JETIR.ORG

# ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue



# JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

# FROM PARALYSIS TO PROGRESS: AYURVEDA'S ROLE IN MANAGING PAKSHAGHATA

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Index words: Ayurveda, Pakshaghata, Ischemic stroke, Panchakarma, Case report

ABSTRACT: Pakshaghata is one of the 80 Nanatmaja Vata vyadhi, that affects half of the body either the way. Pakshaghata, commonly known as hemiplegia, which is a neurological condition characterized by the paralysis of one side of the body. It is primarily caused by the vitiation of Vata Dosha. The clinical presentation of Pakshaghata includes symptoms such as muscle weakness, decreased motor function, speech difficulties and sensory impairments on the affected side of the body. Ayurvedic management of Pakshaghata involves Panchakarma therapies, internal medications, dietary modifications and lifestyle changes. Materials and Methods: In this case study, Patient presented with weakness of upper and lower limbs associated with slurred speech for 1 week and was treated with Panchakarma therapy, which included Takra Dhara, Abhyanga, Shiro Pichu, Ksheera dhooma, Yoga Basti and Nasya, along with Shamana Aushadhis and physiotherapy exercises. Results & Conclusion: There was a remarkable improvement after treatment the NIH Stroke scale score reduced from 13 to 5.

Combining *Panchakarma therapy, Shamana aushadhi* with physiotherapy exercises can provide more effective relief from disease symptoms and contribute to an enhanced quality of life.

**Introduction:** Cerebral infarction, also known as ischemic stroke is the pathological condition occurs when the blood supply to brain is reduced and causes necrotic changes in brain tissues<sup>1</sup>. The prevalence of Stroke in India ranged from 44.29 - 559/100,000 persons during the past two decades. The cumulative incidence ranged from 105 - 152/100,000 persons per year<sup>2</sup>. It can be characterized by hemiparesis, facial paralysis, sensory loss, dysarthria, Visual field loss, aphasia.

Pakshaghata is one of the 80 Vataja nanatmaja vyadhi. Acharya Charaka explains that the aggravated Vata gets lodged in half of the body. The aggravated Vata dosha dries up the Sira, Snayu, and causes looseness of the joints and reduces the functions or movements and sensation in one side of the body<sup>3</sup>. The treatment principle of Pakshaghata will be Snehana, Swedana, Murdhini taila, Navana and Tarpana<sup>4</sup>. Acharya Susruta explains that Snehana, Swedana, Mrdu Shodhana, Anuvasana Basti, Niruha basti, Shiro basti for 3-4 months<sup>5</sup>.

## **Case Report:**

A 40-year-old male patient came with complaints of weakness and heaviness of right upper and lower limbs along with slurring of speech in the last 1 week.

History of present illness – Patient was apparently healthy before 1 week, suddenly he developed weakness of right upper and lower limb, Slurring of speech and giddiness. He has gone to allopathic hospital, where patient was found to have CVA, half loading dose given (Inj. Clexame 0.6 ml) and neurologist opinion obtained and advised for young stroke evaluation. He came to our OPD for further treatment.

K/C/O of DM, HTN (newly diagnosed) under medication for 1 week.

No surgical history.

No any drug or food allergy.

Family history - Not significant.

Addiction: Alcoholic and Chain Smoker.

#### **GENERAL EXAMINATION**

 $Temp-98^0\;F$ 

PR - 75 BPM

BP - 130/80 mm Hg

 $SpO_2 - 98$  % on room air.

RS -B/L clear

CVS – S1S2 Normal

CNS - Conscious, Oriented

PIKCLE – Absent

# HIGHER FUNCTIONS

Conscious – Well conscious

Memory-Intact

Orientation – Fully oriented to time, place and person

Gait – Circumduction gait

## **Cranial Nerve:**

Facial Nerve – Asymmetry of face.

Accessory Nerve – Decreased in right side (Shrugging of shoulder)

# Motor system

Arm Drift (+)

Table 1: Muscle power (Before Treatment)

Muscle power	Left	Right
Upper limb	5/5	3/5
Lower limb	5/5	3/5

Table 2: Deep Tendon Reflexes

DTR	Left	Right
Jaw	Normal (2+)	Normal (2+)
Biceps	Normal (2+)	Exaggerated (3+)
Triceps	Normal (2+)	Exaggerated (3+)
Brachioradialis	Normal (2+)	Exaggerated (3+)
Knee	Normal (2+)	Exaggerated (3+)
Achilles Tendon	Normal (2+)	Exaggerated (3+)
Plantar	Normal (2+)	Exaggerated (3+)

# Asta sthana pariksha

Nadi – Vata Kapha

Mutra - Prabhoota

Malam – Nirama

Jihwa - Lipta

Shabdha - Vaikruta

Sparsha - Prakruta

Drik - Prakruta

Akruthi – Prakruta

# Samprapti ghataka

Dosha – Vata pradhana tridosha

Dushya – Rasa, Rakta, Mamsa, Medas, Sira, Snayu

Srotas – Rasa vaha, Mamsa vaha, Medo vaha Sroto dushti

Srotodushti – Sanga, Vimarga gamana

Agni dushti – Mandagni

Udbhava adhistana- Pakwashaya

Sanchara sthana – Sarva deha



Vyaktha sthana – Ardha shareera

Roga marga – Madhyama

Sadhya asadhyata – Krucchra sadhya

# MRI Brain with MRA/MRV (dated on 14.01.2025)

Focal suspicious area of restricted diffusion in the left hemi mid brain with low ADC values-possibility of hyperacute midbrain infarct.

# **Biochemistry reports (dated on 14.01.2025)**

Serum Triglycerides – 202 mg /dL

Non  $HDL_c - 150 \text{ mg/dL}$ 

Total Cholestrol /HDL Ratio – 6

LDL/HDL ratio – 4

# USG Abdomen (dated on 14.01.2025)

Grade 1 – Fatty liver

Mild hepatosplenomegaly

## MATERIALS AND METHODS

# Panchakarma procedures

Procedures	Medicines	
Takra dhara	Mustamalaki siddha takra	
Abhyanga	Ksheera bala taila + lakshadi taila	
Patra pinda Sweda	Vatahara patra, Lashuna, Methika choorna, Haridra choorna, Shatapushpa Choorna, Rasnadi choorna	
Mamsa njavara pinda Sweda	Aja mamsa, Shastika shali rice, Bala moola Kashaya and Ksheera	

Jihwa pratisarana	Rudraksha choorna (2 Pinch)+ Vacha	
	choorna (2Pinch)+kalyanaka	
	avaleha choorna (2 Pinch) + Honey	
Ksheera dhooma	Bala moola siddha ksheera	
Nasya	ksheera bala 101 – 10 drops on each	
	nostril	
Anuvasana Basti	Sahacharadi mezhugupakkam +	
	Dhanwantaram ghritam	
Mustadi yapana basti	Makshika, Lavana, Sahacharadi	
	mezhugupakkam, Dhanwantaram	
	ghritam, Mustadi yapana kalka,	
	Mustadi yapana Kashaya	

# Shamana Aushadhi

1.	Dhananayanadi Kashayam	60  mL - 0 - 60  mL / BF
2.	Tab. Triglize	1-0-0/ AF
3.	Tab. Cardostab	0-1-0 / AF

And continue Antiplatelet medicines to prevent further complications.

1.	Tab. Telma 20 mg	0-0-1 A/F
2.	Tab. Clopidogrel + Aspirin (150	0-1-0 A/F
	mg)	
3.	Tab. Metformin (500 mg)	1-0-0 A/F

# **RESULTS:**

## **After treatment**

Table 5: Muscle power (After Treatment)

	Left	Right
Upper limb	5/5	5/5
Lower limb	5/5	5/5

Table 6: Deep tendon reflex

	Left	Right
Jaw	Normal (2+)	Normal (2+)
Bicep	Normal (2+)	Normal (2+)
Tricep	Normal (2+)	Normal (2+)
Brachioradial	Normal (2+)	Normal (2+)
Knee	Normal (2+)	Normal (2+)
Achilles Tendon	Normal (2+)	Normal (2+)
Plantar	Normal (2+)	Normal (2+)

# **Assessment Scale**

# **National Institute of Health Stroke Scale**

Table 7: NIHSS

Assessment	Score	
\	Before Treatment	After treatment
1a LOC	0	0
1b LOC question	0	0
1c LOC commands	1	0
2 Gaze	1	0
3 Vision	1	1
4 Facial Palsy	1	1
5 Motor Arm	2	1
6 Motor Leg	2	1
7 Limb Ataxia	1	1
8 Sensory	1	0
9 Language	1	0
10 Dysarthria	1	0

11Extinction &	1	0
Inattention		
Total score	13	5

#### **DISCUSSION:**

#### Shamana aushadhi

Tab. Triglize is a polyherbal combination consists of *Amla, Shunti, Gokshura, Arjuna, Bhallataka, Bilva* having anti – hyperlipidemic activity. It helps in reducing the LDL, VLDL level<sup>6</sup>.

Tab. Cardostab is a patent medicine consists of *Sarpagandha*, *Triphala*. It helps in maintaining blood pressure level. It is *Vata pitta hara*.

Dhananayanadi kashayam is ushna and kapha vata hara and having Vatanuloma karma. It is beneficial in the initial stage of disease as it is having lekhana and srotoshodhaka karma, helps in relieveing Srotorodha. It is having Anti – inflammatory, Hepato protective and Anti – convulsive action.

#### Takra dhara

In *Shirodhara* continuous pouring of liquid on forehead. It is having *Sama sitoshna guna* may have effect on *Sthapani*, *Utkshepa marma*. *Sthapani Marma* is a *sira marma*, may have reflex effect on baroreceptors<sup>7</sup>. It regulates neuroendocrine system, helps in reducing cortisol level<sup>8</sup>.

Lactic acid and other active components in *Amalaki* and *Musta* may pass through Stratum corneum into blood vessels through transdermal absorption.

#### Snehana

Abhyanga is a type of Bahya snehana which helps in reducing stress, lowering heart rate and Blood Pressure in Prehypertensive patients<sup>9</sup>. It is Vata hara in nature. It is also beneficial in Sira Snayu Vishosha.

Ksheera bala taila is Madhura rasa pradhana, Sheeta guna and Brumhana in nature, helps in alleviating Vata dosha and it is Dhatunaamprabalam. It is pleasing to Mind and Sense organs (Shadindriyaprasadaka).

*Lakshadi taila* is *Balya*, *Vataghna*. It is indicated in Apasmara, other neurological conditions and Pregnant women <sup>10</sup>.

#### Swedana

Patra Pinda Sweda leaves of Nirgundi, Eranda, Karanja have analgesic and anti-inflammatory properties and it is generally indicated in Vataja Vikara.

Mamsa Njavara pinda sweda is Balya and Brumhana. It helps in nurtures body, impart strength and soften the body. Aja mamsa being Guru, snigdha in nature, is similar to human body tissues (Shareera dhatu samanya), hence considered it is Bruhmanam<sup>11</sup>.

#### Shiro Pichu

In *Shiro pichu* cotton is soaked in oil and is placed on the vertex of head. Skin over the scalp region is thin so absorption will be quicker through transdermal route. In Ayurveda *Shiropichu* has action on *Tarpaka kapha*, *Sadhaka Pitta* and *Prana vayu*. Due to *Sukshma*, *Vyavayi guna* of *Taila*, it has action on *Manovaha srotas* and helps in pacifying *Mano vikaras*. On the other hand, *Ksheera bala taila* in *Brimhana* and *Vatahara* and *Balya* amends in pacifying *Manovikaras*<sup>12</sup>.

## Nasyam

Nasya was done with Ksheera bala taila 101. The Lipid soluble substance has the ability to cross the mucosa and stimulates the Olfactory nerves cross the blood brain barrier and enters the brain directly.

Nasa is considered as the gateway of Shiras, the drug administered enters into the *Shringataka marma*, and spreads to *Netra*, *Shrotra*, *Siramukha* and *Kanta* helps in Pacifying the vitiated dosha<sup>13</sup>. *Ksheera bala* is *Sheeta virya*, *Madhura rasa* and *Madhura Vipaka* helps in pacifying *Vata dosha* and nourishing the *Dhatus*.

## Ksheera dhooma

Ksheera dhooma is a type of Snigdha sweda, it helps in stimulating the nerve endings and causes vasodilation of capillary vessels. Goksheera is Madhura, Snigdha and sheeta guna. It is Preenana, Brimhana, Shramahara and Jeevana helps in pacifying the Vata dosha. Bala moola is Madhura rasa pradhana, and is Balya and Brimhaneeya. It is Vata shamaka and promotes strength and reduces inflammation<sup>14</sup>.

## Jihwa pratisarana

Jihwa pratisarana was done with vacha choorna and Rudraksha Choorna along with Honey. Rudraksha choorna is having Sheeta Virya, Madhura Vipaka and is Vata pitta shamaka it is also having anti – hypertensive action<sup>15</sup>. Vacha choorna is Katu tikta rasa pradhana and is Medhya, it is Kantya, Vakshakti vardhana, Vak prada, Swara pradana and Swara krit<sup>16</sup>. It helps in improving speech of the patient.

## Yoga basti

Table 3: Yoga basti pattern

	Day 1	Day 2	Day 3	Day 4	Day 5
Morning		N	N	N	A
Afternoon	A	A	A	A	

# Kashaya Basti

Table 4: Kashaya Basti ingredients

Ingredients	Quantity
Madhu	100 ml
Saindava	10 gm
Sneha – sahacharadi mezhugupakka <mark>m</mark>	50 ml
Dhanwantara ghrita	5 <mark>0 ml</mark>
Mustadi yapana kalka	30 gm
Mustadi yanana ksheera Kashaya	500 ml
Aja mamsa rasa	100 ml

#### Anuvasana Basti

Table 4: Anuvasana basti ingredients

Ingredients	Quantity
Sahacharadi mezhugupakam	50 ml
Dhanwantara ghrita	50 ml

Basti is the best treatment modality for Vata vikara. Mustadi yapana basti was administered in Yoga Basti pattern. Yapana Basti is having Vata hara and Rasayana property and does have both Shodana and Brimhana karma<sup>17</sup>. Acharya Charaka explains it as Sadyo balajanana<sup>18</sup>. Acharya Susruta explains, properly administered Basti Dravya will remain in Pakwashaya, Sroni and

below Nabhi and by its *virya*, it spreads to entire body through *srotas*<sup>19</sup>. Helps in pacifying *Vata* doshas and nourishes the dhatus.

Sahacharadi Mezhugupakam contains Sahachara, Devadaru, Shunti. All three are having Ushna Veerya and Kapha vata shamaka.

Dhanwantaram Ghrita indicated in Apasmara, Unmada, Vata shonita. It is pitta Kapha shamaka.

#### **CONCLUSION**

Pakshaghata is a Vata pradhana vyadhi, in which half part of the body is affected leads to loss of sensory and motor functions. It can be co related to hemiplegia or hemiparesis. Adapting vata chikitsa like Snehana, Swedana, Vasti and Nasya along with Physiotherapy and Shamana aushadhi helps in reducing the symptoms and patient's condition. In this case Patient had gained muscle power, his speech became clear, deep tendon reflexes became normal and gait improved. Overall patient had 70% improvement. Thus, Ayurveda plays a vital role in progression of the health of the Pakshaghata patients and helps in improving the quality of life.

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