

ROLE OF AYURVEDIC TREATMENT IN PATIENT OF CVA (HEMIPLEGIA) - A CASE STUDY

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ABSTRACT

Hemiplegia can be defined as the paralysis of one side of the body. It is characterized by the loss of function, loss of sensation, lack of control and marked weakness in the affected side of the body. *Pakshaghata* is symptomatically equivalent to Hemiplegia/Hemiparesis mentioned in contemporary science. *Pakshaghata* has been enlisted amongst the eighty types of *Vataj Nanatmaj vyadhis*.

A 30 year old patient who was apparently normal 3 years back with no any previously known illness suddenly felt weakness in right upper and lower extremity while doing his daily activities. He was unable to move his right upper and lower limb and was unable to stand & walk. His speech was also slurred. Following this incident he was admitted at an allopathic hospital where he was diagnosed as a case of CVA

(Cerebro-vascular accident), for which he was given appropriate treatment. But the patient did not get satisfactory result. Patient was admitted in IPD of Pt. KLS Govt. Ayurvedic college & Hospital for further treatment.

The patient was treated with *Panchakarma* procedure, *Shamana Aushadhi* and Physiotherapy. This study shows the effective result of *Panchakarma* treatment along with *Shamana Aushadhi* and Physiotherapy in *Pakshaghata* disease. It also helps to understand the pathophysiology of *Pakshaghata* through Ayurveda. In this study an attempt has been made

to describe all Scientific effect of Panchakarma procedures, *Shamana Aushadhis* and effect of Physiotherapy has been explained in this case.

KEYWORD:- Pakshaghat, Panchakarma, Shaman Aushadhis, Vataj Nanamatj Vyadhis.

INTRODUCTION

Hemiplegia can be defined as the paralysis of one side of the body. It is characterized by the loss of function, loss of sensation, lack of control and marked weakness in the affected side of the body. Partial loss of function, strength and partial weakness on one side is termed as hemiparesis while complete loss is called hemiplegia.

The most common cause of hemiplegia is Cerebro-vascular accident (CVA) About 80% of CVA is ischemic stroke and 15% is hemorrhagic stroke.

Other causes include

- Traumatic- Brain injury, Cerebral lacerations
- Neoplastic- Glioma, Meningioma
- Spinal cord injury
- Infective- Encephalitis, Meningitis, Brain abscess
- Diseases such as cerebral palsy, Muscular dystrophy, Multiple sclerosis, Spina bifida, Poliomyelitis.

Pakshaghata is symptomatically equivalent to Hemiplegia/Hemiparesis mentioned in contemporary science. *Pakshaghata* has been enlisted amongst the eighty types of *Vataj Nanatmaj vyadhis*. *Vatavyadhi* is one of the *ashtmahagadas*. *Pakshaghat* is characterized by impairment of *karmendriya*, *gyanendriya* and *mana*. Out of which *karmendriya* are considered as a part of motor system while *gyanendriya* attributes to sensory system. In classical literature no specific etiological factor is described separately for *pakshaghat*. As *pakshaghat* comes under *Vataj Nanatmaj vyadhi*, all the factors vitiating *vata dosha* in body can be considered as the root cause of *pakshaghat*. Two main factors mentioned in texts which are responsible for the vitiation of *Vata dosha* are-

वायोर्धातुक्षयात् कोपो मार्गस्यावरणेन च (च.८च.२८/५९)

- 1) *Vata prakopa* due to *dhatukshaya*.
- 2) *Vata prakopa* due to *maarg aavran*.

The symptoms described on the manifestation of the disease are as follows:

हत्वैकं मारुतः पक्षं दक्षिणं वाममेव वा ||५३||

कुर्याच्चेष्टानिवृत्तिं हि रुजं वाक्स्तम्भमेव [१] च ।

गृहीत्वासर्धं शरीरस्य सिराः स्नायूर्विशोष्य च ||५४||

पादं सङ्कोचयत्येकं हस्तं वा तोदशूलकृत् ।

एकाङ्गरोगं तं विद्यात् सर्वाङ्गं [२] सर्वदेहजम् (च.सच.)

- Cheshtanivruthi- Loss of function or degraded function of the affected body part.
- Ruja- Pain in the affected part.
- vakstambha- Slowed or slurred speech.
- Sira snayu shosha- Atrophy of tendons.
- Hasta pada sankoch- Contracture and atrophy of extremities.

Case report

A 30 year old patient who was apparently normal 3 years back with no any previously known illness suddenly felt weakness in right upper and lower extremity while doing his daily activities. He was unable to move his right upper and lower limb and was unable to stand & walk. His speech was also slurred. Following this incident he was admitted at an allopathic hospital where he was diagnosed as a case of CVA (cerebro-vascular accident), for which he was given appropriate treatment. But the patient did not get satisfactory result. Patient was admitted in IPD of ft. KLS Govt. Ayurvedic college & Hospital for further treatment.

No H/O any trauma, surgery, severe disease ´

P/H- Alcohol addiction (since 8 years) ´

Appetite- Normal, Bowel-bladder intact ´

Sleep- Normal

CT Brain (Plain) 09/01/2019

Plain CT head suggests acute intraparenchymal bleed seen in left temporo-parietal as well as gangliocapsular cortex associated with peri-lesional oedema causing midline shift of 5.0 MM towards right side and parital effacement of ipsilateral lateral ventricles.

General examination

- Pallor, icterus, cyanosis, clubbing and, oedema absent.
- Lymph node is not palpable.
- B.P.- 120/80 mm/hg
- Pulse-74/min.
- Spo2 and all vitals were stable

Systemic examination**Central nervous SYSTEM**

Higher functions

Consciousness- Fully conscious of time, place and person.

Memory intact

Behaviour friendly

Orientation- Fully oriented to time, place, person

Cranial nerves- Normal

Motor system

Nutrition- No evident muscle wasting

Tone- Hypertonia in affected side

Power-2/5 in Rt U/L 3/5 IN Rt L/L

Involuntary movement- No any evident involuntary movement

Coordination- Upper Limb

Finger Nose test- Normal

Lower Limb Knee heel test- Normal

Diagnosis

On the basis of clinical presentation and CT -Scan of the brain it was diagnosed as case of Stroke (Pakshaghata).

Treatment protocol

Patient was admitted in IPD of ft. KLS Govt. Ayurvedic college & Hospital for further treatment.

Ayurvedic management

The line of treatment for pakshaghata mentioned in classics is:

स्वेदनं स्नेहसंयुक्तं पक्षाघाते विरेचनम् (च.सच. 28/100) ´

As it is one of the *vata vyadhi*, the line of treatment of *vata vyadhi* should be followed here. If there is *aavran* of *pitta* or *kapha* dosh then that that should be treated first, after that the vitiated *vata* should be managed by: ´ *Aabhyantar* and *bahya snehan* should be administered followed by *Swedan karma*´ After *snehan* and *swedan virechan*, *nasya*, *dhoompan*, *parisheka* etc can be administered according to need.

Treatment regimen

Sarvang snehan swedan: For this procedure Luke warm *vata shamak* oil was applied in *anulom gati* for 20 minutes, after that *nadi swedan* was given.

Trayodshang guggul- 250mg TDS ´

Dashmoolarishta- 20ml BD ´

Rasraj ras- 125mg BD ´

Ekangveer ras-125mg+ *Sameer Pannag ras*-125mg BD ´

Anti inflammatory liniment for local application.

OBSERVATION

Table no. 1: National institute of health stroke scale (NIH-SS).

Score	NIH scale	Range of score	BT	AT
1	Level of consciousness	0 to 3	0	0
2	Best gaze	0 to 2	2	0
3	Visual	0 to 3	0	0
4	Facial palsy	0 to 3	0	0
5	Motor arm	Right 0 to 4 Left 0 to 4	3	1
6	Motor leg	Right 0 to 4 Left 0 to 4	3	1
7	Limb ataxia	0 to 2	2	1
8	Sensory	0 to 2	2	0
9	Best language	0 to 3	0	0
10	Dysarthria	0 to 2	0	0
11	Extinction and inattention (formerly neglect)	0 to 2	0	0
	Total	42	12	3

0=no stroke, 1-4= minor stroke, 5-15=moderate stroke , 15-20 = moderate /severe stroke, 21-42=severe stroke.

Tabel no. 2: Visual analog scale for pain.

S. N.	Symptoms of Pakshaghat	BT	AT
1	Vama sandhibandhan vimokshyana	Normal	Normal
2	Dakshida sandhibandhan Vimokshyana	2/5	4/5
3	Cheshta nivritti	3/5	4/5
4	Ruja	3	5
5	Vakastambha	-	-
6	Akarmandyam	3	5
7	Achetnam	-	-

0=no pain, 1-3=mild pain, 4-5=moderate pain, 6-7=severe pain, 8-9= very severe pain, 10=excruciating pain.

RESULT

There was marked improvement in spasticity of Rt. Upper limb and lower limb.

Power- BT 2/5 in rt upper limb, 3/5 in rt lower limb

AT 4/5 in rt upper limb, 4/5 in rt lower limb ´

ROM in rt upper limb was slightly improved ´

Normal speech of the patient was completely restored ´

Reflexes- Marked improvement in biceps, triceps and ankle jerk, slight improvement in finger flexion.

Interpretation

Table no. 3: The result has obtained by Wilcoxon matched-pairs signed-ranks test.

Subjective parameters	W/tt	T-	Mean bt	Mean at	Md	% of relief	Sd	P-value	Significance
	15	0	1.0909	.2727	0.8182	75%	0.9816	.0625	Very significant

DISCUSSION

Stroke is defined as the sudden death of brain cells due to lack of oxygen caused by blockage of blood flow or rupture of an artery to the brain. In Ayurveda, it is correlated with Pakshaghata based on the signs and symptoms. Pakshaghata is one of Vatavyadhi where impairment of Vata Dosha is seen. In Ayurveda Panchakarma play a major role in the management of Pakshaghata.

In case of pakshaghata initially there is flaccidity in muscles and then comes stage of rigidity. sthanik abhyang and swedana prevents this stage if performed in early stage usually in

prolonged case there is hypertrophy of muscles which can also be prevented by abhyanaga as it increases blood supply of the part. If patient complains of pain in affected part swedana causes pain relief.

Trayodashang guggul- It contains drugs having tikta, katu, kashay rasa, ushna virya and Madhur vipaka. These properties collectively possess vata hara and kapha hara properties. It promotes strength of bones and joints and acts as an excellent analgesic and anti inflammatory agent. ´

Dashmoolarishta- It acts on the vitiated vata and kapha dosha, it has anti inflammatory, analgesic and balya and shothhar properties. ´

Ekangveer ras+Sameer pannag ras- The combination balances all three dosha specially vata and kapha. It relieves stiffness caused due to kapha vata anubandh. It increases metabolic process in CNS & PNS, thus it facilitates good neuro-muscular communication. ´

Rasraj ras- It works on all three dosha specially vata. It acts as an excellent nervine and cardiac tonic. It strengthens the nerves muscles and helps to restore functions of nerves and blood vessels in condition of stroke.

CONCLUSION

The present case study shows that ayurvedic treatment protocol (shodhan and shaman chikitsa) work effectively in the management of CVA (Hemiplegia).

Pakshaghat is Nanatmajavatyadhi and results because of vataprakopa. It affects sira and snayus of one half of the body and face. The main cause of pakshaghat is vitiated vatadosha.

Sthanik abhyanaga and sthanik swedana leads to mridutva thus relieving stiffness and pain. It also promotes blood circulation thus providing proper nutrition to the affected part.

After complete treatment patient recovered fully. Thus it can be concluded that Panchkarma procedure are very effective in Pakshaghata chikitsa and should be given vigorously in the patients suffering from stroke and similar ailments. Further clinical studies should be conducted to validate the efficacy of the treatment.

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