

**MANAGEMENT OF SPASTIC QUADRIPLÉGIA (SARVANGGHAT) WITH  
VATKULANTAK RASA & SHASHTIKA SHALI PINDA SWEDA - A CASE STUDY**Gupta Mohini<sup>1</sup>, Bansal Harendra<sup>2</sup>, Sharma Vivek<sup>3</sup>

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**ABSTRACT**

**Background-** Spastic Quadriplegia also known as spastic tetraplegia is a subset of Spastic cerebral palsy that affects all four limbs (both arms and legs). Spastic quadriplegia usually displays equal involvement of both upper and lower extremities with severe involvement of legs, arms and floppiness of neck. Spastic quadriplegia is generally caused by brain damage either before birth, during or shortly after. In *Ayurveda* quadriplegia can be correlated with *Sarvangghat* which is a *vatavyadhi*. It is a *nanatmaja vatavyadhi* according to *charaka*. As the disease was caused by *vata-kapha dosha*. The treatment is mainly aimed at mitigating *vata kapha dosha* which helps to clear the blocked micro-channels involved in the pathology. **Aim and objective-** To study the effect of *Vatkulantaka rasa* and *Shashtika shali pinda sweda* in the management of Spastic quadriplegia (*Sarvangghat*). **Material and methods-**The present case study is upon 16 years old (male patient) diagnosed case of spastic quadriplegia with complaints of difficulty in walking with stiffness for 6 years at the kayachikitsa IPD of Pt. khushilal Sharma govt. ayurvedic hospital Bhopal. He was treated with *shashtika shali pind sweda* & *Vatkulantaka rasa*. The duration of the study is 21 days. The assessment was done on the basis of symptomatic relief after treatment. **Obser-**

**vation-** The Ayurvedic therapy and oral medication yielded complete symptomatic relief from pain, stiffness and improve quality of life.

**Conclusion-** On the basis of the result obtained, it can be concluded that *Shashtika shali pinda sweda* and *Vatku-lantaka rasa* can be used as an effective treatment in the management of Spastic quadriplegia (*Sarvangghat*).

**Keywords:** Sarvangghat, Spastic quadriplegia, Shashtika shali pinda sweda, Vatkulantaka rasa.

## INTRODUCTION

Spastic Quadriplegia is also known as spastic tetra-plegia is a subset of Spastic cerebral palsy that affects all four limbs (both arms and legs).

Spastic quadriplegia is generally caused by brain damage either before birth, during or shortly after. Many factors can play in an infant developing brain damage, including prematurity, fetal infections or stroke, maternal infections or medical conditions, exposure to toxins or medical negligence.

During 26 to 34 weeks of gestation, the white matter of an infant's brain is very susceptible to damage. White matter sends signals from the brain to the rest of the body and if damaged can lead to the entire body being affected. Lesions or holes in the white matter of the brain can lead to Spastic quadriplegia.

Spastic quadriplegia usually displays equal involvement of both upper and lower extremities with severe involvement of legs, arms and floppiness of neck.

In Ayurveda quadriplegia can be correlated with *Sarvangghat* which is a *vatavyadhi*. It is a *nanatmaja vatvyadhi* according to *charaka*. Due to the intake of various diets and regimens, *vata dosha* gets vitiated and occupies *rikta strotas* in the body then ultimately it causes *vata vyadhi* like *Sarvangghat* increase the *ruksha guna* of *vata* causes *rukshata* and *parushta* in the *strotas* which is the key point in the *samprapti* of *Sarvangghat*.

### CASE STUDY

The present case study is upon 16 years old (male patient) diagnosed case of Spastic quadriplegia with complaints of difficulty in walking with stiffness for 6 years at the kayachikitsa IPD of PT. KHUSHILAL SHARMA GOVT.AUTO. AYURVEDA COLLEGE AND INSTITUTE BHOPAL MP.

According to the patient, he was asymptomatic 6 years ago and gradually developed symptoms like difficulty in walking with stiffness.

Then the patient got admitted to the hospital for further *ayurvedic* treatment. He was treated with *Shashtika shali pinda sweda & Vatkulantaka rasa*. The duration of the study is 21 days. The assessment was done on the basis of symptomatic relief after treatment.

MRI scan of brain-19 May 2016

The abnormal signal is noted in bilateral frontoparietal periventricular white matter with mild to moderate atrophy of genu and anterior body of corpus callosum. These findings are suggestive of periventricular leukomalacia (PVL) due to perinatal hypoxic insult.

### 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 wasting, no hypertrophy, tone hypotonic (Effected side).

Power-

**Table 1**

Limb	Power
Right arm	5/5
Left-arm	5/5
Right foot	3/5
Left foot	3/5

Tone-

**Table 2**

	Right	Left
Upper limb	↑	↑
Lower limb	↑↑	↑↑

**CRITERIA OF ASSESSMENT:** The scoring system was adopted for cardinal symptoms as well as associated symptoms (*Doshanubandhi lakshan*)

**Table 3**

Sign & symptoms		
1. Loss of speech ( <i>Vaksang</i> )		
	Normal	0
	Speak with difficulty	1
	Speak few words	2
	Utter voice	3
	Aphasia	4
2. Lifting of the arm at shoulder/Leg at hip joint (Flexion Extension)		
	Up to 180	0
	Up to 135	1
	Up to 90	2
	Up to 45	3
	No	4
3. Standing from sitting		
	Without support	0
	With support	1
	Unable	2
4. Loss of sensation ( <i>Achetan</i> )		
	Normal	0
	Mild sensory loss	1
	Moderate sensory loss	2
	Severe to total sensory loss	3
5. Loss of muscle power		
	Normal	0

	The movement against gravity with a moderate degree of resistance	1
	Not against resistance	2
	Power detachable when gravity excluded	3
	Flicker	4
	Complete paralysis	5
6. walking time (Cover given distance in time) 10 meter		
	Less than 1 min	0
	Between 1-1:30 min	1
	Between 1:30-2 min	2
	More than 2 min	3
	Can't walk	4
7. Muscle tone Modified Ashworth scale (Ansari et al, 2006)		
	Affected part rigid inflexion or extension	5
	Considerable increase in muscle tone, passive movement difficulty	4
	More marked increase in muscle tone through most of ROM but affects part (s) easily moved (Range of motion-ROM)	3
	Slight increase in muscle tone, manifested by a catch, followed by minimal resistance	2
	Slight increase in muscle tone, manifested by a catch and release	1
	No increase in muscle tone	0
8. Reflexes		
	Normal	0
	Brisk	1
	Very brisk	2
	Clonus	3
9. Involuntary movement		
	Absent	0
	Present	1

**Table 4**

	BT	AT
1. Loss of speech	1	0
2. Lifting of the arm at shoulder/ Leg at hip joint (Flexion extension)	2	1
3. Standing from sitting	1	0

4. Loss of sensation (Achetan)	0	0
5. Loss of muscle power	2	1
6. walking time 10 meters (cover given distance in time)	2	0
7. Muscle tone (Spasticity)	4	2
8. Reflexes	2	1
9. Involuntary movement	1	0

## TREATMENT REGIMEN

### VATKULANTAKA RASA

Vatkulantaka rasa is herbo-mineral Ayurvedic medicine. This medicine contains aromatic animal origin product *kasturi* which is obtained from the belly of male musk deer found in the Himalayan region. Vatkulantaka rasa is useful in the treatment of diseases related to the nervous system, brain and various diseases caused due to vitiation of *vata dosha*.

#### Key ingredients of vatkulantaka rasa

**Kasturi**

**Shuddha parad**

**Shuddha gandhak**

**Ela**

**Bibhitaki**

**Jaiphal**

**Nagkeshar**

**Mensil**

**Laung**

### MODE OF ACTION

Vatkulantaka rasa is an Ayurvedic medicine that is primarily used for the treatment of epilepsy, paralysis.

Nutmeg- Drugs that help in inducing sleep by having an effect on brain-on-brain function. They are indicated in case of insomnia.

Manashila- Drug used to reduce swelling after an injury. The drug is used for the management of epileptic episodes by helping the inhibition of seizure activity.

Mriganabhi-Kasturi-Musk: - The musk is used in the treatment of psychiatric disorders, neurological diseases, nausea, bad odour, strengthening cardiac muscle and respiratory disease.

## RESULT

**Table 5:** The result has obtained by Wilcoxon matched-pairs signed-ranks test -:

	W/Tt	T-	mean		MD	% of Relief	SD	SE	P value	Significance
			BT	AT						
Subjective parameters	36.00	0	1.667	0.5556	1.1114	66%	0.6009	0.2003	0.0078	Very Significant

## INTERPRETATION

Results revealed that before treatment mean score was 1.667 with  $SD_{\pm} 1.118$  which was brought down to mean 0.5556 with  $SD_{\pm} 0.7265$  after treatment which showed significant results given at 95% CI and P-value 0.0078. there was 66% relief in the subjective parameter.

## DISCUSSION

### SHASHTIKA SHALI PINDA SWEDA

Shashtika shali pinda sweda is a commonly practised therapeutic sudation procedure with many benefits. It makes the body supple, removes stiffness of joints,

cleans the micro-channels of the body and improves circulation. It improves complexion, increases appetite. It maintains the metabolism and is found to be very effective. It works as *brimhana* and provides *dhatu poshana* (nourishment). *Ushna guna* stimulates the sympathetic nervous system and performs vasodilation. *Sara* and *sukshma guna* liquefy the *lina dosha* and then these doshas are expelled out through the micro-pores.

Generally, *bala taila* is applied for *abhyanga*. *Bala* is *vatashamaka* and *balya* thus provides nutrition to the muscular tissue. Also, the taila possess *snigdha guna* by virtue of which it performs *snehana*, *kledana* and

*vishyandana* of the body at the cellular level. Also, *abhyanga* causes a reduction of tone in muscles, which are in a state of excess tension. Stretching of tight fascia and restoration of mobility of soft tissue also occurs.

The procedure of *Shashtika shali pinda sweda* not only provides heat but also medicine.

Fomentation makes the skin more permeable by opening the skin appendage through sweating, dilating blood vessels and helping in the absorption of the medicine. The superficial layer of skin is generally impermeable to most things. Phospholipids are present in milk, which is an important component of the cell membrane. Its amphipathic nature helps in the absorption of the medicine. It pacifies morbidity of *vata*, *pitta* and *rakta* in the skin, afflicted joints muscles and soft tissue. It also improves the movement of joints and enhances the flexibility of the body, soothes the nerves and improves blood circulation.

### VATKULANTAKA RAS

As the disease is caused by *vata-kapha dosha*, which are *sheeta veerya* in nature, the medication sudations which are *ushna veerya*. (The opposite quality for *vata-kapha*) are beneficial. Spasticity is due to *kapha dosha*. The drug *vatkulantak ras* is known to mitigate *vata-kapha dosha*. In *Vatkulantak ras* maximum ingredients have *tikta, katu ras, laghu, ruksha guna & ushna veerya* which would help in the pacification of vitiated *kapha*. Once *avarana* is removed, vitiated *vata* can be pacified. In *vatkulantak rasa* maximum ingredients have *ushna virya* and *madhura vipaka* property which would help to bring the vitiated *vata* to its normal. Hence *Vatkulantak rasa* having *Vata-kapha shamaka* is very effective in the management of Spastic quadriplegia.

**SOP-** *Vatkulantak rasa* is a safe *Ayurvedic* medicine. there are no adverse effects, no toxic effects of the drug and no interaction with any other drugs noted.

### CONCLUSION

The present case study shows that *Shashtika shali pinda swedana & Vatkulantak rasa* work effectively

in the management of Spastic quadriplegia (*Sarvangghat*).

As the disease was caused by *vata-kapha dosha*. The treatment is mainly aimed at mitigating *vata kapha dosha* which helps to clear the blocked micro-channels involved in the pathology. Even though it cannot be claimed that the situation is completely cured, the quality of life of the patient could be improved as the therapy helped to restore the normal functions of the body. Further clinical studies should be conducted to validate the efficacy of the treatment.

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