



PAKSHAGHAT: A CASE STUDY

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Abstract: *Pakshaghata* a term in *Ayurvedic* literature, refers to a condition characterized by loss of function and weakness in one half of the body. It is regarded as predominately *Vata Dosha Vyadhi*. Factors such as *Dosha* involvement, *Bala*, and *Vaya* can impact the prognosis, with the face potentially involved.

Current scientific theories suggest the brain controls motor functions, with cerebral vascular accidents being the primary cause of loss of bodily function. *Ayurveda* can be correlated with *Pakshaghata* because of the most similarity; on the other hand, *Ayurveda* treats both the underlying cause and symptoms of *Pakshaghata* with *Samshodhana* and *Vata - Shamaka chikitsa*.

In the present case, the patient presented with right side *Pakshaghata* and was treated with *Panchakarma* therapy, which included *Shirodhara*, *Nasya*, *Mukhabhyanga*, *Ksheerdhooma*, *Agnilepa*, *Vasti*, and *Shaman Aushadhi*. Initially, *Nasya*, *Mukhabhyanga*, and *Ksheerdhooma* were given for 7 days. *Shirodhara*, *Sarvang Abhyanga*, *Nadisweda*, *Agnilepa* for 13 days, and *Vasti* for 5 days. Then the patient was discharged with oral medication and then came to follow up after 25 days. After treatment, patients get significant results.

Key words: *Pakshaghata*, *Dosha*, *Samshamana*, *Samshodhana*..

1. Introduction:

Acharya Charaka explains that *Pakshaghata* is a disease caused by the vitiation of the *Vata Dosha*, resulting in *Adhishtana* in one half of the body and joint stiffness (a lack of function on one side of the body)¹. *Acharya Sushruta* explains that *Vata Dosha* travels in *Urdhava Adhoga Tiryaka Dhamani*, leading to *Sandhi Bandhana Moksha* and ultimately causing *Pakshaghata*. The prognosis is *Asadhya* when *Dhatukshaya* is the cause, *Krichhrasadhya* when *Vata* is the only factor, and *Sadhya* when *Vatadosha* is linked to other doshas². *Pakshaghata's Chikitsa* lists *Snehana*, *Swedana* and *Mridu Samshodhana* first, followed by *Vasti* with *Balya* and *Vatashamaka Aushadha*, *Shalavana Upanaha*, *Nasya*, *Shirovasti*, and *Abhyanga* with different *Taila*³.

Hemiplegia, often a result of cerebrovascular disorders or stroke, is characterized by a focal neurologic deficit. The clinical symptoms are highly variable due to the brain's complex anatomy. Other symptoms include weakness, decreased movement control, clonus, spasticity, exaggerated deep tendon reflexes, and decreased endurance. Hemiplegia is the leading cause of disability and has significant socioeconomic implications⁴.

2. Case report:

A 57-year-old Male patient reported at the Kayachikitsa OPD of Padma hospital, SDMTAMC Terdal, complaining *Vaakrichata* (Difficulty in talking) Right upper & lower limb *Karma* and *Bala Kshaya* (loss of function and strength) since 18 days along with gradual onset and routine work in co-ordination but no signs and symptoms of Increased intracranial pressure. Before coming to us he consulted to Lakeview Hospital Belagavi where he has got his MRI Brain done for two times and later, he was put on Antiplatelets, Antihypertensive & other symptomatic medication and got partial improvement in speech and Rt. Upper and lower limb function. The patient was detected diabetic and hypertensive along with above complaint. With these complaints, patient admitted to hospital with ID no. 30182.

3. Clinical Findings:

The case was subsequently consulted on 22/09/2023 in OPD of Padma hospital Terdal for the *Ayurvedic* treatment. A male patient with moderate build, had complaints of *Vaakrichata* (Difficulty in talking) Right upper & lower limb *Karma* and *Bala Kshaya* (loss of function and strength) since 18 days along with gradual onset and routine work Inco-ordination. When physical examination was done, vitals were stable, per abdominal examination did not reveal any significant findings.

4. Dashavidha Pareeksha (Ten-Fold Examination):

Prakriti (genome) was *Vata Kapha*; *Vikriti* was *Vata Pradhana Tridosha*; *Satva* (psyche) was *Madhyama* (moderate); *Sara* (excellence of tissue), *Samhanana* (compactness of organs), *Ahara Shakti* (power of food intake), *Satmya* (suitability), *Pramana* (measurement of body organs) were *Madhyama* (moderate), *Vyayama shakti* was *Madhyama* (moderate).

5. Ashtavidha Pareeksha (Eight-Fold Treatments):

Nadi (pulse) was *Vataja* (78/minute); *Mala* (bowel) was *Vibhandayukta* (constipated) and regular; *Mutra* (urine) was *Srista* (normal); *Shabda* (voice) *Vaakrichata* (Difficulty to speech/slurred speech); *Jihva* (tongue) was *Lipta* (coated); *Akriti* (body built) was *Madhyama* (moderate); *Drik* (vision) was normal.

6. H/O:

Type 2 DM & Hypertension detected with above complaints 18 days back, Now patient is on allopathy medication.

No history of any surgical intervention or blood transfusion

1st MRI Brain: (02/09/2023) Acute infarct in left half of pons age related bilateral diffuse prominence of fronto-parietal cortical sulci.

2nd MRI Brain: (19/09/2023) 17 days later MRI was compared to previous MRI brain there is no significant increase in size of subacute infarct noted in left half of pons. No e/o hemorrhagic transformation. No e/o fresh infarct.

H/O old blood reports: Hb 15%, platelets 2.47 lakh/cells/Cmm, BSL level 140 mg/dl, creatine 1.1 mg/dl.

7. O/E:

General Condition: stable conscious oriented

No pallor/icterus/edema.

B.P: 140/100 mm of Hg

P.R: 78/min

Temp: Afebrile

8. Central nervous system

8.1. Higher functions:

Consciousness: fully conscious to time place and person.

Memory Intact Behavior friendly

Orientation: fully oriented to time, place and person.

8.2. Cranial nerves:

Facial nerve (symptoms present) Asymmetry of face, stasis of food in mouth, dribbling of saliva through mouth during talking. Eye closure normal, whistling not present, blowing not present Hypoglossal tongue deviated.

8.3. Sensory system:

Superficial sensation WNL

Deep sensation WNL

Cortical sensation WNL

Deep tendon reflexes – Right knee reflex exaggerated; Right elbow reflex exaggerated.

8.4. Gait: Hemiplegic gait positive

8.5. Movements:

Unable to raise right upper leg above to head.

Elbow flexion possible up to 60 degrees.

Unable to do physiotherapy stair up and down by 2 fingers.

Unable to draw circle with pen.

Unable to get up and sit without support.

Unable to walk without support.

Unable to wear cloths/shoes or bath without support.

Unable to attend professional work at TVS show room.

8.6. Motor Function:

Table 1: Motor function before treatment

	Right upper limb	Right lower limb	Left upper limb	Left lower limb
Bulk	Normal	Normal	Normal	Normal
Tone	Normal	Normal	Normal	Normal
Power	3/5	4/5	5/5	5/5

9. Diagnosis: Pakshaghata (Right side Hemiplegia)

10. Treatment:

Table 2: Panchakarma Treatment

Date	Procedure	Medication used	Days
22/09/2023 - 03/10/2023	Shirodhara	Ksheerbala Taila + Karpasasthyadi Taila	13 day
22/09/2023 - 29/09/2023	Sarvanga Abhyanga f/b Nadisweda	Balashwagandha Taila	13 day
23/09/2023 - 29/09/2023	Nasya	Gudaadraka Swarasa	7 day
23/09/2023 - 29/09/2023	Mukhabhyanga & Ksheerdhooma(face)	Mukhabhyanga Karpasasthyadi Taila	7 day
23/09/2023 - 02/10/2023	Agnilepa	Lashuna, Maricha, Sarshapa, Arka, Haridra, Saindhava Lavana, Dhattura.	11 day

29/09/2023 - 03/10/2023	<i>Basti a)Anuvasan basti b)Niruh basti</i>	<i>Sahacharadi taila. Manjisthadiksharbasti</i>	3 day 2 day
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Table 3: Shamana Chikitsa

Date	Drug name	Dose	Days
22/09/2023 - 03/10/2023	<i>Dhanadanayanadi Kashayam</i>	10 ml TID after food	13 day
22/09/2023 - 03/10/2023	<i>Yasthimadhu churna + Vacha churna + pipali Churna</i>	2gm with water TID after food	13 day
22/09/2023 - 01/10/2023	<i>Tab Vrihat Vatchintamani Rasa</i>	1 tab BD after food	10 day
22/09/2023 - 03/10/2023	<i>Capsule Palsinuron</i>	1 tab TID after food	13 day
22/09/2023 - 03/10/2023	<i>Capsule Gandharvahastadi Thailam</i>	1 tab HS (hora somni)	13 day

Physiotherapy: for 13 days. (22/09/2023 – 3/10/2023)

11. Discharge medication:

- 1) *Sarasvatarishta + Ashwagandharista + Cardorium* syrup 10 ml each with 1/2 water BD after food.
- 2) Cap *Lashun Rasayan* 1 Bd 2 day 2 Bd for 3day 1 Bd for 2 day repeat cycle 2 time after food.
- 3) Cap *Palsinuron* TDS after food.
- 4) Tab *Brahmhi Vati gold* – 1 HS.
- 5) Tab *Makardhwaj vati gold* - OD after food.
- 6) *Abhyanga* with *Balashwagandha taila*.

Patient continued above medication up to next follow up 4/10/2023 to 30/10/2023 (25 days).

12. Follow Up and Outcome:

The patient took *Panchakama* treatment for 13 days and then came to follow up after 25 days.

13. Result:

Improvement in *Vaakrichata* (Difficulty to talking).

Facial nerve (symptoms present) Asymmetry of face improved, No stasis of food in mouth, No dribbling of saliva through mouth during talking.

Gait: Hemiplegic gait Negative.

Movements:

Able to raise right upper leg above to head.

Elbow flexion possible upto 80 degree.

Able to physiothrepic stair up and down by 2 figure.

Able to draw circle with pen.

Able to get up and sit without support.

Able to walk without support

Able to were cloths/bath/ shoes without support

Able to attend professional work at TVS show room.

Table 4: Motor function after treatment

	Rt upper limb	Rt lower limb	Left upper limb	Left lower limb
Bulk	Normal	Normal	Normal	Normal
Tone	Normal	Normal	Normal	Normal
Power	5/5	5/5	5/5	5/5

14. Probably mode of action:

The aggravated *Vata-Vataja* disorder in *Vatavyadhi* affects both the *Snayu* (nerves) and *Sira* (blood vessels). The best treatments have been mentioned as *Snehana* (oleation), *Swedana* (sudation), and *Basti* (enema). It supplies *Pushti Prasada*, or food for the *Dhatus*, and balances the *Vata Doshas*. If *Abhyanga* is done for a sufficient amount of time, the oil gets absorbed and transported to the different *Dhatus*. *Swedana* has the ability to enter the microchannels after they have dilated and lead the toxins towards *Kostha* or expel them through the use of *Shodhan* therapy^{5,6}.

Shirodhara: It helps to pacify the vitiated *Vata* in *Shiropadesh* and relaxes the nervous system. *Karpasahastadi taila* soothes muscles, nerves, and balances *Vata Dosha*⁷. *Balashwagandha taila* has muscle and nerve-strengthening properties, and it is best for *Vata*-induced degenerative neurological changes.

The accumulated *Doshas* are expelled out by *Shodhana Nasya*. *Guda* with *Adra* having *Tridoshoshamaka* activity, *Adra* acts as *Kaphaghna*, *Strotoshodhaka*, and *Raktprasadka* and enhances good circulation. *Ksheerdhoom* is helpful in treating anxiety, stress, speech disorders, and facial paralysis caused by an imbalance in the *Vata Dosha*⁸.

Agnilepa, a paste containing drugs like *Ushna*, *Tikshna*, *Ruksha*, *Katu*, *Tikta Rasa*, and *Laghu Guna*, whose properties are opposite those of *Vata Kapha Dosha* helps relax and reduce muscle spasms, and improve muscle function⁹.

Vasti helps in *Vata shamana* multidimensional affect *Dhatu Poshana* and pacification of other *Doshas* associated with *Vata Dosha*. *Anuvasana Basti* with *Sahacharadi Taila*, balances the *Vata* and *Kapha*¹⁰. It helps ensure that the blood circulates properly and strengthens the veins. *Manjisthadi Kshara Vasti* contains potent *Vata Shamak*, *Stroto*, and *Raktashodhak Dravyas*. *Kshara Basti* aids in removing lumen blockages and enhances circulation to the afflicted area¹¹.

Palsineuron capsules enhance PNS and central nervous system metabolic functions. It leads to neuromuscular communication¹².

Brihatvatachintamani Rasa has properties such as *Medhya*, *Rasayana*, *Lekhana*, *Balya*, *Kshayagna*, *Ojovardhana*, and *Yogavahi*, which have a targeted effect on the management of *Pakshaghata*¹³.

The post ischemic brain's upregulation of anti-apoptotic proteins and downregulation of pro-apoptotic proteins is influenced by gold nanoparticles. The brain's inflammatory response is reduced by silver nanoparticles.

The *Gandharvahashta Eranda Thailam* Capsule helps to restore the natural balance of the digestive system by providing friendly relief from hard bowel movements. It helps to regulate the *Vata*'s normal movement¹⁴.

Makardhwaj Vati aids in tissue repair and regeneration, protects against cellular damage, and stabilizes *Vata* and *Pitta* doshas¹⁵.

Brahmi Vati, a helpful remedy for nerve strengthening and circulation improvement, is known for its neuroprotective and memory-enhancing properties¹⁵.

*Saraswatarishta*¹⁶ is a potent nervine tonic that aids in reducing low grasping power and slurred speech.

Cardorim Plus is a potent herbal remedy that strengthens blood vessels and dissolves blockages to improve blood circulation.

Ashwagandharishta effectively reduces bad cholesterol and enhances neurotransmission and synaptic flexibility¹⁶.

Vacha, along with *Medhya*, supports regulating speech problems due to its *Vata* pacifying and *Medhya* actions.

Physiotherapy helps patients restore, maintain, and optimize their physical strength, function, and overall wellness; enhance joint integrity and muscular flexibility; and meet developmental milestones¹⁷.

15. Discussion

Ayurveda is a science that not only treats symptoms but ultimately leads to *Samprapti Vighatana*, thus curing the disease. In *Pakshaghata* disease, *Vata* is the basic cause of the disease, which should be treated first with *Shodhana* and *Shamana Chikitsa*. *Vasti* helps *Vata Shamana* multidimensional affect *Dhatu Poshana* and pacification of other doshas if associated with *Vata Dosha*. *Manjisthadi Kshara Vasti* contains potent *Vata Shamaka*, *Stroto*, and *Raktashodhaka properties*. *Pakshaghat's* main pathology lies in the brain. In *Ayurveda*, *Nasa* is called *Dwara to Shira* (brain) [Nasa Hi Shiraso Dwaram]. In the case of *Nasya*, which causes *Dosha Shodhana* and *Shamana*. *Shirodhara* pacifies the vitiated *Vata* in *Shiropadesha* and relaxes the nervous system. In the case of *Pakshaghata*, if there is flaccidity, rigidity, hypertrophy of muscles, and stiffness prevented by *Abhyanga*, *Swedana*, *Ksheerdhoom* and *Agnilepa* it also increases blood supply to the part.

16. CONCLUSION

Pakshaghata is a *Vata Pradhana* ailment that causes loss of function in one half of the body, which may be compared to hemiplegia of any origin. *Vata Pradhana Vyadhis* are best treated with *Shirodhara*, *Nasya* and *Vasti*, and the main *Adhishthana* of *Dosha* is *Urdhva Jatrugata*. Symptomatic relief is given by *Sthanika Abhyanga*, *Swedana*, *Agnilepan*, *Shaman Aushadhi*, and physiotherapy. After the above treatment, the patient's recovery is significant. Thus, it can be concluded that *Panchakama Shodhana* and *Shamana Aushadhi* and physiotherapy are very effective in *Pakshaghata Chikitsa* and in patients suffering from stroke and similar ailments.

Declaration of Patient Consent

Authors certify that they have obtained patient consent form, where the patient has given his consent for reporting the clinical case information in the journal. The patient understands that his name and initials will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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Conflicts of Interest

There are no conflicts of interest.

17. References:

1. Kashinath Shashtri, Gorakhnath Chaturvedi, Charak Samhita of Charaka with Vidyotini Hindi commentary, Chikitsa Sthana, Reprint Edition, 2013, chapter 28, verse 54 Varanasi; Chaukhamba Bharati Academy, 2013; 787 p.
2. Ambikadatt Shastri, Sushruta Samhita of Sushruta with Ayurveda Tatva Sandipika Hindi Commentary, Nidana Sthana, Reprint Edition, 2014, chapter 1, verses 60–63, Varanasi: Chaukhambha Sanskrit Sanstana, 2014; 115p.
3. Kashinath Shashtri Gorakhnath Chaturvedi, Charak Samhita of Charaka with Vidyotini Hindi commentary, Chikitsasthana Reprint edition, 2013, chapter 28 verse 101 Varanasi; Chaukhamba Bharati Academy, 2013; 807 p.
4. P.J. Mehta, P.J. Mehta's Practical Medicine, 20th Edition, Central Nervous System, 2016; 350p, 353p, 356p.
5. Vasant C. Patil, Principles and Practice of Panchakarma, 3rd ed., Bangalore; Atreya Ayurveda Publications, 2016; 120p.
6. Vasant C. Patil, Principles and Practice of Panchakarma, 3rd ed., Bangalore; Atreya Ayurveda Publications, 2016; 237–239p.

7. Tokinobu A., Yorifuji T. (May 2017). "Effects of Ayurvedic Oil-Dripping Treatment with Sesame Oil vs. with Warm Water on Sleep: A Randomized Single-Blinded Crossover Pilot Study." J Altern Complement Med. 22 (1): 52–58.
8. Ashtanghridayam of Vagbhata, edited by Dr. Bramhanand Tripathi, Chaukhamba Pratsthan Delhi, Reprint 2009, Ah.su. 5/48, 6/163.
9. Deva, Sachin; Mathad, Prasanna; and Roy, Kanu. (2020). MODULATION OF AGNILEPA IN THE MANAGEMANT OF AMAVATA. 9. 7.
10. Shasirekha K., Bargale Sushant Sukumar. Caraka Samhita of Agnivesha, Sidhistana, 1st edition. New Delhi; Chaukhambha Publications; 2020. 125p.
11. Chakradatta Samhita Sanskrit text with English translation by Priyavrat Sharma, edition 2003, Ch. 73/29-31.628p.
12. <https://www.ayurvedinfo.com/2012/08/10/palsinuron-capsules-benefits-dosage-ingredients-side-effects/>
13. Siddhi Nidan Mishra, Bhaishajya Ratnavali of Kaviraj Govind das Sen, Chaukhamba Surbharati Prakasha, 2009; 530p.
14. <https://www.ayurvedinfo.com/2012/06/03/gandharvahasthadi-thailam-benefits-how-to-use-ingredients-side-effects/>
15. Shree Vaidyanath Ayurveda Bhavan. Ayurveda Sarsangrah Shree Vaidyanath Ayurved Bhavan Limited, Nagpur, 2015, 527p.
16. Krishna Gopal Ayurved Bhavan Rastantrasaar & Siddhaprayog Sangraha Part-II (2019th ed., Vol. 2) [Hindi]. Krishna Gopal Ayurved Bhawan (2012), 373p.
17. Sohini S. Conventional Ayurvedic Management in Spastic Cerebral Palsy, IJAPR, April 2017, 4p.

