EUROPEAN JOURNAL OF BIOMEDICAL AND PHARMACEUTICAL SCIENCES
http://www.ejbps.com

ISSN 2349-8870
Volume: 6
Issue: 1
548-551
Year: 2019

MANAGEMENT OF AMYOTROPHIC LATERAL SCLEROSIS (ALS) WITH PANCHAKARMA THERAPIES AND SHAMANA DRUGS–A CASE REPORT

[1]*Dr. Kshiteeja Choudhary and [2]Dr. Gopesh Mangal

[1]PhD. Scholar, Dept. of Panchakarma, National Institute of Ayurveda, Jaipur.
[2]Assistant Professor & HOD (I/C), Dept. of Panchakarma, National Institute of Ayurveda, Jaipur.

***Corresponding Author: Dr. Kshiteeja Choudhary**
PhD. Scholar, Dept. of Panchakarma, National Institute of Ayurveda, Jaipur.

Article Received on 09/11/2018 **Article Revised on 29/11/2018** **Article Accepted on 19/12/2018**

ABSTRACT

Purpose- Amyotrophic lateral sclerosis (ALS) is a cluster of atypical neurological diseases that first and foremost involve the nerve cells (neurons) responsible for controlling voluntary muscle movements like talking, walking and chewing. The disease is progressive in nature, means the symptoms get worse over time. The prevalence of ALS is 6 per 100,000 of total population and the male to female ratio is 2:1. At present, there is no cure for ALS and not any effective treatment modality to stop the progress disease. **Method-** A female patient, aged about 40 years with the complaints of weakness in bilateral upper and lower limbs, difficulty in speech and swallowing and difficulty in daily work since 2 years was admitted in the *Panchakarma* Female ward. Complaints of patients progressively increased day by day. The Patient was treated with *Panchakarma* therapies like *Abhyanga* and *Swedana*, *Shasthishali Panda Sweda*, *Rajayapana Basti* in *Kala Basti* schedule, *Shirodhara*, *Vachachurna Lepa* and *Shamana* drugs. **Result-** After the course of *Panchakarma* therapies with *Shamana* drugs patient able to walk for long distance and doing daily work at home, swallowing is easier and improvement in speech. Marked improvement found in muscle power. **Conclusion-** *Panchakarma* therapies and *Ayurvedic Shamana* drugs are supportive, palliative, and multi-disciplinary treatment modality which is also Non-invasive ven and improves quality of life.

KEYWORDS: Amyotrophic Lateral Sclerosis, *Rajayapana Basti*, *Shirodhara.*

INTRODUCTION

Amyotrophic lateral sclerosis (ALS) is a lethal motor neuron disorder that is, characterized by progressive loss of the upper and lower motor neurons at the spinal or bulbar level.[1]

ALS is also known as Charcot disease and motor neuron disease (MND) as it is one of the five MNDs that affect motor neurons.[2] There are four other known MNDs: Primary lateral sclerosis (PLS), progressive muscular atrophy (PMA), progressive bulbar palsy (PBP), and pseudobulbar palsy. It is known as Lou Gehrig's disease or motor neuron disease.[3]

Most patients present as limb-onset ALS (70%), and the remaining ones present as bulbar-onset ALS, which usually manifests with dysarthria and/or dysphagia. Approximately, 10% of all ALS cases are familial, and the disease may be inherited in an autosomal-dominant, recessive, or X-linked way.[4]

According to *Ayurveda* there is no exact correlation of ALS but the sign and symptoms it is mainly *Vatika* disorder. *Vata* is the main *Dosha* of human body and it regulates the other two *Dosha*[5] and it also regulates all main function of body.[6] *Vata* action is much resemble with nervous system function, so symptoms of ALS resemble with vitiated *Vata* symptoms. ALS can be correlated with *Kapha Avrita Udana Vata*[7], *Kapha Avrita Vyan Vata*[8] especially and *Oja Vishrns.*[9] In the condition of *Avrana*, the treatment modality accorded to our *Achraya* is *Anaabhishyandi*, *Snigdha*, *Srotoshodhaka* drugs, *Kapha* and *Pitta Avirudha* (without affect homeostasis of *Kapha* and *Pitta*) and *Vatanulomana Chikitsa*[10] and *Yapana Basti.*[11]

CASE REPORT

This 40 years old female patient presented in the OPD of *Panchakarma* in National Institute of Ayurveda, Jaipur with the complaints of weakness in bilateral upper limbs and lower limbs, difficulty in speech and swallowing and difficulty in daily work since 2 years and stiffness in left lower limb since 15 days.

History of present illness

Patient was healthy 2 year back as per her own opinion, and then she felt weakness in both upper limbs and lower limbs which is increased day by day. She also felt some

disturbance in speech and voice became slurred and difficulty in swallowing and difficulty in daily work. Before 15 days she is also complaining of spasm in her left leg. She took allopathic medicine but not got relief now she came in Panchakarma OPD in National Institute Of Ayurveda, Jaipur for further treatment.

Family history: Not significant.
Past history: No relevant past history.

Examinations
General condition of patient was fair; appetite of the patient is normal. Bowel- irregular, mictuiration – Normal, Sleep – Sound, pallor & icterus – not present, cyanosis- not present, lymph nodes- not enlarged, tongue – Non coated, pulse rate- 80/min. On examination patient was fully oriented and responding to all commands. Higher function of patient was normal and Sensory reflexes were normal. CVS- S_1 and S_2 normal**.** Chest- bilateral chest clear and no added sound**.**

Examination of the *Rogi* (patient) according to *Ayurveda*

- *Prakriti: - Pitta-Kapha.*
- *Vaya: - Madhyama*
- *Bala: - Madhyama*
- *Agni: - Madhyama*
- *Koshta: - Madhyama*
- *Abhyavarana Shakti- Madhyama*
- *Jarana Shakti - Avara*
- *Nadi- Pitta Kaphaj*

Samprapti Ghataka

- *Dosha- Vata-Kaphaja*
- *Dushaya- Rasa, Mansa, Majja*
- *Srotas- Rasavha, Majjavha*
- *Adhishthana- Utmang*
- *Samutthana- Amashaya Smuttha*
- *Vyaktisthana- Ksrmendriya*
- *Rogmarga- Mdhyama*
- *Agni- Manda*

Treatment
Table 1: *Panchakarma* therapy.

S.NO.	Therapy	Duration
1.	*Abhayanga And Swedana*	7 days
2	*Shashthishali Panda Swedana*	14 days
3.	*Rajayapana Basti*[12]	16 days
4.	*Shirodhara*	21 days
5.	*Vachachurna Lepa*	15 days

After the proper examination and analysis of the patient has been prescribed for *Abhyanga* and *Swedana* for 7 days, *Shashthishali Panda Swedana* for 14 days, *Rajyapana Basti* (medicated enema) in *Kal Basti* schedule and *Shirodhara* with *Bala-Aswaghandha Taila* for 21 days. *Vachachurna Lepa* for 15 days.

Table 2: Shaman drugs.

S.No	Drugs	Dose
1.	*Tryodasang guggulu*[13]	2 tab trice a day
2.	*Rasraj ras*[14]	125mg BD
3.	*Mashabaladi kashaya*[15]	30 ml BD
4.	*Guduchi satva*	500mg
	Panchatikta gharita guggulu	250mg
	Madhuyasthi churna	500mg
	Ashawaghandha churna	2 gram
		1x2 matra
5.	*Brahmarasayana*[16]	5 mg BD

RESULT
Before starting treatment, total score of ALSFRS-R[17] was 19, at the time of discharge the score was 28. Patient showed good improvement in speech, swallowing, salivation, walking and generalized weakness. At the time of discharge, the patient's gait was improved; felt energetic, stiffness of left lower limb decreased with overall improvement in general condition.

DISCUSSION
Probable mode of action of *Rajayapana Basti*
The *Basti*, which promotes the longevity of life, is *Yapana Basti*.[18] All *Yapana Basti* having quality of both *Niruha* and *Anuvasana Basti*[19] so all *Yapana Basti* perform dual function as *Brimhana* and *Srotoshodhana*. *Rajayapana Basti* is superior from all the *Yapana Basti*. It also called king of all *Yapana Basti.*[20] In *Ayurveda* ALS is a condition there is *Avrana* of *Vata* by *Kapha* so we can say in ALS there is vitiation of *Vata* by

Srotorodha by *Kapha*. Here *Rajayapana Basti* alleviates the *Avrana* of *Vata* by reduction of *Kapha* and normalize the *Vata Dosha*. By normalization of *Vata, Yapana Basti* maintains the homeostasis in the body constituents which in turn alleviate the disease.

Probable mode of action of *Shirodhara*

Shirodhara is a procedure which is fruitful treatment for neuromuscular relaxation and nourishment. In *Shirodhara* there is unbroken pouring of fluid over a frontal area of head which increases local circulation may help the absorption of active principles of drug. *Shirodhara* is a relaxation therapy which pacifies the aggravated *Vata Dosha* and relieves from mental exhaustion and helps to normalization of nervous system function.

Probable Mode of action of *Trayodashang Guggulu*

Trayodashang Guggulu is having a property of *Vedanastapak, Shoolahara* and *Rasayan*. The drugs of *Tryodashang Guggulu* are *Ushna Veerya* so reduces stiffness and it also having *Deepana Pachana* property due to *Shunthi* so reduces the *Ama Dosha* and clear the *Srotasa* and normalize the *Vata* which is vitiated due to obstruction. It is also having *Madhura Vipaka, Guru Sanigdha* and *Picchhila Guna* so it suppressed *Vata Dosha* and responsible for *Mansvardhana* and *Balavardhana*, so it gives strength to the muscles of affected limbs.

Probable Mode of Action of *Mashabaladi Kashaya-*

Mashabaladi Kashaya is having property of *Tridosha* shaman mainly *Vata Kapha Shamak, Nadibalya, Pusthikara, Shatuverdhaka, Rasayana* and *Vrishaya. Masha* itself a potent *Dhatu Verdhaka* and *Vatashamaka* due to *Madhura Rasa* and *Ushnadi Guna*. *Bala* is considered as a nervine stimulant, *Balya* and *Madhura Rasa* and *Madhura Vipaka*. *Kauncha Beeja* is *Madhura, Snigdha* and *Ushana* in property, it acts as nervine tonic. *Rasana* is *Vatashamaka* due to *Tikta* and *Katu Ras, Ushana Virya. Rohisha* is *Katu Rasa, Katu Vipaka, Ushana Virya* and *Vatashamaka* in nature. *Erand* is *Madhur, Katu, Kashaya Rasa, Madhur Vipaka* and *Ushna Virya*. *Ashwagandha* is *Tikta, Kashaya, Madhur Rasa, Madhura Vipaka, Ushna Virya* and *Balya, Vatashamaka. Saindhav Lavan* and *Hingu* are helpful in easy absorption of drugs.

CONCLUSION

ALS is a rapidly progressive neurodegenerative disorder disturbing both upper and lower motor neuron function. Some time it is life threatening in nature so tough to manage, but by appropriate early diagnosis and *Ayurvedic* treatment which is the safest, cost-effective, simply available, effective and quick responding. So *Ayurvedic* modality of treatment can be best option for management of ALS. The incidence of ALS is increasing every year so efforts must be taken to promote awareness of the disease and encourage the research for ALS management.

REFERENCES

1. Rowland LP, Shneider NA. Amyotrophic lateral sclerosis. N Engl J Med., 2001; 344: 1688–700. [PubMed]
2. Sara Zarei etal. A comprehensive review of amyotrophic lateral sclerosis, Surg Neurol Int., 2015; 6: 171. [PMID: 26629397, doi: 10.4103/2152-7806.169561]
3. Longo L.D, Fausci S.A.Harrison's Principles of internal Medicine; 18th edition, vol II: 3345-49.
4. Chen S, Sayana P, Zhang X, et al. Genetics of amyotrophic lateral sclerosis: an update. *Mol Neurodegener*, 2013; 8: 28.
5. Bhrahmanand tripathi, sarngdhara samhita dipika hindi commentary, purvakhanda, chapter 5, verse no. 43-44, 2007 edition, Varanasi: choukambha surbharti prakashan, 2007; 60.
6. Kasinath sastri, gorhkhanartha chaturvedi(editor). Vidyotini hindi commentary of charaka samhita, Sutrasasthana, chapter 11, verse no.7, 2009 edition, Varanasi: choukambha bharati academy, 2009; 246.
7. Kasinath sastri, gorhkhanartha chaturvedi(editor).Vidyotini hindi commentary of charaka samhita, chikitsasthana, chapter 28, verse no. 224-225, 2009 edition,Varanasi: choukambha bharati academy, 2009; 814.
8. Kasinath sastri, gorhkhanartha chaturvedi(editor). Vidyotini hindi commentary of charaka samhita, chikitsasthana, chapter 28, verse no.228-229, 2009 edition, Varanasi: choukambha bharati academy, 2009; 815.
9. Kaviraja ambika data shashtri, shushruta samhita edited with ayurveda tattva sandipika, sutrasthana, chapter 15/29, chaukhamba sanskrit sansthan Varanasi, 2012; 80.
10. Kasinath sastri, gorhkhanartha chaturvedi(editor). Vidyotini hindi commentary of charaka samhita, chikitsasthana, chapter 28, verse no. 239, 2009 edition, Varanasi: choukambha bharati academy, 2009; 817.
11. Kasinath sastri, gorhkhanartha chaturvedi(editor). Vidyotini hindi commentary of charaka samhita, chikitsasthana, chapter 28, verse no. 240, 2009 edition, Varanasi: choukambha bharati academy, 2009; 817.
12. Vaidhya jadvji trikamji acharya, susrutasamhita with nibandhasamgraha commentary of sri dalhanacharya, chikitsa sthana 38/106-111, chaukhamba sanskrit sansthan Varanasi, 2013; 548.
13. Indradeva tripathi, chakradatta with vaidayaprabha hindi commentary, vatavyadhichikitsa 69-73, choukhambha Sanskrit bhawana Varanasi, 2014; 139.
14. Siddhinandana mishra (editor)Kaviraj govinddassen virachita bhaishajya ratnawali siddhiprada hindi commentary, 26/198-202, Chaukhamba Sanskrit surbharti prakashana, Varanasi, 2012; 535.
15. Indradeva tripathi, chakradatta with vaidayaprabha hindi commentary, vatavyadhichikitsa 23-24,

choukhambha Sanskrit bhawana Varanasi, 2014; 135.
16. Pt. hari sadasiva sastri paradakara, astanghrdaya with sarvangsundra of arunadatta and ayurvedarasayana of hemadri, uttarsthana, 39/15-23, choukhamba Sanskrit sansthana Varanasi, 2012; 924.
17. http://www.outcomes-umassmed.org/als/alsscale.aspx cited on 12/12/2018 at 6.03pm
18. Agnivesha, Charaka, Dridhabala, Charaka Samhita, Siddhi Sthana, Uttarbasti Siddhi Adhyaya. 12/17, edited by Aacharya Vidyadhar Shukla, second edition, Chaukhamba Sanskrit Pratishthana Varanasi, 2002; 984.
19. Kshinath shastri, dr. gangasahaya pandeya, charaka samhita siddhi sthana 12/22, choukhambha Sanskrit sansthana, Varanasi, reprint 2012, p.no. 1025.
20. Vaidhya jadvji trikamji acharya, susrutasamhita with nibandhasamgraha commentary of sri dalhanacharya, chikitsa sthana 38/106-111, chaukhamba sanskrit sansthan Varanasi, 2013; 548.