



CLINICAL EVALUATION OF AYURVEDIC INTERVENTIONS IN PAKSHAGATAM: A CASE REPORT.

Ayurveda

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ABSTRACT

Cerebrovascular accident (CVA), commonly known as stroke, is an acute neurological emergency caused by a sudden disruption of cerebral blood flow resulting in focal or global neurological deficits. It remains one of the leading causes of mortality and long-term disability worldwide. CVA may occur due to ischemia resulting from vascular occlusion or due to intracerebral haemorrhage following vessel rupture, leading to irreversible neuronal damage if timely interventions are not achieved. The present case report describes a 70-year-old female diagnosed with a small vessel ischemic stroke (Lacunar infarct), who was admitted to our institution with complaints of inability to lift or move the right upper and lower limbs for a duration of 2 months. She was managed with Ayurvedic therapeutic interventions including Abhyangam, Nadiswedam, Shiropichu, Nasyam and other treatments. Following 21 days of treatment, significant clinical improvement was observed with the patient regaining the ability to walk with support, lift the affected limb and perform activities, indicating marked functional recovery.

KEYWORDS

Pakshagatam, Lacunar Infarct, Panchakarma, Cerebro Vascular Accidents.

INTRODUCTION

Cerebrovascular accident (CVA), commonly referred to as stroke or brain attack, is an acute medical emergency caused by a sudden interruption of blood supply to a part of the brain, resulting in the rapid onset of neurological dysfunction^{3,1}. It is one of the leading causes of adult disability and ranks as the second most common cause of death worldwide. CVA occurs due to impaired cerebral perfusion or damage to cerebral blood vessels, presenting either as an ischemic stroke due to vascular occlusion or a hemorrhagic stroke due to vessel rupture². Clinically, Stroke is defined as the sudden development of focal or global neurological deficits lasting longer than 24 hours, arising from cerebral ischemia or hemorrhage and prolonged interruption of blood flow leads to irreversible brain tissue damage with permanent neurological deficits. Stroke constitutes a major global and national health burden, with a lifetime risk of approximately 25% in individuals aged 25 years and above and over 12 million new cases reported annually worldwide³. A significant proportion of stroke survivors are below 70 years of age, contributing substantially to long-term morbidity. The overall prevalence is estimated at around 465 per 100,000 population with marked regional variations³. In India stroke is a leading cause of mortality and disability, with prevalence rates ranging from 84-262 per 100,000 in rural areas and 334-424 per 100,000 in the urban population. The incidence rises notably after 65 years of age, commonly due to atherosclerotic changes, and is higher among males. Ischemic strokes constitute nearly 80% of cases, while hemorrhagic strokes account for about 20%⁴.

DISCUSSION ON NIDANA & SAMPRAPTI

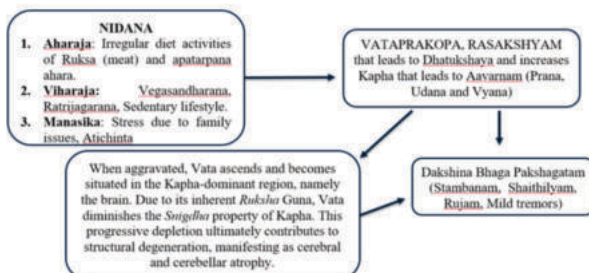


Figure 1: Discussion on Nidana and Samprapti of this Case.

Case Study

A 70-year-old female came to our OPD with complaints of pain in the

right shoulder, followed by progressive weakness and restricted movement of the right upper and lower limbs, along with mild tremors and was admitted to the allopathic hospital for the same, where she was diagnosed with CVA and HTN. She also reports a history of low back pain radiating to the right lower limb, associated with stiffness, which began approximately one year ago, for which she did not undergo any treatment. She was irregular with her medications, and she came to our hospital for betterment of her condition.

General Examination

• Personal History:

- ◆ **DIET:** Mixed
- ◆ **APPETITE:** Regular
- ◆ **SLEEP:** Disturbed due to stress
- ◆ **MICTURATION:** Normal
- ◆ **BOWEL:** IR- Constipated (2 days once)
- ◆ **HABITS:** 3 coffees a day
- ◆ **ADDICTION:** Nothing specific.
- **MENSTRUAL HISTORY:**
- ◆ **AGE OF MENARCHE:** 14 Years
- ◆ **AGE OF MENOPAUSE:** 54 Years
- **FAMILY HISTORY:** Nothing specific.
- **SURGICAL HISTORY:** Nothing specific.
- **PAST ILLNESS:** Nothing specific.
- **BP:** 140/90 mmHg
- **PR:** 90bpm
- **RR:** 18rpm
- **HEIGHT:** 160 cm
- **WEIGHT:** 65Kg
- **EDEMA:** Absent
- **ICHTERUS:** Absent
- **BMI:** 25kg/m²
- **NAILS:** Normal
- **PALLOR:** Present
- **CYANOSIS:** Absent
- **LYMPHNODES:** Non-Palpabale
- **TEMPERATURE:** Afebrile

Systemic Examination:

GIT: P/A soft & non-tender, No organomegaly seen.

Respiratory System: NVBS+, No added sounds heard.

CVS: S1S2 heard, No palpitations.

CNS EXAMINATION:

1. HMF:

- **CONSCIOUSNESS:** Conscious & alert
- **ORIENTATION:** Oriented
- **MEMORY:** Recent, Immediate, & past -Intact
- **LANGUAGE:** No Slurring and Fluent speech
- **INTELLECT:** Intact

2. CNS:**NERVES – RESULT**

1. Olfactory - Intact
2. Optic - Intact
3. Oculomotor -Intact
4. Trochlear - Intact
5. Trigeminal - Corneal reflex – Present; Sensation – Intact; Jaw jerk – Not able to elicit
6. Abducens - Intact
7. Facial - Symmetrical, Able to raise eyebrows, smile and puff
8. Vestibulocochlear - Intact
9. Glossopharyngeal - Intact
10. Vagus - Intact
11. Accessory - Intact
12. Hypoglossal – Intact

3. Sensory Examinations**Table 1: Sensory Examinations of Both Limbs.**

	UPPER LIMB		LOWER LIMB	
	RIGHT	LEFT	RIGHT	LEFT
PAIN	+	-	+	-
TEMPERATURE	+	-	+	-
TOUCH	+	-	+	-
GRAPHESTHESIA	Not able to elicit.			
STEREOGNOSIS	Able to elicit.			

4. Motor Examinations:

- Nutrition: Equal in all the limbs
- Tone: Rigid in both Right upper and lower limb, left- Normal
- Power:
 - Right upper limb- 2/5
 - Right lower limb - 0/5
 - Left upper and lower limb- 5/5
- CO-ORDINATION TEST:
 - Finger nose test: Not able to do
 - Heel Shin test: Not able to do
- GLABELLAR TAP: Negative
- CLONUS: Negative

Dasavidha Pareeksha:

- ✓ PRAKRITTI: Vata
- ✓ VIKRUTI: Vata Kapha
- ✓ SARA: Twak
- ✓ SAMHANANA: Madhyama
- ✓ PRAMANA: Madhyama
- ✓ SATVAM: Madhyama
- ✓ SATMYA: Sarvarasa
- ✓ AHARASAKTHI: Avara
- ✓ VYAYAMA SAKTHI: Avara
- ✓ VAYAS: Vridhdha

Ashtavidha Pareeksha:

- ✓ NADI: Vata Kapha
- ✓ MOOTRAM: Alpa
- ✓ MALAM: Constipated
- ✓ JIHWHA: Liptam
- ✓ SAPDA: Madhyama
- ✓ SPARSHA: Anushnasheetha
- ✓ DRUK: Madhyama
- ✓ AKRITI: Madhyama

Diagnosis: Pakshagatam / CVA (SVIC)**Treatment:****Table 2: Internal Medicines**

INTERNAL MEDICINE	DOSAGE
Rasnaerandadhi Kashayam	7.5ml each Kashayam + 45ml warm water in empty stomach at 6 am.
Danadayanadi Kashayam	
Sahacharadhi Kashayam	7.5ml each Kashayam + 45ml warm water in empty stomach at 6 pm.
Gandharvahastadhi Kashayam	

Tab. Estakin	2—0—2 (AF)
Tab. Madhuzest	1—0—1 (AF)
Kalyanaka Ghritam	5ml—0—5ml (1 hour before Kashayam) (4/11/25)
Vidaryadi Kashayam	7.5ml each Kashayam + 45ml warm water + 10 drops in empty stomach at 7 am & 7 pm. (8/11/25)
Dasamoolam Kashayam	
Ksheerabala 101 avarti	
Vatagajankusha Ras	2—0—2 (AF) (8/11/25)

Table 3: External Treatments

EXTERNAL TREATMENT	DAYS
Podikizhi with Nagaradi choornam + Udwartana Choornam + Dhanwantara Tailam. (F)	4 days with oil
Nadiswedam with Bala choornam (F)	24/10/2025 – 12/11/2025
Nasyam	Anutailam -2 drops in each nostril after lunch
	Ksheerabala 101 – 2 drops in each nostril (For 10 days)
Shiropichu with Brahmi tailam	From 3rd day for 6 days till 31/11/2025
Shirovasti with Brahmi Tailam + Ksheerabala Tailam.	12 days from 1/11/2025
Abhyangam with Cheriya Sahacharadhi tailam + Dhanwantara tailam(F).	From 5th Day (28/11/2025)
Matravasti with Gandarvahastadhi eranda tailam	31/10/2025, 6th, 7th & 9th Nov
Navarakizhi	3/11/2025 – 12/11/2025

Line of Treatment:

1. RUKSHANAM - Podikizhi, Nadiswedam & Ruksha Nasyam.
2. SODHANAM - Abhyangam, Nadiswedam, Nasyam & Matravasti.
3. BRMHANAM - Navarakizhi, Shiropichu & Shirovasti.
4. Kaphavilayanam – (Avarana nivriti) Kevala Vatam- Vatahara Chikitsa- Balyam, Brimhanam.

DISCUSSION**Mode of Action of Pharmacological Properties of the Drugs:**

Rasna Erandadhi Kashayam possesses *Lekhana Karma*, *Deepana*, *Vatahara*, *Sulahara*, *Sophahara*, muscle relaxant, anti-inflammatory and analgesic actions that help in reducing low back pain, stiffness and muscular spasticity. By alleviating aggravated Vata and removing Avarana, it contributes to improvement in motor coordination and functional mobility⁷.

Sahacharadhi Kashayam predominantly acts as a *Vata-Kapha Samaka* and *Vatanulomaka*, with *Deepana*, *Pachana*, and *Srotosodhana* properties. It is especially effective in *Adhokaya* disorders and addresses *Aavaranajanya Vata*. Its mild *Karsana*, *Stambhahara* and anti-inflammatory actions help in reducing rigidity, heaviness and pain, thereby enhancing lower-limb strength, gait and functional movements in hemiplegic patients⁶.

Danadanayanadhi Kashayam exerts *Lekhana* and *Srotosodhana* effects, facilitating the removal of micro-channel obstruction and improving *Dhatu Pariposhana*. By enhancing nerve conduction and neuromuscular transmission, it aids in the restoration of motor functions and reduces neurological deficits seen in *Pakshagatam*⁷.

Gandharvahastadhi Kashayam, along with Vidaryadhi Kashayam, provides *Balya* and *Brmhana* effects promoting nourishment of *Mamsa* and *Majja Dhatu*. The administration of Ksheerabala Taila (101 avarti) offers potent *Vatahara*, *Snigdha* and neuroprotective actions, supporting nerve regeneration, reducing spasticity and improving muscle power and endurance.

Kalyanaka Ghritam, a renowned Medhya Rasayanam, enhances cognitive functions, memory and higher mental faculties, which are often compromised in *Pakshagata*. Vatagajankusharas, with its strong *Vataamulomaka* and *Aavarana Bhedaka* properties, helps in relieving neural blocks and restoring normal *Vata Gati*. Together, these formulations contribute to improvement in speech, cognition, coordination and overall neurological recovery.

Pharmacokinetic Actions of Procedures:

Udwartana with Nagaradi Churnam was employed to address *Kapha Avrita Vata* commonly seen in *Pakshagatam*. Owing to its *Katu Tikta Rasa*, *Laghu Ruksha* and *Teekshna Guna* *Usna Veerya* and *Katu Vipaka*, Nagaradi Churnam exerts *Lekhana*, *Srotosodhana*, *Deepana* and *Pachana* actions, thereby reducing *Ama*, *Kapha* accumulation and stiffness in *Snayu*, *Sandhi* and *Mamsa*. This helps in relieving heaviness, improving circulation and facilitating better neuromuscular response. As *Kaphahara* and *Ruksha* therapies may secondarily aggravate *Vata*, *Dhanwantara Tailam* was administered concurrently to maintain therapeutic balance. Being *Vata Kaphahara*, *Brmhana* and *Rasayana*, it nourishes *Snayu Sandhi Mamsa Dhatu*, prevents excessive dryness, pacifies *Vata* and supports muscle strength and functional recovery. This combined approach effectively removed obstruction while protecting *Vata*, contributing to improved mobility and reduction of stiffness in *Pakshagatam*.

Podikizhi, *Nadiswedanam* and *Nasyam* were administered to address *Vata Kapha* vitiation and *Srotorodha* in *Pakshagatam*. The combined therapeutic effect is attributed to the predominance of *Katu Tikta Rasa*, *Laghu Ruksha* and *Teekshna Guna*, *Ushna Veerya* and *Katu Vipaka*, which collectively impart *Lekhana*, *Srotosodhana*, *Deepana* and *Pachana* actions. These interventions help in eliminating *Ama* and *Kapha* accumulation, restoring the patency of channels and facilitating the normal movement of *Vata*. As a result, *Vata Kaphahara* action is achieved, leading to a significant reduction in *Stambha* (Rigidity), *Sula* (Pain) and *Gaurava* (Heaviness). *Nasyam* further acts at the *Sirogata Vata* level, supporting neurological recovery and functional improvement. This integrated approach contributed to improved mobility, reduced stiffness and enhanced overall motor function in *Pakshagatam*.

Abhyanga plays a pivotal role in the management of *Pakshagata* by addressing *Sira Snayu Visosana* and aggravated *Vata*. Through its *Snigdha* and *Ushna Guna*, *Abhyanga* facilitates *Srotosodhana* by mobilising morbid *Dosas* and metabolic toxins from the peripheral tissues, softening the skin and underlying structures. Its *Vatashamana* action reduces *Stambhana*, Spasticity and rigidity of joints and muscles, while providing a calming and analgesic effect. The *Sneha* component nourishes and strengthens *Mamsa* and *Snayu Dhatu*, preventing further dryness and degeneration. By improving tissue pliability and relieving neural compression, *Abhyanga* enhances nerve conduction, coordination and motor control, thereby improving mobility and functional performance. Overall, the combined *Balya*, *Brmhana*, and *Rasayana* effects of *Abhyanga* contribute significantly to pain relief, neuromuscular strengthening and restoration of movement in *Pakshagata*. *Dhanwantara Tailam* possess properties like *Balyam*, *Brimhanam*, *Snigdham*, *Shothaharam*, *Vedanasthapanam* and *Cheriya Sahacharadhi Tailam*, which has *Vatahara*, *Mamsa Snayu Balya*, *Shoola Srothohara*, *Srotoshodhana*, and *Gati Vardhana*.

According to Acharya Charaka, *Matra Vasti* plays a central role in the management of *Avaranajanya* disorders by emphasising *Srotosuddhi*, *Vata anulomana* and *Rasayana* effects. *Vasti* simultaneously accomplishes restoration of the normal course of *Vata* and *Srotosodhana*, thereby addressing the core pathology of *Avarana*. It is considered the treatment of choice for *Madhyama Marga* involvement and for protecting *Marma*. Through its *Sneha* and *Vatashamaka* actions, *Matra Vasti* prevents *Sira Snayu Visosana*, maintains tissue integrity and supports neuromuscular nourishment. The combined *Vatashamana* and *Srotosodhana* effects improve mobility and coordination, enhance nerve conduction, and strengthen *Mamsa* and *Snayu Dhatu*, thereby contributing significantly to functional recovery in neurological conditions.

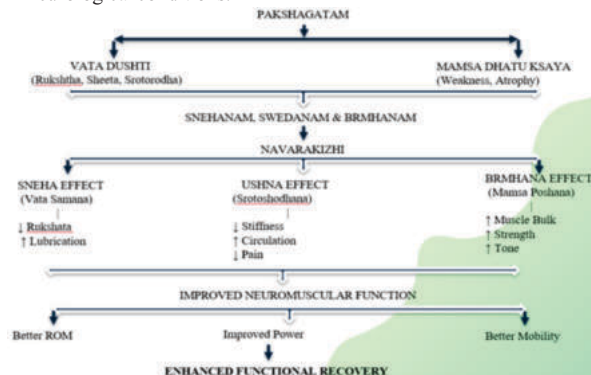


Figure 2: Action of Navarakizhi in Pakshagatam.

Shiropichu and *Shirovasti*, being *Murdhni Taila* procedures, act by the sustained application and retention of warm medicated oil over the scalp, which directly influences *Shiras*, the seat of *Prana Vata* and higher nervous functions. The medicated oil penetrates the scalp through hair follicles and superficial channels, providing nourishment to *Majja Dhatu* and *Shiras Srotas*, thereby improving neurological function. The *Ushna* and *Snigdha* properties of the oil pacify aggravated *Vata Dosha*, leading to a reduction in tremors and spasticity. The combined effects of thermal and gentle pressure, especially in *Shirovasti*, help reduce sympathetic overactivity and promote parasympathetic dominance, resulting in mental and physical relaxation. Additionally, these procedures exert a neuroendocrine modulatory effect by reducing stress hormone levels, improving sleep quality, and balancing neurotransmitter activity, which explains their efficacy in various neurological and psychosomatic disorders.

RESULTS

Table 4: Before and After Treatment.

SCALES	BT	AT
The Barthel Index	30	45
Oswestry Low back disability Questionnaire	33	29
NIH Stroke Scale	6	0
Graphesthesia	Not able to elicit	Able to elicit
Right upper limb motor power	2/5	4/5
Right lower limb motor power	1/5	4/5
Muscle tone (Right upper & lower limb)	Rigidity	Rigidity reduced, tone near normal.
Finger nose test	Not able to do	Able to elicit
Heel shin test	Not able to do	Able to elicit

CONCLUSION

The present case highlights the effectiveness of an integrated Ayurvedic management approach in the treatment of *Pakshagatam*. Systematic administration of internal medicines along with appropriate Panchakarma procedures resulted in significant improvement in motor functions, muscle tone and daily activities. The therapeutic interventions acted by pacifying aggravated *Vata Dosa*, promoting *Srotosodhana* and facilitating *Samprapti* *Vighatana*, thereby aiding neurological recovery and functional rehabilitation.

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