



ROLE OF PANCHAKARMA IN HEMIPLEGIA-A CASE STUDY

¹Priyanka Tripathi, ²Priya G.Maheta, ³Urvashi M.Patel, ⁴Rohini R.Salve

¹PG Scholar, Department of Panchakarma, Government Akhandanand Ayurved College, Ahmedabad Gujrat, India

²PG Scholar, Department of Panchakarma, Government Akhandanand Ayurved College, Ahmedabad Gujrat, India

³PG Scholar, Department of Panchakarma, Government Akhandanand Ayurved College, Ahmedabad Gujrat, India

⁴Head of Department and associate professor, Department of Panchakarma, Government Akhandanand Ayurved College, Ahmedabad Gujrat, India

ABSTRACT:

Hemiplegia is the condition of paralysis of either the left or right side of the body with loss of function. It is also associated with poor balance, speech deficit and loss of function which result from any injury to motor centres of the brain either due to ischemia or haemorrhage. The prevalence rate of hemiplegia is 9 cases per 1000 in global population. In Ayurveda this condition can be compared with *Pakshaghaat* due to much resemblance in their clinical symptom. A female patient aged 55 years diagnosed case of left side hemiplegia took the treatment for 15 days of contemporary science. With no previous improvement she was treated at Department of Panchakarma at Government Akhandanand Ayurved Hospital. As per Ayurvedic classics *Acharyas* have described the involvement of vitiated *Vata Dosha* in pathogenesis of *Pakshaghaat*. *Snehna*, *Swedana*, *Mridu Virechana*, *Basti*, *Nasya* etc. are considered the best way to treat a patient of hemiplegia. The above said patient was given Panchakarma treatment along with internal Ayurvedic medicine. She got very significant improvement in all the subjective criteria helping to increase faith of the patient in Ayurved *Shastra*.

KEYWORDS: *Virechana*, Stroke, *Pakshaghaat*, *Shastishalik Pind Sweda*, Hemiplegia, *Basti*, *Nasya*.

INTRODUCTION:

The Central Nervous System controls most of the body and mind. Due to the changing lifestyle disease development is increasing like never before. Globally the incidence of communicable and non-communicable disease is on the rise drawing attention for its prevention and treatment. Among the diseases related with CNS, Stroke is one of the leading cause of death, If patient survives physical and mental disability remains for life-time. The prevalence rate of stroke range about 9 cases per 1000 in global population. Worldwide cerebrovascular accidents [stroke] are the second leading cause of death and 3rd leading cause of disability¹. In this condition damage of the cortico-spinal tracts (extends from the lower spinal cord to the cerebral cortex) occurs. Stroke in Ayurveda can be correlated with *Pakshaghaat*. Main vitiation of *Vata*, with *Pitta* or *Kapha Anubandha* results in *Shudha vata* or *Avrutta Vata Vyadhi*. Movement is the function of *Vyana Vayu*ⁱⁱ. Considering all *Samprapti- Ghataka*, *Acharyas* have advised different *Shodhana* and *Shamana Chikitsa*. *Snehana*, *Swedana*, *Virechana*, *Basti* are said to be best in this treatment. In the present case patient was having *Vama Paksha Chesta Hani*, *Vaka Stambha*, *Mukha Vakra* and *Ruja*. She took

treatment in modern contemporary science with no improvement at all. After 15 days of stroke, she was admitted to Government Akhandanand Ayurveda Hospital Ahmedabad. After evaluation the condition was diagnosed with *Vama Pakshaghaat (Kapha and Pitta Avrutta Vata)*. The patient was given classical *Virechana* followed by *Basti Karma* along with *Shamana Chikitsa*. Patient got significant results during this period and was able to do her day- today activities with much ease.

CASE HISTORY:

Patient was asymptomatic before 26/5/2021. While sleeping in night she started experiencing numbness over the left half of the body including face and extremities, headache and reduced strength over left hand and leg. On next morning she suddenly started experiencing slurring of speech and slight deviation of angle of mouth. she was admitted to nearby allopathic hospital. She took treatment there for 15 days with no or mild improvement.

CHIEF COMPLAINTS:

- Complete loss of function in left upper and lower extremities
- Numbness in the above said area
- *Vaka-Aspashtata* (Slurred speech)
- *Lala-Srava* (drooling of saliva)
- *Shirahshoola* (Headache)
- *Daurbalya* (severe weakness)

K/C/O-Hypertension

PAST HISTORY-Hypertension-15days (diagnosed at the time of stroke)

FAMILY HISTORY-Not any

RADIOLOGIC REPORT-

MRI-BRAIN [3-06-2021] Right frontal-basal ganglia acute infarct with right basal ganglia haemorrhage

MR ANGIO OF BRAIN {3-6-21} Poor flow signal involving of distal right M1 segment, suggesting thrombosis. Normal appearance of rest of intracranial MR angiography. No aneurysm or vascular malformation.

CT SCAN OF BRAIN [6-6-2021] Large hypodense area seen in right fronto-parieto-basal ganglia region p/o infract. The lesion causes mass effect in form of compression of ipsilateral frontal horn of lateral ventricle. Small hypodensity {hv 16 to 20} noted in right parietal region p/o infract.

SAMPRAATI GHATAK:

- *Dosha - Vata* (All five types; *Prana, Udana Vayu* especially) *Pitta* (*Pachak Pitta, Ranjak Pitta* especially) *Kapha Shleshaka* and *Avalambaka Kapha* especially
- *Dushya -Rasa, Rakta, Mansa, Meda Dhatu*
- *Agni- Jatharaagni, Dhatavaagni*
- *Ama- Dhatwaagni-Maandya-Janya*
- *Srotasa- Atipravrutti, Sanga, Siragranthi and Vimaargamana*
- *Udhavsthana- Pakwaashya*
- *Adhasthan – Shira*
- *Roamarga - Madhyam Roga Marga*
- *Vyakt sthan - Vama Paksha*

On examination- Patient was well conscious, well oriented to time -place and person, Recent and remote memory –intact

ASHTAVIDHA PARIKSHA/SAMANYA PARIKSHA:*Nadi* (pulse)- 86/min*Mala* (stool)-*Vibandha**Mutra* (urine)-*Samyak**Jivha* (tounge)-*Sama**Netra* (eyes)-*Shwetabh Pitta**Sparsh*(skin)-*Ruksha**Akriti*- *Madhyam**Bala*- *Avara***SYSTEMIC EXAMINATION :***Raktachaap* (B.P.)-130/70 mm of Hg**GAIT/ DECUBITUS-** Patient was unable to walk.**R.S.-**Normal**C. V. S.-** Normal**G. I. T.-**Constipated**NEUROLOGICAL EXAMINATION:****SENSORY SYSTEM****PAIN:** present on bilateral extremities**TOUCH:** present on bilateral extremities**PRESSURE:** present on bilateral extremities**TEMPERATURE:** present on bilateral extremities**MOTOR SYSTEM-Before treatment**

	RIGHT EXTREMETY		LEFT EXTREMETY	
	UPPER	LOWER	UPPER	LOWER
TONE	Normal	Normal	Hypotonia+++	Hypotonia+++
POWER	5	4	0	2
REFLEXES				
	BICEP-Normal	KNEE-Normal	BICEP-Diminished	KNEE-Exaggerated
	TRICEP-Normal	ANKLE-Normal	TRICEP-Diminished	ANKLE-Exaggerated
	SUPINATOR-Normal	PLANTAR-Flexor	SUPINATOR-Diminished	PLANTAR-Extensor(Babiniski's sign+ve)

METHODOLOGY:

As patient was suffering from *Pakshaghaat Mridu-Virechana* was planned initially.

Sr no	Date	Duration	Date	Karma	Drugs with Dose
1	12-06-2021 to 16-06-2021	5 days	12-06-2021 to 16-06-2021	<i>Deepana -Pachana</i>	<i>Trikatu Churna</i> 3gm twice a day before food with Luke warm water
2	17-06-2021 to 21-06-2021	5 days	17-06-2021 to 21-06-2021	<i>Snehapana</i> with <i>Go-Ghrita, Anupana - Koshna Jala</i> , Dose was increased according to the <i>Agni</i> of the patient	30 ml
					60 ml
					90 ml
					120 ml
150 ml					
3	22-06-2021 to 23-06-2021	2 days	22-06-2021 to 23-06-2021	<i>Bahya Abhyanga</i> and <i>Sarvanga Sweda</i>	<i>Mridu</i> (Both procedures)
4	24-06-2021	1 day	24-06-2021	<i>Mrudu Virechana</i>	<i>Triphala kwatha</i> -100ml <i>Argavadha Phalamajja</i> -50gm <i>Erand Sneha</i> -50ml

On the above-mentioned date *Virechana* drug was administered to the patient. Below mentioned findings were noted

Chaturvidha Shuddhi-

- *Vaigiki*- 9
- *Antiki*- *Kaphanta*,
- *Maniki*-Not counted
- *Laingiki*- *Uttam*(*Indriyasamprasado, Laghutwam, Deeptagni* etc.)

Samsarjana Krama for 5 days was advised. (25-06-2021 to 29-06-2021). After the completion of *Samsarjana Krama, Shamana* internal treatment along with other *Panchakarma* procedures were started.

Sr no	Date	Lakshan	Panchakarma procedure	Shamana Aushadhi
1	30-06-2021 to 6-07-2021	1. Complete loss of function in left upper and lower extremities 2. <i>Vaka-Aspashtata</i> (Slurred speech) 3. <i>Lala-Srava</i> (drooling of saliva) 4. Numbness in same side 5. <i>Shirahshoola</i>	1. <i>Sarvanga Abhyang</i> with <i>Tila Taila</i> 2. <i>Shastishalik Pinda Sweda</i> 3. <i>Nasya</i> with <i>Ksheerbala Taila</i> (8-8drops)	1. <i>Dashmool kwatha</i> -10ml 2times 2. <i>Gokshuradi Guggul</i> -2tds 3. <i>Lashunadivati</i> -2 tds 4. <i>Vishtinduk Vati</i> -2tds 5. <i>Rasayan Churan</i> -3gm+ <i>Brahmi Churan</i> -2gm + <i>Swarnamakshik Bhasma</i> -125mg 3 times a day All medicine after meal with lukewarm water
2.	7-07-2021 to 14-07-2021	1. Mild function of left upper limb↑ 2. moderate function of left Lower extremity↑↑ 3. <i>Vaka Aspashtata</i> ↓↓ 4. <i>Lala Srava</i> ↓↓ 5. Numbness- Absent 6. <i>Shirahshoola</i> - Absent	<i>Yoga Basti</i> 1. <i>Nirooha Basti</i> - <i>Dashmooladi</i> (<i>ksheerabala Taila, Putiyavani kalka, Dashmool kwatha</i>) 2. <i>Anuvasan Basti</i> - <i>Ksheera Bala Taila</i> 60ml	Same above
3.	15-07-2021 to 21-07-2021	1. Mild function of left upper limb↑ 2. Normal function of Left Lower extremity↑↑↑ 3. <i>Vaka Aspashtata</i> ↓↓ 4. <i>Lala Srava</i> absent	Panchakarma stopped Patient discharged from hospital	Same above continued

Assessment of the Patient after total treatment of -30 days:

- Difficulty in walking totally improved now patient can walk without support for at least 30min
- Weakness of the Left upper extremity reduced
- Complete recovery in the function of Left lower extremity
- No Pain in the upper and lower limb
- Difficulty in speech improved

ON EXAMINATION-AFTER TOTAL TREATMENT:

	RIGHT EXTREMITY		LEFT EXTREMITY	
	UPPER	LOWER	UPPER	LOWER
TONE	Normal	Normal	Hypotonia+	Normal
POWER	5	5	2	5
REFLEXES				
	BICEP-Normal	KNEE-Normal	BICEP-Improved	KNEE-Normal
	TRICEP-Normal	ANKLE-Normal	TRICEP-Improved	ANKLE-Normal
	SUPINATOR-Normal	PLANTAR -Flexor	SUPINATOR-Improved	PLANTAR-Babiniski's sign-ve

DISCUSSION:

1. **Nidaan Parivarjana**ⁱⁱⁱ:-(to avoid causative factor)- As the first step of any treatment is to avoid causative factors, Patient was advised to avoid *Vatavardhak Ahara-Vihara* [*Ruksha-Sheeta-Alpa Ahar ,Ratrijagran,Langhana, Chinta,Shoka,Diwaswapna* etc]
2. **Dipana- Pachana**- It is the golden rule of *Shodhana Chikitsa* that *Sama-Dosha* should never be eliminated as it may destruct the body. In order to convert *Sama Dosha Avastha* into *Nirama Avastha* and for the detachment of morbid *Dosha* from the *Dushya* and *Srotasa* *Dipana-Pachana* was advised. *Dipana* helps in stimulation of *Jatharaagni* and *Pachana* does the digestion of *Ama*. For this *Trikatu*^v*Churna*[*Pippali, Maricha, Shunthi*] was given. it is *Ushna-Virya, Katu-Vipaka* and does *Dipana* and also indicated in *Alpagni*^vcondition
3. **Go-Ghrita**:*Abhyantra Snehapana* was done with *Go-Ghrita* in *Samhitas Acharya's* mentions the properties of *Go-Ghrita* as'' *Gavyam Sarpigunottarama*^{vi} '' *Sarvasnehaottamum*^{vii} .*Ghrita* act as good solvent for many metabolic waste products, and it enters the cells easily because cell wall is made up of phospholipids and does *Utkleshna* of *Doshas* which is required for proper *Shodhana*.
4. **Virechana**: In the present case of hemorrhagic hemiplegia[*Pakshaghaat*] *Vata* is not only culprit *Rakta* and *Pitta* are also involved and also the involvement of *Sira-Snayu* in the *Samprapti* of *Pakshaghaat* account to the role of *Raktadhatu*.the verse "Evama Yeva Pittadhara Saeva Majjadharaiti" explained by *Dalhabdacharya* directly shows the relation of *Pittadhara Kala* with the *Majjadhara* and *Mashtishka Majja* is the *Adhistan* in *Pakshaghaat Vyadhi* also *Acharya Charaka* gave the precise *Chikitsa Sutra* for *Pakshaghaat* by mentioning *Swedana, Snehana, and Virechana* as treatment modality^{viii}. Hence the management of vitiation of *Majjadhatudusti,Pitta* and *Rakta Vikar* was done by *Virechana* with *Aragvadh Phalamajja , Erand Sneh* and *Triphala Kwatha*.In *Samhitas Acharya* mentions *Aragvadh* as *Chaturangulo Mriduvirechana*^{ix},*Eranda* oil^xis *Vatakaphahara* due to is *Ushna Tikshna* property also it possess *Snigdha Guna* and preferred in case of *Sneha Virechana* which is advised by *Acharya's* in *Vata Vyadhi Chikitsa*.*Triphala* is one of the drug mentioned by *Acharya Charaka* in *Virechanopaga Mahakashaya*^{xi} i.e it facilitates the process of *Virechana*.

5. **Abhyanga:** *Sira Snayu Sankochana* is mainly occur in *Pakshaghaat* hence *Snehna* is very essential for condition. By the use of *Snehana* even the dry wood can bend^{xii}. *Abhyanga* helps in nourishing and strengthening the muscle of upper limb and lower limb. Therapeutically *Abhyanga* also act on vitiated *Vata Dosha* also it nourishes the *Dhatu* of the body.

6. **Nirgundi taila:** *Nirgundi* is one of the important herb used in the treatment of *Vata* disease. *Acharya Charaka* mentioned *Nirundi taila* in *Vatavyadhi Chikitsa* to pacify *Vatajanya Vedana* through *Abhayanga*, *Purana*, and *Paana*^{xiii}.

7. **Shastishalik pinda sweda:** *Shastishalik Pinda Sweda* is a kind of *Sankara sweda*^{xiv} as mention by *Acharya Charaka* which comes under the catageory of *Saagni sweda* with *Snigdha Darvya* as *ksheera* and *Shaali Dhanya*. It will help to improve circulation, nourishment, to the body it also improves the strength of the tissue of bones and muscles.

8. **Basti:** In *Pakshaghaat* the main culpit is vitiated *vata* and in *Ayurveda Acharyas* have appreciated *Basti* as a unique form of treatment modality for *Vata* and *Avaranjanya* condition. Acc. to *Acharya Charaka Basti* does *Srotoshuddhi* and *Vataanutomana*. hence *Basti* helps in breaking the process of *Avarana* as well as expels out the vitiated *Vata Dosha* from the nearest route.

In the present case *Yoga Basti* was planned with

Niroohan Basti: *Dashmool kwatha*, **Anuwasana Basti:-Ksheerbala Taila**

Niroohan Basti^{xv}: *Madhu* having *Yogvahi Sukshma Marga Anusarita* property act as catalyst and penetrate into the *Sukshma Srotas*. *Saindhav lavana* having *Laghu* and *Tridoshamaka Guna* added to it. *Sneha Dravya Ksheerbala Taila* having *Snigdha Guna* opposite of *Ruksha* and *Laghu Guna* of *Vata* which I turns pacify *Vata*. For *Kalka Putiyavani Kalka* is added as it is *Laghu, Ushna, Snigdha* and *Katu, Rasa* and possess *Vatakaphahara* property, *Dashmoola Kwatha* does *Vataanutomana* and *Nirharana* of *Dosha*.

Anuwasana Basti: *Anuwasana Basti* will retain the oil for a specific period without causing any adverse effect. It protects *Pureeshdhara Kala* by giving *Snehana* effect. *Ksheerbala Taila* having *Guru* and *Snigdha Guna* pacify *Ruksha* and *Laghu Guna* of *Vata* which in turn does *Vata Shamana*.

9. **Nasya:** *Nasya* is said to be the opening to the head. Medicine administered through *Nasya* via *Shringataka Marma* reaches to brain and helps to expel out *Doshas* of *Uttamanga*^{xvi} (supra-clavicular region) *Pakshaghaat* primarily a *Vata* disorder. so the treatment should mainly be emphasised on *Balya, Brihana* drugs which allivates *Vata*. hence for *Nasya Ksheerbala Taila* is used.

10. **Kshirabala Taila:** *Ksheerbala Taila* contains *Bala, Go-Dugdha* and *Tila Taila* as main ingredient^{xvii}. *Bala* (*sida cordifolia*) is kept among *Balya* (strengthening) *Mahakashya*^{xviii} by *Acharya Charaka* and *Acharya Sushruta* has kept it among *Vatashamaka gana*^{xix}, hence it is best for promoting strength and alleviating *Vata*.

11. **Gokshuradi Guggulu:**^{xx} *Gokshuradi Guggul* contains *Trikatu, Triphala, Musta, Suddha Guggulu*. The formulation has *Tridoshamaka, Raktashodhaka* and *Rasayana* properties. Most of the drug in the formulation are *Ushna Virya, Laghu-Ruksha Guna* and *Madhur- Vipaka* therefore helps in pacifying the *Vata Dosha*.

12. **Dashmoola Kwatha:** it is indicated in *Tridoshaja Vyadhi* by *Acharya Sushruta*^{xxi}. *Dashmool Kwatha* are *Katu Rasa, Katu Vipaka, Laghu, Ruksha Guna* and *Ushna virya*. By virtue of these properties *Dashmool* does *Amapachan* and remove *Avarana* and other properties associated to that acting on *Vata Dosha*.

13. **Vishtinduka Vati:**^{xxii} It is mentioned in *Ras Tantra Sara* and *Siddha Prayoga Samgraha*. The main content of *Vishtinduk Vati* is *Kuchla* which having properties like *Vata -Shamaka, Chittavasadhara* (antidepressant properties) and *Hridya Daurbalyahar* (cardiac tonic).

14. **Lashunadi Vati:**^{xxiii} It contain *Lasuna, Jiraka, Saindhav Lavana, Suddha Gandhak, Shunthi, Pippali, Maricha, Hingu* and *Nimbu Swarasa* (ref). *Lashun* is *Vatashamaka* by *Snigdha, Pichchila, Guru, and Ushna Guna*. due to *Ushna* and *Tikshna Guna* it enhances *Agni* and prevent the formation of *Amavastha*.

15. **Bramhi choorna:** *Brahmi* does *Rasayana, Smritiprada, Medhya Swarya* all these *Karma* of *Brahmi* are mentioned in *Bhawprasha Nighantu*. *Bramhi* (*Centella asiatica*) is one of the prominent herbs for revitalizing the nerve and brain cells^{xxiv}.

16. **Cap palsineurone:** It is a proprietry medicine prepared by combination of *Ekangveera Ras, Mahavataavidhvansam Ras, Sameerpannagrass* and *Sutasekhara Ras*, and all these *Yogas* are directly indicated in

Vataj Roga^{xxv}. Due to this specific type of combination, it was administered to patient to tackle symptoms like weakness and stiffness.

CONCLUSION:

In *Pakshaghaat* both mental and physical condition of the patient affects. If patient comes to undergo Ayurvedic treatment as early as possible, the results are wonders. Ayurvedic formulations and procedures are having significant role in the management of *Pakshaghaat*. Ayurveda Panchakarma therapy is useful to improve muscle power tone of hemiparesis patient. This case showed marvellous results in the recovery of the patient and no adverse effect were observed during the treatment.

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