

## ROLE AND SCOPE OF PANCHKARMA IN THE MANAGEMENT OF PAKSHAGHATA: A CONCEPTUAL STUDY

Gangarapu Kiranmai<sup>1</sup>, Vaishali R. Chaudhari<sup>2\*</sup>, Mamata Nakade<sup>3</sup> and Snehal Aldar<sup>4</sup>

<sup>1,4</sup>PG Scholar, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved and Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune- 411018 Maharashtra, India.

<sup>2</sup>Professor and Guide, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved and Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune- 411018 Maharashtra, India.

<sup>3</sup>Professor and HOD, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved and Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune- 411018 Maharashtra, India.



\*Corresponding Author: Dr. Vaishali R. Chaudhari

Professor and Guide, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved and Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune- 411018 Maharashtra, India.

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### ABSTRACT

*Pakshaghata* refers to paralysis or loss of function in half of the body; In this case, *Manas*, *Karmendriya* (Organ of action) and *Gyanendriya* (Sensorial organs) are impaired. A stroke can happen at any time and leave a victim disabled for life. The estimated adjusted prevalence rate of stroke in rural regions is 84–262/100,000, while in urban areas it is 334–424/100,000. Because the symptoms and indicators are as close as possible the *Pakshaghata* can be correlated to Hemiplegia. The two causes of any *vata vyadhi* are *Margavarana* and *Dhatukshaya*, which are interpreted as Haemorrhagic and Ischemic strokes, respectively. This Conceptual study gives a better guideline in treating *Pakshaghata* according to *Ayurveda*. In *Ayurveda Panchakarma treatment* is frequently regarded as a highly effective means of promoting the qualitative recovery of patients, restoring their muscles and enhancing their motor system particularly in *Pakshaghata*.

**KEYWORDS:** *Pakshaghata*, Hemiplegia, Panchakarma, Virechan, Basti, Snehan, Swedan.

### INTRODUCTION

*Pakshaghata* is one of the eighty *Nanatmaja vata vyadhi*, or diseases brought on by vitiation of *vata dosha*.<sup>[1]</sup> The terms *Paksha*, which means "*Ardha*" or half, and *Aghata*, which means "*Nasha*" or loss, are the roots of the word *Pakshaghata*. Thus, the full meaning is impairment of *Karmendriyas*, *Gnyanendriyas*, and *Manas*, resulting in loss of sensation in half the body. *Karmendriyas* are thought to be a component of the motor system, whereas *gyanendriyas* are thought to belong to the sensory system. Both are meant to be guided and controlled by the *Manas*.<sup>[2]</sup>

*Acharya Charaka* states that *prakupita vata* in one side of the body results in *adhishtana*, which in turn creates *pakshaghata*, which is connected to stiff joints and the desiccation of nerves, muscles, and tendons (*Sira and Snayu*).<sup>[3]</sup> Whereas, *Acharya Sushruta* explained it in '*Mahavata vyadhi*'<sup>[4]</sup> that *Vata dosha* generates *sandhi bandha moksha*, which results in the loss of functioning in one part of the body, known as *Pakshaghata*. It goes through *Urdhava*, *Adhoga*, and *Tiryaka dhamani*.<sup>[5]</sup> It is associated with hemiplegia, which is the consequence of stroke and cerebrovascular

accidents. One half of the body is paralysed in hemiplegia, while one side is feeble in hemiparesis. Pyramidal tract lesions can occur anywhere from the cerebral cortex, where they begin, to the fifth cervical segment, which can result in hemiplegia. A stroke might be indicated by unexpected numbness in the arm or leg, especially on one part of the body, slurred speech, confusion, loss of balance, and difficulty walking for no apparent reason. A vascular mechanism causes a fast onset of neurological deficiency, of which 85% are ischemic and 15% are the result of original haemorrhages.<sup>[6]</sup> Statistics from India show that 7,000,000 people experience a stroke annually. 10% of stroke victims fully recover, 25% have mild impairments, 40% have moderate to severe impairments, 10% need hospital care, and 15% pass away soon after the stroke.<sup>[7]</sup>

One of the key *Ayurvedic therapy* techniques is *panchakarma*. *Panchakarma* literally translates to "five procedures": *Shirovirechan/Nasya* (Nasal administration of medicines), *Asthanabasti* (Enema using medicinal decoction), *Vamana* (therapeutic emesis), *Virechan* (Purgation), and *Anuvasanabasti* (Enema using medicated

oil). In addition to these five main treatments, there are several auxiliary therapies that fall under the umbrella of *Panchakarma*, such as *Snehan* (oleation), *Swedan* (fomentation), *Shirobasti*, etc. Using *panchakarma* to treat neurological disorders is highly beneficial. The *Charaka Samhita* refers to the *pakshaghata* treatment plan as *virechana*.<sup>[8]</sup> According to certain theories, *virechana* is recommended when *pitta*, *rakta*, *kapha*, and *meda* are obstructing the *vata*. The best remedy for *vata* vitiation is believed to be *basti*. Because of this vitiation of *vata*, *basti karma* is of the utmost importance in treating *Pakshaghata*, and when combined with *virechana*, *basti karma* and stroke treatment have been found to be highly beneficial.

#### AIM AND OBJECTIVE

To study the Role and scope of *Panchakarma* management in *Pakshaghata*.

#### MATERIALS AND METHODOLOGY

Review is collected from Classics, Samhithas, Commentaries, Recent published articles, from Scopus, PubMed Journals etc.

**Nidana (Causative factors):** In Ayurveda, the causes of the illness *pakshaghata* have not been identified in isolation. Being a kind of *vata vyadhi*, classical *pakshaghata* is thought to be caused by the *Nidana* of *vataprakopa*. This is most likely the cause of the lack of narration of the individual *Nidanas* of *Pakshaghata*. The following are the causes of *pakshaghat*:<sup>[9]</sup>

- 1. Food related causative factors:** *Vata prakopa* and *Dathukshaya* are caused by overindulging in *Tiktha*, *Katu*, *Kashya* rasa elements that contain *Ruksha*, *Sheeta*, *Lagu Guna*, and *Adhaki*, *Chanaka*, *Kalaya*, and *Alpa bhojana*, as well as *Vishmashana*.
- 2. Enviromental causative factors:** A number of variables are emphasised, including *Vegadharana*, *Rathrijagarana*, overindulging in physical activity and having sex beyond one's limits,<sup>[10]</sup> walking,

talking, swimming, and travelling. Overindulgence in these *nidanas* can result in *vata prakopa* and *dhatukshaya*.

- 3. Exogenous causative factors:** *Under Agantuja hetu* (Exogenous factors), *Marmaaghata*, *Abhighata*, and *Bhagna* are also included.
- 4. Psychological factors:** *Vata prakopa* will also be caused by the *Manasika* (Psychological) factors *Bhaya*, *Chinta*, *Krodha*, *Shoka*, and *Utkantha*.
- 5. Seasonal factors:** *Varsha kala* (Cloudy skies), cold weather, summertime, excessive air exposure can also result in *vataprakopa*.
- 6. Miscellaneous factors:** This category includes all additional *nidanas* such as profuse bleeding (*Asrikshaya*), *Rogatikarshana*, *Dhatukshaya*, *Ama*, and *Margavarodha* that are not included in any of the other groups mentioned above.

**Poorvarupa (Prodromal symptoms):** *There is no text that describes the Poorvarupa of Pakshaghata. Because Vayu, with its chala, Laghu, and Sookshma Gunas, causes very acute start of sickness, Pakshaghata, being a Nanatmaja vata vyadhies, does not have any Poorvaroopas. According to Acharya Charaka, the Poorvarupa of every Vata Vyadhi is Avyakta Lakshana.*

#### Roopa (Cardinal Signa and Symptoms)

- *Anyatara paksha Chesta Nivritti, Vak stambha, Ruja.*<sup>[3]</sup>
- Unconscious (*Achetana*)
- Loss of functioning (*Akarmanyata*)
- *Hasta Pada sankocha*
- *Sira Snayu vishosha*
- Pricking pain (*Toda*)
- Pain (*Shoola*)
- Reduced joint compactness (*Sandhibandha vimoksha*)
- Burning sensation (*Daha*), Grief (*Santap*), (*Moorcha*)

#### Dosha specific clinical features

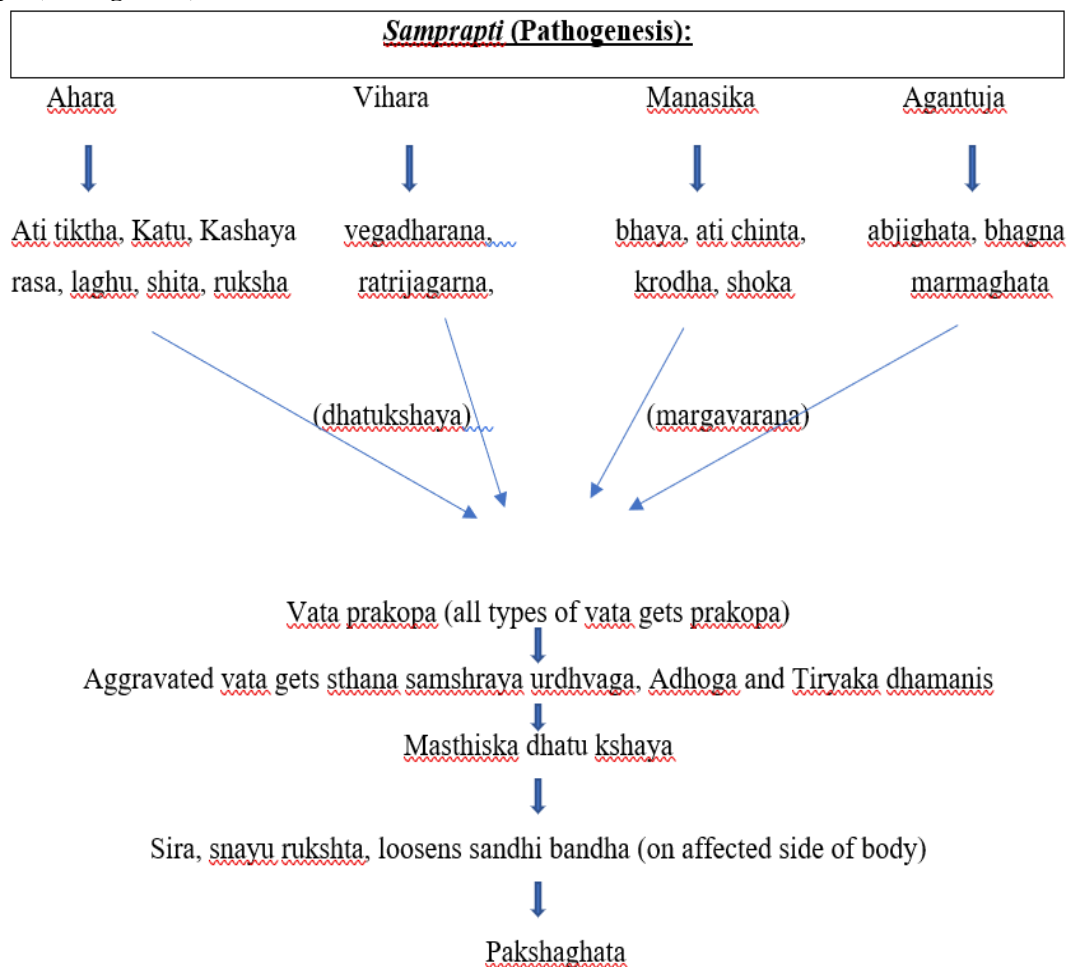
Table no. 1: *Dosha specific clinical features.*<sup>[11]</sup>

| Dosha associated                | Clinical features  |
|---------------------------------|--|
| <i>Pitta involved condition</i> | <i>Burning sensation, Increase in body temperature by grief, Syncope</i> |
| <i>Kapha involved condition</i> | <i>Coldness, Swelling, Heaviness.</i>                                    |

#### Samprapti ghataka (Pathophysiology)

- *Dosha: Vata (all types of vata)*
- Pitta (Pachakaa, ranjaka pitta)*
- Kapha (shleshaka, kapha)*
- *Dushya: Rasa, Raktha, Mamsa, Medha dhatu and Manas*
- *Agni: Jatharagni, Dhatvagni*
- *Ama: Dhatwagni Maandhya*
- *Srotasa: Rasa, Rakta, Mamsa, and Meda vaha srotasa*
- *Srotodushti: Atipravrutti, Sanga, Siragranthi and Vimarga gamana*
- *Udbhava stana: Pakwaashaya*

- *Sanchara stana: Urdhwa, Adhah, Tiryak dhamanis*
- *Adhithana: Shiras*
- *Rogamarga: Madhyama Roga Marga*
- *Vyakti sthana: Either Dakshin (right) or Vama (light) Paksha*

**Samprapti (Pathogenesis)****Upashaya**

Being a vata disorder in Pakshaghata, 'Upashaya' indicated in vata vyadhi, are also useful in Pakshagata.<sup>[12]</sup>

- Ghee
- Majja (Marrow)
- Medicated enema
- Fomentation accompanied with oleation (Swedan and Snehan)
- To reside in windless place
- Covering the body with blankets
- Food ingredients with sweet, sour and palatable taste.

**Sadhya-asadhyatva**

- a) **Charaka samhita:** Pakshaghata was categorised by Charakacharya as either Asadhya or Kashtasadhya. Only if the patient is Balawana and the ailment has recently occurred without any complications will it be cured; otherwise, it won't.<sup>[13]</sup>
- b) **Sushruta samhita:** Shuddha Vata as Kashtasadhya, Kshaya as Asadhya, and Samsrushta Dosha Pitta or Kapha as Sadhya are the causes of Pakshaghata.<sup>[5]</sup>
- c) **Madhav nidana:** If pakshaghata is caused by kevala vata, it is kashtasadhya; if it is caused by pitta and

kapha alone, it is sadhya; and if it is caused by kshaya, it is Asadhya.<sup>[14]</sup>

**Chikitsa**

**Charakacharya:** Swedan, (fomentation) Snehan (oleation), and Virechana (purgation) were suggested by Charakacharya as treatments for Pakshaghata.<sup>[8]</sup> Jejjata Acharya and Gangadhara acharya read this as Snehayukta Virechan and Swedan.

**Sushrutacharya:** Non-emaciated Pakshaghata patients experience agony in the afflicted area. First to be supplied are Snehan (Oleation) and Swedan (Fomentation), and then Mild (Mrudhu) Vaman (Emesis) and Virechan (Purgation). After that, administering Anuvasan (Oil enema) and Asthapan Basti (decoction enema) is necessary. Following this, the general guidelines and corrective actions outlined in the Akshepaka treatment plan should be given at the appropriate time.<sup>[15]</sup> The exact measures mentioned are Mastishkaya, Shirobasti (Retention of oil on head), Abhyanga (Massage) by Anu taila, Salvana upnaha sveda (Fomentation by paste of herbal drugs), and Anuvasan (Oil enema) by Bala taila. It is recommended that all of the aforementioned methods be diligently adhered to for a duration of three or four months.

**Ashtanga sangraha:** In accordance with *Sushruta's* advice, *Ashtanga Sangraha*kar Vagbhat specified oleation, fomentation, mild *Shodhan*, oil and decoction enema, and *Bala Taila* in particular for oil enema. In addition, *Doshasangraha* advocates using *Kukkuti Rasayan Kalpa*.<sup>[16]</sup>

**Ashtanga hrudiyam:** Ashtanga Hrudayakar Vagbhat promoted *Snehan* and *Snehayukta Virechana* and adhered to the *Charaka* therapy approach.<sup>[17]</sup>

Table no. 2: Panchkarma procedures according to different acharyas.<sup>[18]</sup>

| Sr. no. | Therapy               | Charak | Sushruth | Astanga hruday | Astanga sangraha |
|---------|-----------------------|--------|----------|----------------|------------------|
| 1.      | <i>Snehan</i>         |        | +        | +              | +                |
| 2.      | <i>Swedan</i>         | +      | +        |                | +                |
| 3.      | <i>Vaman</i>          |        | +        |                | +                |
| 4.      | <i>Mrudu virechan</i> |        | +        |                | +                |
| 5.      | <i>Sneha virechan</i> | +      |          | +              |                  |
| 6.      | <i>Basti</i>          |        | +        |                | +                |
| 7.      | <i>Shirobasti</i>     |        | +        |                |                  |
| 8.      | <i>Upanaha</i>        |        | +        |                |                  |
| 9.      | <i>Rasayana</i>       |        |          |                | +                |
| 10.     | <i>Abhyanga</i>       |        | +        |                |                  |

## DISCUSSION

**Pakshaghata** one of the *Nanatmaja vata vyadhi*. The line of treatment and *panchakarma* procedures explained by different *acharyas*.

**Abhyanga** (Applying oil): This results in 2 forms; one caused by temperature, pressure, and friction, and the other by drugs utilised. Due to *vata dosha* vitiation, as *sira* and *snayu sankocha* is the feature primarily observed in *pakshaghata*. A straightforward technique for treating vitiated *vata* is *snehan/abhyanga*. Because *Pratiloma* type massage has long-lasting effects on all the *saptha dhatus*, it can infiltrate the body at many levels and support regular operation of *Vyana* and *Udana vayu*, as well as strengthen and nourish muscles.<sup>[19]</sup> *Dashmool tail*, *Bala tail*, *Sahchar tail*, *Masha tail* can be advised.

**Swedana** (Sudation/Fomentation): eliminates body part stiffness, promotes joint mobility, opens up microchannels to improve blood flow, and clears out excess *Vata* and *Kapha* that impede the channels. By eliminating blockages in the microchannels and stiffness in the body parts, it dissolves the toxins in the body and widens the tracks, making the toxins more transportable towards their original location to break down the pathogenesis.

**Shasttikashali pinda sweda** (Rice pollutice fomentation): This is a kind of massage therapy induces perspiration. As *Sira* and *Snayu Shosha* is seen in the *pakshaghata* patient, by *tikshna* and *ushna guna* of *pitta dosha*, *khara*, *ruksha* and *vishada guna* of *vata*. *shastika shali pinda sweda* is performed, because it possesses the opposing characteristics of vitiated *doshas* and contains both *shasttik shali* and *Ksheer* (milk). Milk contains phospholipids, which are crucial parts of cell membranes that aid in drug absorption. It has a much greater effect on muscles, joints, soft tissues, and skin blood flow since it is more potent and penetrates deeper.<sup>[19]</sup>

**Virechana** (Purgation): Since *vata* is the primary *dosa* involved and *pakvashaya* is the *sthana of vata*, *Virechan* has given priority in the treatment of *pakshaghata*; *Sneha virechan* is indicated in *pakvashaya gata vata*.<sup>[20]</sup> In a *kevala vata* situation, *virechana* cannot be used as the primary treatment. In the case of *vata vyadhi*, where *vata* is connected to *kapha*, *pitta*, *rakta*, and *Meda*, this is the course of *treatment*.<sup>[21]</sup> In *pakshaghata*, *sira* and *kandara* are vitiated which are *upadhatu*s of *rakta*, and *Masthishkamajja* is the *adishtana* of *pakshaghata* so, *virechan* is the best treatment. as there is *pranavatadushti* in *pakshaghata* patient *virechan karma* helps in bringing the *pranavata* in its normal pathway. *Virechan* can improve the cellular functions and correct the tissue damage through fluid homeostasis. It also helps in proper brain function, mental and physical impairment.<sup>[22]</sup>

*Nithya virechana* can be advised with *Saptala siddha ghruta*, *Eranda taila* with *ksheera*, *Nimbamrutadi eranda taila*, *Gandharvasthanadi taila*.

**Basti** (Enema): *Basti* is suggested if the patient is unfit for *virechan* and has *pakshaghata* due to *keval vata dosha*. *Vata* is seen as the main aggravating factor and *Basti Chikitsa* is regarded as the prime line of treatment. Because it immediately affects *Pakvashaya*, the principal seat of *vata dosha*, it concurrently induces *detoxifying* and *pacifying treatment*, resulting in *anulomana of apana vayu*.<sup>[23]</sup> Next, it results in *anulomana of saman*, *vyana*, *udana*, and *prana vayu*s, respectively, which eventually pacifies the *vata dosha*. *Basti* approaches the illness from multiple angles like *Balya*, *Brimhana*, *Pushtikara* as *dravyas* used in it has many properties. Medicated enema helps to eliminate *vitiated Dosh*a from the body and increases the strength and spreads easily by potency of the drug.

*Anuvasana basti* with *Tila taila*, *Dashmool taila*, *Ksheerabala taila*, *sahachara taila* can be advised.

Niruha basti with *dashmooladi niruh basti*, *Erandamooladi niruha basti* or *mustadi yapana basti* can be given.

**Nasya** (nasal instillation): *Shira Pradesh* is the primary *Adhishthana* of the *Indriya* (sensorial organs), and the nose is thought to be the route to it. A drug given by NASA travels to *Shira*, where it simultaneously causes *Vata Shaman* and *Dosha Nirahana*. Nasya operates immediately in Urdhava Jatrugata Vikar, making it a powerful Vata Shamaka treatment. *Panchendriya vardhana taila*, *Anu taila*, *Maha masha taila* has *vata shamana* properties so this can be advised.<sup>[24]</sup> If the patient came in unconscious state *pradhmana nasya* can be done with *Vacha*, *Vidanga*, *Apamarga*, *Pippali churna*. After nasya karma the *Avarasatra* (Poor Mental Strength) in the patient gets improve.

**Shirobasti**: *Shirobasti* belongs to the category of *Murdhnitaila*. It is carried out at the scalp area. In terms of *Murdhnitaila's* order of effectiveness, *Shirobasti* is superior. The medications and oil's active ingredients enter the bloodstream through the scalp's receptors and travel all the way to the brain. The length of contact, the medication's solubility, and the physical state of the skin and exposed body region are the most crucial factors. It aids in body and mind relaxation to a harmonising degree. *Shirobasti* is the best treatment for balancing the vitiated *vata dosha*, according to *Ayurveda*. By balancing the *vata dosha*, the oil used in this treatment relieves the many underlying symptoms associated with *vata* imbalance. *Brahmi taila* and *Jatamansi taila* are advised.<sup>[25]</sup>

## CONCLUSION

*Pakshaghat* is a *vataja pradhanya vyadhi* that is similar to hemiplegia which has loss of functioning in one part of the body. Particularly in *Pakshaghata* (Hemiplegia), ayurvedic treatment is thought to be an effective strategy for improving patient recovery. Because it promotes tonicity, relaxes muscles, enhances circulation, enhances mental function, and restores the motor system and muscles that have atrophied, panchakarma has positive effects on this illness. As a result, the *Pakshaghata* patient experiences general relief from disability. Less chronicity results in greater progress. Through panchakarma treatment, the patient gains independence.

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