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AN AYURVEDIC APPROACH IN THE MANAGEMENT OF *SARVANGA ROGA* W.S.R TO GUILLAIN BARRE SYNDROME – A SINGLE CASE STUDY

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ABSTRACT

Guillain Barre Syndrome is an acute, inflammatory, demyelinating, polyneuropathy. It manifests as a rapidly evolving areflexic motor paralysis with muscle weakness, tingling sensation in the toes, feet and legs then spreads upward to the arms and fingers as quadriparesis or quadriplegia. The course is sometimes severe and fulminant. The most common cause is acute non-trauma related paralysis, this disease usually triggered by an infection. It occurs year around at a rate of between 1 to 4 cases per 100,000 annually.

This can be paralleled with *Sarvangaroga* which was explained in the context of *Pakshagata* by *Acharya Vagbhata.* In this present study, A 43 years old male patient complaint of karma and *Balakshaya* in both *urdhwa* and *adhoshakas* since 20 days ,was diagnosed as *Sarvangaroga* w.s.r to Guillain Barre syndrome was treated under Ayurvedic Principles .These Panchakarma therapies and *shamanoushadhi* has given the best result to the patient in terms of absolute reduction of signs and symptoms.

Keywords: GBSyndrome, SSPS, *Udhwartana,Basti, Sarvangaroga.*

INTRODUCTION:

Guillain Barre syndrome is an acute, inflammatory, Demyelinating, Polyneuropathy. It is acquired and Immune mediated. There will be rapidly evolving areflexic motor paralysis with or without sensory disturbances. The usual pattern is an ascending paralysis that may be first noticed as rubbery legs. Weakness typically evolves over hours to a few days and is frequently accompanied by tingling dysesthesias in the extremities. The legs are usually more affected than the arms and facial diaparesis is present in 50% of affected individuals. The disease is usually triggered by an infection.Intubation,Plasmapheresis,intravenous immunoglobulin and glucocorticoids are lines of treatment adopted by bio-medicine practitioners[1].

A 43 years old Patient diagnosed as GB Syndrome presented with the *Karma Kshaya* of all four limbs of Lower motor neuron type. As per Ayurvedic classics, this condition can be correlated with *Sarvangaroga* which was explained in the context of *Pakshagata* stating that *Pakshagata* is *Ekangaroga* and the same afflicting both half of the body i.e. all 4 limbs as *Sarvangaroga*[2]. By deriving the *Kaphavruta VataSamprapti* for *Sarvangaroga*, the Ayurvedic treatment which was administered in this patient has given the best result.

CASE REPORT:

A 43 year old male patient, librarian from Mysore approached the OPD of *Panchakarma* Department JSS Ayurvedic Medical College, Mysore. He presented with absolute Weakness of all 4 Limbs

since 20 days. Patient at first developed mild pain in the right lower limb followed by that in the right upper limb. By the end of the day, he suddenly developed weakness of right lower limb. Later the weakness gradually increased to involve all 4 limbs.

With absolute weakness patient couldn't move the limbs while sleeping, couldn't sit, stand & walk, not even flickering movements of fingers & toes.

No history of loss of consciousness, sensory loss, involvement of face, dyspnoea & loss of bladder control. Patient has undergone Immunoglobulin injection therapy during the first 20 days of emergency care with no improvement. He is not a Known Case of Diabetes Mellitus, Hypertension, Bronchial asthma.

PAST HISTORY:

No History of Tuberculosis, Viral fever and has not undergone any major surgical procedure. No history of any specific medication and not a smoker/ alcoholic.

ROGI PARIKSHA :-

AshtasthanaPreeksha

- Agni- Prakrutha
- Nidra- prakrutha
- Mala- once per day
- Mutra- Catheterized
- Vyasana – not a smoker/alcoholic
- Shabdha,Sparsha , Drik– prakrutha.

DashavidhaPareeksha

- *Prakriti – kaphavata*
- *Satwa, Samhanana – Pravara*
- *Pramana, Sara – Madhyama*
- *Saatmya, Aharashakti – Madhyama*
- *Vyayaama shakti – Avara*
- *Vayataha -Madhyama*

EXAMINATION:

Systemic examination :-

- Respiratory System - NAD
- cardiovascular system - NAD
- Per Abdomen -NAD

Nervous system:-

- Central Nervous System- Conscious and well oriented.
- Cranial nerves were normal

Motor Nerves:-

- Tropical changes – no bed sores.
- Atrophy in muscles of hands & legs ++
- Fasciculation & irritability- Absent
- Contraction & contractures- Absent
- Involuntary movements- Absent

Muscle power –

- Upper limb 0/5 (R) 0/5 (L)
- Lower limb 0/5 (R) 0/5 (L)

Muscle tone - All 4 limbs flaccid

Reflexes :

- Visceral reflexes (micturition &bowel) – intact
- Superficial reflexes - Glabellar tap reflex -ve
- Abdominal reflex (both sides) -ve
- Babinski's sign (B/L) -ve

Deep tendon reflexes

- B/L Upper Limb: Biceps, triceps, radial jerks –absent(areflexia)
- Lower Limbs:Knee & ankle jerks – absent (areflexia)
- Clonus –absent
- Co-ordination – can't be elicited.

Sensory nerves:

- Tactile sensation, temperature sense- intact
- Tactile Discrimination, Position sense – Intact
- Vibration sense and Stereognosis – Intact.

Investigation :-

Urine Routine

Urine Albumin- Nil

Urine Sugar-Nil

Pus Cells-3-4

CSF analysis – Date – 12/2/15

Biochemistry

Protein -20 (20-45 mg/dl)

Glucose -82 (65-95 mg/dl)

Chloride -116 (116-122 m mol/l)

Cytology

Cell count - nil

Cell type - smear shows few RBC's

Malignant /atypical cells - Nil

Nerve conduction velocity report

Conduction delay in motor study of Bilateral Ulnar, Common Peroneal, Tibial, Sural and Superficial Peroneal Nerves.

Impression: GB Syndrome.

INTERVENTION:

Table No -1

SHOWING THE TREATMENT :

Treatment	**1st sitting**	**2nd sitting**	**3rd sitting**
Gandharvahastaditaila[3] 15ml + 10ml milk	First 5 days	First 5 days	First 5 days
SarvangaShashtikaShaliPindaSweda[4] and *SarvangaUdhwartana*[5]alternate days.	20 days	20 days	---
SarvangaShashtikaShaliPindaSweda	-----	-----	20 days
Basti	15days*Matra Basti*	*Kala basti*	*Kala basti*
PratimarshaNasya with Maha Masha Taila 2 drops each nostrils[25]	For four months		

*GandharvahastadiTaila*15ml + 10ml milk

SarvangaShashtikaShaliPindaSweda with application of *Maha MashaTaila*[6] and *AshwagandhabalaLakshadiTaila*[7] in equal quantity.

Sarvanga Udhwartana with *TriphalaChurna*[8] and *KapikacchuChurna*[9] in equal quantity.

Matra Basti with *DhanwantaraKuzumbu*[10]and *SahacharadiTaila*[11] 40ml each, total of 80ml.

Kala basti:*Anuvasana* with *Maha Sneha* 100ml

Niruha Basti:

Honey – 80ml

SaindhavaLavana – 6grms

Maha Masha Taila 140 ml

Shatapushpa Kalka 15grms

Dashamoola+ Balamoola+ Erandamoola+AmrithaKsheera Kashaya 450ml

20 days of treatment was administered in 1st sitting. After 1 month gap 2nd sitting of treatment was given for 20 days. 1 month after the completion of 2nd sitting, 3rd sitting of treatment was performed.

***SHAMANOUSHADHI*:**

AshtavargaKashaya[12]and*SahacharadiKashaya*[13]10ml each with 20ml water after food twice daily for first 1 month followed by *MashabaladiKwatha*[14]20ml twice daily after food for next 3 months.

ChaturmukaRasa[15]1 tablet after food twice daily for first 50 days followed by *Ashwagandha Churna* 2grms[16]+ *ShatavariChurna*[17] 2grms + *KapikacchuChurna*2grms + *AbhrakaBhasma*[18]125mg twice daily for next 75 days.

Table No 2

OBSERVATION AND RESULTS:

Signs and symptoms	BT	After 1st sitting	After 2nd sitting	After 3rd sitting
Atrophy	++	Reduced	Reduced	No atrophy
Muscle Power	0/5	2/5	4/5	5/5
Muscle tone	Flaccid	Tone improved	Tone improved, flaccidity reduced	Normal muscle tone
ADL (Activites of Daily Life)	Absent	Able to sit and stand with support	Able to sit and walk with support	Walk without support

There was no change for a week at the beginning of the treatment. Later muscle tone improved from the level of absolute flaccidity and by end of first sitting patient's muscle power improved a little and patient could able to sit and stand with 3 persons support.

Gradually by the end of the 2nd sitting of treatment patients muscle tone and power got considerably improved and the patient could able to sit with support and walk with support of walker. By the end of 3rd sitting of treatment the atrophied muscle bulk considerably became almost normal and muscle tone also became normal. With normal muscle power patient could able to sit, stand and walk without support and do his daily routines. He regained ability to do all activities of daily life.

DISCUSSION:

Guillain Barre syndrome- GB Syndrome also known as Landry's Paralysis is an Acute Inflammatory demyelinating Polyneuropathy involving spinal roots, peripheral nerves and occasionally Cranial nerves. This syndrome is named after the French Neurologists Georges Guillain and Jean Alexandre Barre.

Two third of people with this syndrome will have history of either Viral/ bacterial infection. In the demyelinating forms of GBS, the basis for flaccid paralysis and sensory disturbance is conduction block. First attack is on Schwann cell surface, widespread myelin damage, macrophage activation, and lymphocytic infiltration. If the axonal connections remain intact the recovery will be faster as rapidly as remyelination occurs. Circumstantial evidences suggest that all GBS results from immune response to nonself antigens.

The Nerve dysfunction is caused by an immune attack on the nerve cells of the Peripheral nervous system and their support structures.

Diagnosis of GBS can be made by Asbury criteria i.e. main criteria:

- Progressive weakness of 2 or more limbs
- Areflexia
- Disease course < 4 weeks, exclusion of other causes.

Supportive criteria:

- Relative symmetric involvement
- Mild or absent sensory involvement
- Facial nerve or other cranial nerve involvement
- Absence of fever
- Typical CSF profile, Electrophysiological evidence of demyelination.

Elevated protein level usually greater than 55g/L and fewer than 10 WBC per cu mm of fluid (Albumino cytological dissociation) CSF favors the diagnosis, During the acute phase, the disorder can be life threatening due to weakness of respiratory muscles leading to respiratory failure. Autonomic nervous system involvement may lead to BP fluctuation and irregularities in heart rate. Recovery may take weeks to years. About a third has some permanent weakness. Globally death occurs in about 7.5% of those affected. Once the weakness has stopped progressing, it persists at a stable level (plateau phase) before improvement occurs. The Plateau phase can take between 2 days and 6 months, but the most common duration is a week.

This GB Syndrome can be paralleled with *Sarvangaroga* as per the explanation of *Vagbhata* in the context of *Pakshagata.* He stated that when aggravated *Vata* takes *Ashraya* in *Sira Snayu* of half of the body, it produces *Karma kshaya* of half of the body and is called as *Pakshaghata* or *Ekangaroga*. In the same way if *Karma kshaya* is produced all over the body it is called *Sarvangaroga*.

Here *Samprapti* of *KaphavritaVata* (specially *VyanaVata*) [19] can be derived. These *Doshas* takes *Ashraya* in *Sira Snayu* of both sides of the body producing *Karma kshaya* of both *Hasta* and *Pada*(i.e all over the body) resulting in *Sarvangaroga,Dhatukshaya* results later. Even *Charaka* has included *Ekangaroga* and *Sarvangaroga* under *SnayugataVata*[20].This has to be differentiated from the term *SarvangagataVata*[21] which is a painful condition of musculoskeletal system.

To start with *Kaphavrita*Vata line of treatment[22]was followed and later *KevalaVataChikitsa*[23]was administered. At first patient was given *Gandharvahastadierandataila[3]* for the purpose of *Vatanulomana*. Considering the condition as *KaphavritaVata,Snigdha* and *Rooksha* therapies were administered alternatively in the form of *ShashtikaShaliPindaSweda* and *Udhwartana* with *TriphalaChurna* and *KapikacchuChurna[9]*alternatively for first20 days in the 1st and2nd sitting of treatment.

As patient was absolutely bed ridden, *Matrabasti* with *MahaSneha[24]*80ml was administered for 15days, though *Niruha Basti* was the choice. With a gap of 1 month after repeating *ShashtikaShaliPindaSweda* and *Udhwartana* for 20 days, patient was administered *Kala Basti* as quoted earlier. The *Maha Sneha* which was chosen for *Anuvasanabasti* contains *Ghrita*, *Taila*, *Vasa* and *Majja* along with other *Brihmana, Vatahara* drugs and is advised in *Ekangaroga* and *Sarvangaroga*, *MajjagataVata* as explained in*Chakradatta*. *Maha Masha Taila* used in *Niruha Basti* is *Brimhana* and highly useful in paralysis in which muscle undergo atrophic changes i.e. LMN type. The drugs used in *Kashaya* for Basti i.e. *Dashamula,Erandamula* are *Vatahara*, Shothahara,*Balamula* is *Brimhana* and *Amrita* is Anti-inflammatory and immunomodulator. So this combination of *Anuvasanabasti* and *Niruha Basti* has given much benefit to the patient.

As the patient was improving, with a gap of 1 more month, 3rd sitting of treatment was performed. Here *KevalaVataChikitsa* was done. Patient was given only *ShashtikaShaliPindaSweda* and it was not alternated with *RookshaUdhwartana*and

same combination of Basti was administered.

Expecting the improvement in both upper limbs, patient was given *MahaMasha Taila*2drops to each nostrils once daily *PratimarshaNasya* throughout for about 4 months as *Nasya* was advised in *BahushirshagataVata*[25].

Under the basis of *KaphavritaVata*, *AshtavargaKashaya*[12]and *Danadanayanadi Kashaya*[26]which are *KaphaVatahara* were administered for one month to start with the treatment. After one month these *Kashayas* were stopped. Later *Masha BaladiKwatha* which is *Vatahara* and exclusively advised in the treatment of *Pakshagata* i.e,*Karma kshayajanyaVataVyadhi* was started and continued for next 3 months.

Kala basti was administered after 50 days of treatment (i.e Panchakarma therapies and shamanoushadis under the basis of Kaphavrithavatachikitsa)When the patient could able to sit and stand with support .Later kevalavatachikitsa i.e Santarpanachikitsa was done.

There is no reference for yogya and ayogyata of the patient and the disease and also for the yogabasti, kala basti and karma basti. That has to be selected according to the Patients condition under yukthi.

These *Panchakarma* therapies and *Shamanoushadhi* has given the best result to the patient in terms of absolute reduction of signs and symptoms.

CONCLUSION:

Guillain Barre syndrome can be compared with *Sarvangaroga*, which was explained by *Vagbhata*. The above discussed *Panchakarma* therapies and *Shamanoushadhies* can be effectively adopted in its management.

According to bio-medicine, approximately 85% of patients with moderately affected Guillain – Barre syndrome achieve full functional recovery within several months to year. Though the disease affected severely in this patient recovery was seen in three and half months.

REFERENCES:

1. Longo L Dan, Fauci S Anthony; *et al*;Harrison's Principle Of Internal Medicine. United States of America:McGraw – Hill Companies, Edition 18. Vol II. Chapter 385, Page no 3473, Pp 3610.

2. Paradakara Hari SadasivaSastri. AstangaHridaya of Vagbhata with SarvangaSundara of Arunadatta&Ayurvedarasayana of Hemadri Commentary. Varanasi: Chaukhambha Sanskrit Sansthan, Reprint 2012. Nidanasthana, Chapter 15, Shloka no 38-39, Page no 533, Pp 956.

3. Murthy.K.RSrikantha. Translated AstangaSamgraha of Vagbhata. Varanasi: Chaukhambhaorientalia, Reprint 2012. Vol II. ChikitsaSthana, Chapter 15, Shloka no 21, Page no 443, Pp 627.

4. Kasture HS. Ayurvediya Panchakarma Vijnana. SwedaVijnana. Nagpur: Baidyanath Ayurveda Bhavan Publication, Edition .Page no 168, Pp 654.

5. Kasture HS. Ayurvediya Panchakarma Vijnana. SwedaVijnana. Nagpur: Baidyanath Ayurveda Bhavan Publication, Edition .Page no 168, Pp 654.

6. Sharma P V. Translated Cakradatta. Varanasi: Chaukhambhaorientalia, Edition 2007. Chapter 22, Shloka no 165-171, Page no 201, Pp 731.

7. Dr. Nishteswar K & Dr. Vidyanath R. Translated Sahasrayogam. Varanasi: Chowkhamba Sanskrit Series. Edition 2014. TailaPrakarana. Shloka No 21. Page No 121, PP 540.

8. Sharma P V. Translated Cakradatta. Varanasi: Chaukhambha orientalia, Edition 2007. Chapter 30, Shloka no 48-49, Page no 272, Pp 731.
9. ProfessorMurthy.K.RSrikantha., Bhavaprakash of Bhavamishra ,Krishnadas academy , Varanasi 1st edition 1998.Purva Khanda,PrathmabhagaGuduchyadivarga, Shloka no 129-131,Page no 247, Pp738.
10. Sharma P V. Translated Cakradatta. Varanasi: Chaukhambhaorientalia, Edition 2007. Chapter 22, Shloka no 190-194, Page no 203, Pp 731.
11. Dr. Nishteswar K & Dr. Vidyanath R. Translated Sahasarayogam. Varanasi: Chowkhamba Sanskrit Series. Edition 2014. TailaPrakarana. Shloka No 36. Page No 131, PP 540.
12. Dr. Nishteswar K & Dr. Vidyanath R. Translated Sahasarayogam. Varanasi: Chowkhamba Sanskrit Series. Edition 2014. Kashaya Prakarana. Shloka No 54. Page No 42, PP 540.
13. Shastri Sri Lakshmipathi. Yogaratnakara with VidyotiniHindhi Commentary. Varanasi: ChaukhambhaPrakashana. Edition 2012. VatavyadhiChikitsa. Page No 525.
14. Sharma P V. Translated Cakradatta. Varanasi: Chaukhambhaorientalia, Edition 2007. Chapter 22, Shloka no 24-25, Page 731 .
15. Choudhary K Anand. Translated Bhaisajyaratnavali of Shri GovindaDasji. Varanasi: Chaukhambha Sanskrit Sansthan, Edition 2009. Chapter 26, Shloka no 149-155, Page no 157, Pp 799 .
16. Shastri Sri Lakshmipathi. Yogaratnakara with VidyotiniHindhi Commentary. Varanasi: ChaukhambhaPrakashana. Edition 2012. AjirnaChikitsa,Shloka no 1-6.
17. Bhavaprakash Nighantu edition of 1998:verse 174-177,Page no -392-393.
18. Sharma Sadananda,Rasa Tarangini, edited by Pandit Kashinath Shastri,11 edition,1979,Motilal Banarsidas,Varanasi,Dashama Taranga,chapter no.29,page no 229.
19. Acharya YT; *et al*; Susruta Samhita with NibandhaSangraha and Nyayachandrika Commentary. Varanasi: Chaukhambha Sanskrit Sansthan, Edition 2012. Nidanasthana, Chapter 1, Shloka no 39, Page no 263, Pp 824.
20. Acharya YT; *ed*; Agnivesa. Caraka Samhita with Ayurveda Dipika commentary of Chakrapanidatta. Varanasi: ChaukhambhaPrakashana, Reprint 2013. Chikitsasthana, Chapter 28, Shloka no 35, Page no 617, Pp 738.
21. Acharya YT; *ed*; Agnivesa. Caraka Samhita with Ayurveda Dipika commentary of Chakrapanidatta. Varanasi: ChaukhambhaPrakashana, Reprint 2013. Chikitsasthana, Chapter 28, Shloka no 25, Page no 617, Pp 738.
22. Acharya YT; *ed*; Agnivesa. Caraka Samhita with Ayurveda Dipika commentary of Chakrapanidatta. Varanasi: ChaukhambhaPrakashana, Reprint 2013. Chikitsasthana, Chapter 28, Shloka no 245, Page no 627, Pp 738.
23. Acharya YT; *ed*; Agnivesa. Caraka Samhita with Ayurveda Dipika commentary of Chakrapanidatta. Varanasi: ChaukhambhaPrakashana, Reprint 2013. Chikitsasthana, Chapter 28, Shloka no 217-218, Page no 626, Pp 738.
24. Sharma P V. Translated Cakradatta. Varanasi: Chaukhambhaorientalia, Edition 2007. Chapter 22, Shloka190-194, Page203, 731.
25. Murthy.K.RSrikantha. Translated Sharangadhara Samhita. Varanasi:

Chaukhambhaorientalia, Reprint 2012. Uttara Khanda, Chapter 8, Nasya Vidhi Adhyaya, Shloka 45, Page 227, Pp 323.
26. Dr. Nishteswar K & Dr. Vidyanath R. Translated Sahasarayogam. Varanasi: Chowkhamba Sanskrit Series. Edition 2014. Kashaya Prakarana. Shloka No 58. Page No 45, PP 540.

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