Charak Samhita*, *Agrya samgraha* (superior components), It is depicted that '*Sadvachanam anushthayam*' which means good words from a noble person should be listened to for good state[12].

The patient was advised to take *Satvik* (pure) food regimes which give energy, positivity and vigour to that individual. *Satvik* food increases a state of calmness and harmony which increases spirituality. *Rajas* (passion, energy, and movement) *guna* (properties) food regimes that make the person more passionate and restless. *Tamas* (lethargy, darkness, and ignorance) *guna* (properties) also causes passionate and restless conditions. It drives an individual to darkness[13]. These all types of treatment helps as rejuvenator and antioxidant which are depicted in *Ayurveda*[14].

4. Conclusion

Senile dementia is very common. It can be encountered in mild as well as severe forms. The patient hesitates to communicate with the doctors in such a condition. But if it is treated in mild form it can be treated easily. In this patient, *Shatavari ghanavati* showed good effects due to its antioxidant and counter properties of *Vata* component. Along with this, counselling and meditation were advised to the patient. In this case, a holistic approach with internal medication, counselling, meditation and food regimes treated the patient with mild cognitive impairment successfully.

5. Consent

Consent was taken from the son of the patient for this treatment.

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