

A CLINICAL STUDY OF *PANCHATIKA NIRUH BASTI* AND *PATRAPINDA SWEDAN* IN THE MANAGEMENT OF SPINAL CORD COMPRESSION (EVIDENCE BASED)

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ABSTRACT

Spinal cord compression is a rare entity affecting vertebrae. It is caused by bone fragments from a vertebral fracture or a tumour or an abscess ruptured inter-vertebral disc compressing spinal cord. It causes paralysis of limbs and decreased sensation below the level of compression. The patient selected was a Fifty years old female having spinal cord compression with L4-L5 bulges causing cauda equina lesion. She was started with *Panchatikta Kshir Basti*. The pain and heaviness associated with the disease aggravated due to *Basti*. So then patient was given *Panchatikta Niruh Basti* along with *Patra Pinda Swedan*. The spinal cord compression with L4-L5 bulges causes the oedema around tissues of vertebral column. The *Basti* given was hyperosmolar in nature so it caused the excretion of vitiated *doshas* along with it thus reducing the peripheral oedema around the spinal cord. The spinal cord along with the nerves itself is a place for *Majjavaha Strotas*. The *Prana* along with *Vyan vayu* are responsible for *Chetana* that is liveliness in the body. Due to vitiation of “*Chala*” and “*Ruksha*” *guna* of *Vyana* and *Prana*, the nerve conduction got hampered. *PatraPinda Swed* is a type of *Snigdha Sweda* containing *Eranda*, *Arka* and *Nirgundi Patra* along with *Saindhav*, *Nimbu swaras* and *Eranda Sneha*. The *Snigdha*, *Sthir* and *Ushna guna* of all of these caused the *Shaman* of *Ruksha*, *Chala* and *Sheet guna* of vitiated *vata* respectively. So the pain and the spasticity along with heaviness were reduced. Thus, combined effect of the therapy gave significant results in patient. Previously she was unable to walk without support. After treatment for about one and half month she could walk without support (a walker).

Keywords: *Basti*, cauda equine, hyperosmolar, *Nirgundi Patra*, *Eranda Sneha*,

INTRODUCTION

Spinal cord compression occurs when a mass places pressure on anywhere along the cord or

due to bone fragments from a vertebral fracture or a tumor or an abscess or ruptured inter-

vertebral disc¹. It is regarded as a medical emergency, independent of its cause and requires swift diagnosis and treatment to prevent long term disability due to irreversible spinal cord injury. The symptoms included are backache, dermatome, paralysis of limbs below the level of compression, decreased sensation below the level of compression².

A bundle of nerves extends downwards from the bottom of the spinal cord, through the lower back bones and over the bone at base of spine. This bundle is called the Cauda equine, which means horse's tail in Latin, because that is what the bundle looks like³. Cauda Equina may be compressed by a ruptured or herniated disk or a tumor or an abscess. It may be damaged by an injury or swell because it becomes inflamed and the symptoms are called as Cauda Equina Syndrome. The symptoms are pain in lower back and sensation & muscle control impairment. Pain is felt in the lower back, but sensation is reduced in the buttocks, genital area, bladder and rectum – the area of the body that would touch the saddle. Thus this condition is called saddle anesthesia⁴.

CASE HISTORY –

Patient's name- ABC

Age- 52 years

Sex – Female

Address – Sion

Profession – Household work (Farming done previously for 15-20 years)

Present Complaints –

1. Bilateral lower limb weakness - since 5 months
2. Couldn't get up from the bed – since 5 months
3. Couldn't walk without support, not even with a walker - since 5 months

4. Backache - since 10-12 months

5. Tingling numbness over bilateral lower limbs - since 10-12 months

History of present illness – Patient was suffering from the above symptoms since last 10 months. She had a history of fall then. She was on multiple NSAIDs and taken steroids, but was not relieved from pain.

MRI of the patient -

1. There is a posterior bulge at L4-L5 level compressing nerve roots causing Cord Compression. Indicating Cauda Equina syndrome with the mentioned deformities.

DISCUSSION

It was observed that the patient mostly had bilateral lower limb weakness along with tingling numbness over the limbs. The subject was not able to walk on its own. They also causative factor here is that the trauma she had, 10 months ago and a continuous heavy work lifting which she had done for years. **PROBABLE PATHOPHYSIOLOGY OF DISEASE ACCORDING TO AYURVEDA -**

Cord Compression – From the space in between the *Kasheruka*, there goes the Spinal cord that is *Merudand*; from cervical region to lumbar region. At each *Kasheruka Sandhi*, *Vaatnadya* runs from the bilateral sides and then they provide nerve supply to that particular organ. The function of this particular organ depends upon this nerve supply.

This spinal cord for its proper functioning needs proper space in between. Any reason making space reduction here will cause pressure over the nerves going in between and their work gets hampered. Hence the edema develops and the organ supplied by those nerves also gets hampered thus producing *Shoth*, *Chimchimayan*, *Karma Vaikalya*. Due to lack of space in be-

tween the *Kasheruka* and spinal cord, the friction causes the inflammatory changes creating *Shoth, daah, shool and karmagrah*. (*Sthanik Sampapti*)

Cauda Equina syndrome – In this syndrome, the fibres of the spinal cord come out of it abnormally. In this patient also, the pathology was acquired due to her posterior bulge. In both these conditions; there is an anatomical defect.⁵ This causes obstruction for the normal passage of spinal cord and nerves. Due to space reduction in both of these structures there is inflammatory changes due to friction. Again due to inflammation, these spinal nerves also get irritated and inflamed.⁶

Sthanik dhatu for spine includes *Asthi, Majja, Snayu* and *Kandara* which are responsible for a good posture along with the normal nerve conduction. The *hetus* are responsible for increment in the *Ruksha* and *Khara guna* of *Vata* which causes “*Vata prakop*”. (Hetu in the form of rigorous work done in the farm for many years). The *vata prakop* along with the *sthanik dhatu kshay* here caused the anatomical deformity that is *Kasheruka Rachanatmak Vikruti*. Therefore due its anatomical defect here, the spinal nerves got compressed and that created *Shoth* along the *Vaatnadi*.

EFFECT OF THERAPY

Cord compression and Cauda Equina syndrome are both anatomical deformities so the surgical

treatment becomes the prime treatment⁷. The patient was suggested the same. But the patient was not ready for the surgery so just to give symptomatic treatment, the treatment was started.

In *Charak Samhita* the treatment for *Asthi* and *Majjagat vyadhis*, *Panchatikta Kshir Basti* is recommended⁸. During initial stage of treatment, it was thought that this *Avarodhatmak Shotha* is the result of *Dhatukshay*. So to correct the *Shesh dosha*; *Dhatu vardhan* is required. The patient was given *Panchatikta Kshir Basti*, that is *Bruhan basti* for eight days.⁹ The complaints like heaviness over the limbs along with the body and numbness increased. Thus the symptoms were indicating towards *Sama Lakshanas*. In *Samavastha*, pain and heaviness on movements increases and in *Niramata* vice versa. So here the treatment to be administered should not only act on the *Samata* but also on the *Asthi Dhatvagni*. *Panchatikta Niruha basti* is *Shodhan* , *Pachan* and *Deepan*. It is hyperosmolar in nature. So it helps in removing the vitiated *doshas* along with it thereby reducing the oedema, that oedema which is present around the tissues of vertebral column¹⁰.

Panchatikta niruha basti contain (*Kantakari, Guduchi, Patol, Vasa, Nimba*)⁸ along with *Sahachar tail* with *Madhu* and *Saindhav*. The *Kaal basti* (one cycle of 15 days) was given to the patient.

DRAVYA	Mode Of Action
Panchatikta Sidhha Kashaya (300 ml)	Tikta ras causes reduction in the inflammation of Asthi and Majja Avaran (Tikta ras is best to for asthi and Kashay Majja dhatvagni) So the Shoth ultimately gets reduced. In turn the spinal nerve compression gets reduced ⁸ . So the symptoms developing due to them gets reduced like Shool, Chimchimayan so the organs getting nerve supply from them also gets improved.
Sahachar taila (30ml)	Vaat treatment includes “Na Ati Snigdha Na Ati Ruksha” conditions. So the Sneha is required though it is a Niruh Basti.
Madhu (15ml)	Phosphorous, Potassium, Magnesium is required for normal bones. Also the Anupravan bhav of the madhu helps in rapid action of basti.
Saindhav (5gm)	Sookshma Strotogami ¹¹

The Asthi Dhatvagni must act on the Poshakansha coming from the Meda dhatu and Poshana of ascending dhatus will be appropriate. So here the dravyas selected were PanchaTikta. Its contents helps in removing Sarambha, it helps in Asthi and Majja dhatvagni vardhan.

The local Snehan treatment is also required as there was spasticity developed due to Sira Kandara Kathinya. Patra Pinda Swedan is a type of Snigdha swed containing leaves of Eranda, Nirgundi, Arka along with Saindhav, Eranda sneh and Nimbu swaras. The leaves are to be heated along with sneh and then pottali (ela kizhi) is to be made with cotton material. The swedan was given from Kati to Ubhaypada.

Here due to Dhatuk shayatmak vaatprakop (ruksha and khara guna) Snehan Chikitsa is required. Patra Pinda Swedan isa type of Snigdha and Ushna in nature. So it reduces the Sheet, ruksha and Khara guna and causes Vata Shaman. Maansagat Stambha is also reduced and after twenty days of Patra Pinda Swedan the Sira Kandara Kathinya also decreased.

CONCLUSION

The cord compression syndrome though may need surgical interventions for its complete correction but Ayurvedic Therapy at times proves beneficial in symptomatic relief, as in this case. The pre and post symptoms and their improvement are as follows:

PRE	POST
1. Patient was not able to get up from the bed and stand on her own.	1. Patient could get up and stand on her own with little support.
2. Patient was not able to walk with support also.	2. Patient could walk with walker.
3. Patient had heaviness over bilateral Limbs and her SLR was Rt – 45 Lt – 45 Bilateral - 45	3. Patients heaviness reduced and her SLR improved. Rt – 80 Lt – 80 Bilateral – 80
} Painful	} Mild painful

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