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Effect of Ayurvedic Treatment on *Pangutva* with Special Reference to Syringomyelia- A Case Study

Shinde R B^{1*}, J D Gulhane², Wankhede S N³, Deshpande P V⁴ and Sahu R S⁵

¹⁻⁵Department of Kayachikitsa, Government Ayurved College and Hospital, Nagpur, Maharashtra, India

ABSTRACT

Syringomyelia is a chronic progressive degenerative disorder of spinal cord in which a cyst or cavity form within the spinal cord. This cyst known as syrinx it may be expand and elongate over time, destroying the spinal cord. The damage may result in loss of feeling, paralysis, weakness and stiffness in the back, shoulder and extremities. It may also lead to a cape-like bilateral loss of pain and temperature sensation along the upper chest and arms. These symptoms typically vary depending on the extent and often more critically on the location of the syrinx within the spinal cord. The sign and symptoms of syringomyelia can be correlate with *Pangutva* mentioned in Ayurvedic literature. If vitiated *Vata* at lumbar region is paralyse lower portion of the body and of both legs is called *Pangutva*. *Vatahara Chikitsa*, *Brihana Chikitsa* and *Vatanulomak Chikitsa* should be done in syringomyelia.

KEYWORDS

Pangutva, *Syringomyelia*, *Vatahara Chikitsa*, *Brihana Chikitsa*



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INTRODUCTION

Syringomyelia is a chronic progressive degenerative disorder of spinal cord characterised clinically by brachial amyotrophy and segmental sensory loss of dissociated type (loss of pain and temperature with retained touch) and pathologically by cavitation of central part of spinal cord usually in the cervical region but extend upward in the medulla oblongata and pons or downward into thoracic or lumbosacral segments¹. This degenerative condition of the spinal cord involves destruction of neurons in the central portion of the cord with formation of a cystic cavity, or syrinx. Onset of symptoms usually is in the second or third decade. The intrinsic muscle of the hand is involving initially, followed by progressive loss of motor and sensory functions in the upper and lower extremities. Orthopaedic treatment entail bracing for prevention of contractures, or arthrodesis of neuropathic joints. Laminectomy occasionally is indicated to relieve expanding cavities of the spinal cord². Lesion in syringomyelia spare the dorsal columns but involve the spinothalamic fibres crossing the cord from both side over the length of the lesion. There is no sensory loss in segment above and below the lesion, this is described as suspended sensory loss. suspended sensory

loss can only occur with intrinsic disease such as syringomyelia. Urinary symptoms usually occur earlier in the course of an intrinsic cord disorder than with compressive disorder. There is sometimes reflex loss at the level of the lesion if afferent fibres of the reflex arc are affected³.MRI accurately identifies developmental and acquired syrinx cavities and their associated spinal cord enlargement. Images of the brain and the entire spinal cord should be obtained to delineate the full longitudinal extend of the syrinx, assess posterior fossa structures for the Chiari malformation, and determine whether hydrocephalus is present. Treatment of syringomyelia is unsatisfactory. The Chiari tonsillar herniation may be decompressed, generally by suboccipital craniectomy etc.⁴.The sign and symptoms of syringomyelia can be correlate with *Pangutva* mentioned in Ayurvedic literature. there is no detail description of sign, symptoms and treatment of *Pangutva*. There are 80 *Nanatmaja* Vatavyadhi are only mentioned in Ayurvedic literature *Pangutva* is one of them⁵. The treatment of *Pangutva* are mentioned same as treatment of *Vatavyadhi*⁶. If vitiated *Vata* at lumbar region is paralyse lower portion of the body and of both legs is called *Pangutva*⁷.



OBJECTIVE OF THE STUDY

- 1) To study concept of *Pangutva*
- 2) Detail study of Ayurvedic treatment on syringomyelia.

MATERIAL AND METHODS

Setting: government Ayurvedic college and hospital Nagpur

Case report

A 60-year-old male patient brought by relatives to OPD of Kaychikitsa department of government Ayurvedic college and hospital Nagpur, on dated 6th March 2019 with complaints of;

- 1) Bilateral lower limb weakness
- 2) Unable to walk
- 3) Tingling numbness of bilateral hands
- 4) Constipation
- 5) Intermittently retention of urine
- 6) Generalised weakness
- 7) wound of 5 x 3 cm at medial aspect of left thigh
- 8) wound of 6 x 3 cm at right gluteal region with foul smell and discharge
- 9) pain at right thigh

patient had above complaints since 4 months

History of present illness

The patient was normal before 5 months ago. since then patient had been suffering from lower limb weakness, unable to walk,

generalised weakness, loss of pain, temperature and touch, sever constipation, loss of urine and motion sensation, unable to move in the bed, unable to seat, loss of appetite, bed soar at right gluteal region, a dry wound at medial aspect of left thigh, blackouts in front of eyes and vertigo, intermittently fever with chills.

With these complaints patient goes in government hospital of Amravati, from Amravati patient refer to government medical college Nagpur, where patient admitted since 6/12/18 to 18/12/18 for treatment of above complaints but patient could not get relief so on dated 6th March 2019 patient come in government Ayurvedic college and hospital Nagpur, for further treatment we admitted patient in IPD of Kaychikitsa department.

Past history

- 1) H/O type 2 diabetes since 4 years on medication of insulin Glargine
- 2) No H/O Hypertension
- 3) No any surgical history or any other major illness

Clinical findings- physical examination

Physical examinations that is *Nadi, Mala, Mutra, Jinva, Shabda, Sparsha, Drik, Akriti, Sarata, Samhanan, Vyayamshakti, Aharshakti, Prakriti* are all examined and results are shown in Table no 1.

Table 1 Ayurvedicphysical examination.

Ayurvedic



1	Nadi (pulse)	90/ minute, <i>Sarpagati</i>
2	Mala (stool)	<i>Grathita</i> , once in 3 days
3	Mutra (urine)	<i>Pitabhvarna</i> , (indwelling Catheter)
4	Jihva (tongue)	Saama
5	Shabda (sppech)	Spashta
6	Sparsha (skin)	Shitoshna
7	Drik (eyes)	Prakrit
8	Akriti (body posture)	Krish
9	Sarata, satva, Satmya	Madhyam
10	Sanhanan	Alpa
11	Vyayamshakti, Aharshakti	Alpa
12	Prakriti	Vata Pradhan Pitta Anubandhi

Modern physical examination

Respiratory system

Size and shape of chest are normal, accessory muscle of respiration are working,

R/R- 18/ minute. Trachea centrally placed, tactile vocal fremitus is bilaterally equal, resonant sound all over chest, air entry bilaterally equal, crept and wheezing are absent.

Cardio vascular system

all findings are normal

Per abdomen examination

all findings are normal

CNS Examination

patient is well oriented, pupillary reflexes are normal, Cranial nerve examination is normal.

Examination of Muscle Power Grades as shown in Table no 2. Reflexes of Biceps and triceps are normal and knee, ankle and

planter reflexes are absent as shown in table no 3.

Table 2 Muscle power grade (MPG)

	Right	Left
Arms	4/5	4/5
Legs	0/5	0/5

Table 3 Reflexes

	Right	Left
Triceps	Normal	Normal
Biceps	Normal	Normal
Knee	Absent	Absent
Ankle	Absent	Absent
Planter	Absent	Absent

INVESTIGATION

Haematological investigations

In this haemoglobin increases with the treatment and creatinine, uric acid and erythrocyte sedimentation rate decreases with the treatment as shown in table no 4.

Table 4 Blood investigation:

Name/Date	6/12/18	7/3/19	29/3/19
Haemoglobin	11.4g/dl	11.6 g/dl	13 g/dl
TLC	9500	9500	9700
Platelet	365000	349000	248000
RBC	3.36 mil/dl		
Urea	25 mg/dl	Technically low	30 mg/dl
Creatinine	1.9 mg/dl	0.71 mg/dl	1.27 mg/dl
Uric Acid	-	8.7 mg/dl	4.7 mg/dl
Sodium	133 mEq/L	128 mEq/L	
Potassium	4.1 mEq/L	3.5 mEq/L	
SGOT	23 IU/L	24 IU/L	
SGPT	11 IU/L	18 IU/L	
Total Bilirubin	0.7 mg/dl	0.28 mg/dl	
Total Protein	6.1 gm/dl	-	
ESR		86	61

USG(abdomen and pelvis)- no any significant abnormality seen.



USG Scrotal- bilateral hydrocele

MRI

1) Intramedullary altered signal intensity in thoraco-lumber cord with dilatation of central canal from T5 vertebral level extending up to conus medullaris. s/o hydro syringomyelia

2) Diffuse disc bulge at L3-L4, L4-L5, and L5-S1 causing moderate spinal canal

compression severe bilateral neural foramina compression

Treatment Schedule

In treatment schedule gives date of addition of drugs, duration of drugs, dose respective drug, *AushadhiSevana Kala* and *Anupana* which is given with drug are explain in table no 5

Table 5 Treatment schedule

Date	Medicine	Dose	<i>Aushadhisevankala</i>	<i>Anupana</i>
7/3/19-7/4/19	<i>GuduchiChurnaQuatha</i>	40ml bd	<i>Vyanodane</i>	-
7/3/19-25/3/19	<i>SudarshanGhanavati</i>	250mg tds	<i>Vyanodane</i>	<i>Koshnajala</i>
7/3/19- 6/4/19	<i>GandharvaHaritakiChurna</i>	5gm bd	<i>Vyanodane</i>	<i>Koshnajala</i>
9/3/7- 28/3/19	<i>AsthimajjaPachakQuatha</i>	40ml bd	<i>Vyanodane</i>	-
11/3/19-6/4/19	<i>ShalishastikaPindasweda (Navarkizi)</i>	od		
12/3/19-20/3/19	<i>MatrabastiBalataila</i>	60ml od	<i>Bhaktottar</i>	
13/3/19-7/4/19	<i>TrayodashangGuggulu</i>	500mg bd	<i>Vyanodane</i>	<i>Koshnajala</i>
14/3/19-24/3/19	<i>Gokshura Churna</i>	5gmbd	<i>Vyanodane</i>	<i>Koshnajala</i>
18/3/19-3/4/19	<i>PrishtavanshBasti</i>	od	-	-
25/3/19-7/4/19	<i>BruhatvataChintamani Rasa-1gm, Rajatbhasma 5gm, guduchisatva 30gm, Sutshekhar 20 tab,</i>	All devidedequally in 60 doses. For 30 days	<i>Vyanodane</i>	<i>Dugdh</i>
26/3/19-7/4/19	<i>VarunadiQuath</i>	10ml bd	<i>Vyanodane</i>	<i>Koshnajala</i>
27/3/19-7/4/19	<i>Pizinchil</i>	od		
28/3/19-6/3/19	<i>Majjabasti</i>	60ml od	<i>Bhaktottar</i>	

Pathya Apathya

Pathya is one which is compatible to body and which is not harmful to the body. An another definition of *Pathya* which is a *Priyam*(suitable) to *Manasa* and *Shareera* is called *Pathya*⁸.

Diet schedule

Morning breakfast:Upama, fruits.

Lunch: 1-2 **Bhakari**, **Sabji**, **Green**

Vegitables, **Cow ghee**, **Dal rise**.

Apathya

Divaswapa, *Guru ahara*,Oily-spicy food, junk food, Bakery products, Non veg, curd.

RESULTS

Assessment of criteria

In this case assessment done by two parameters one is SCIM score and another is MPG. SCIM score assessed on date of 6th March 2019, 21st March 2019 and 6th April



2019 and results are shown in table no 6 and figure no 1, also date wise assessment of MPG are shown in table no 7

Table 6 Change on SCIM score⁹

Criteria	6/3/19	21/3/19	6/4/19
SCIM score out of 100	21	44	53



Figure 1 shows improvement in SCIM Score

Table 7 Change in MPG

	Right				Left			
	18/12/18	6/3/19	21/3/19	6/4/19	18/12/18	6/3/19	21/3/19	6/4/19
Arms	5/5	4/5	5/5	5/5	5/5	4/5	5/5	5/5
Legs	4/5	0/5	1/5	1/5	4/5	0/5	1/5	1/5

DISCUSSION

Syringomyelia (*Pangutva*) is *Asadhya* (uncurable) disease. In modern science there is operative treatment to stop the increasing size of cystic cavity, or syrinx. But Ayurveda said that even if disease is not curable it means *AsadhyaVyadhi* then also don't stop the treatment because with the help of treatment we can improve life standard and extend life span of the patient, Ayurveda said that *Chikitsanasti Nishfala*. In this case goal of treatment is to treat the

Prakopaand Vridhi of *VataDosha*, *MajjaKshaya* and *DhatupakaLakshana*. The properties of drugs used and mode of action are shown in table no 8, *Bruhadvatichintamani* rasa work as *VataPittajaVikara*, act as *Dhatu Vardhana* and *Balya*. *RajatBhasma* act on *Snayu* and *Shira* it is useful in nerve conduction disorders. *Sutashekhar* act as *Pittaghna* and *Balya*. *Guduchi* act as *Balya Agnidipana* and *Dahaprashmana*. *Sudarshana Ghanavati* act as antipyretic. *Haritaki* work as laxative. *AsthimajjaPachakQuatha* work



as *Dipana Pachana, Jwaraghna. Trayodashang Guggulu as Sandhi, Asthi, Snayu, Majja Ashrita Vatashamana. Syrinx act as Abhyantara Vidradhi and Varuna specially act as Abhyantara Vidradhinashana. Sthanik Karmas like Shalishastika Pindaswed (Navarkizi),*

Pizinchilare given for muscle strength and Matrabasti work on Vatashamana. In syringomyelia there is Majja Dhatu Kshaya so the principle of Vridhisamane Sarvesha Viparyateviparya Majja Basti given to the patient and positive results came out.

Table 8 Mode of action of drugs

	Name of drug	Properties	Mode of action
1	<i>Guduchi Churna Quatha¹⁰</i>	<i>Rasa Tikta Kashaya, Virya Ushna, Vipak Madhur</i>	<i>Tridoshara, Raktashodhan, Dhaprashamana.</i>
2	<i>Sudarshan Ghanavati¹¹</i>	<i>Ushna Tikshana Madhura</i>	<i>Jwarghana</i>
3	<i>Haritaki Churna¹²</i>	<i>Rasa Lavanvarjita Panchrasa, Virya Ushna, Vipaka Madhura.</i>	<i>Vataghana, Vatanulomana.</i>
4	<i>Asthimajja Pachak Quatha¹³</i>	<i>Pittashanmak</i>	<i>Dipana, Pachana, Jwaraghana</i>
5	<i>Trayodashang Guggulu¹⁴</i>	<i>Ushna, Lekhana,</i>	<i>Sandhi, Asthi, Snayu, Majja Ashrita Vatanashana</i>
6	<i>Gokshur Churna¹⁵</i>	<i>Rasa Madhura, Vipaka Madhura,</i>	<i>Balya, Mutral, Shothahara</i>
7	<i>Varunadi Quath¹⁶</i>	<i>Vatakaphashamaka</i>	<i>Vatahar, Abhantar Vidradhinashan</i>
8	<i>Bruhatvata Chintamani Rasa-1gm,¹⁷ Rajatbhasma 5gm¹⁸, guduchisatva 30gm, Sutshekhra 20 tab¹⁹,</i>		<i>Vata Pitta shamak, Dhaturvardhana, Balya, Nerve stimulant</i>
9	<i>Shalishastika Pindaswed (Navarkizi)²⁰</i>	<i>Type of Sankara Sweda</i>	<i>Snigdhasweda, guru, sthira, Tridoshghna</i>
10	<i>Pizinchil²¹</i>	<i>Type of Pariseka Sweda</i>	<i>Snigdha Sweda,</i>
11	<i>Matrabasti²²</i>	<i>Type of Anuvasana Basti</i>	<i>Vatanashana, Sristapurishakrita, Bruhana</i>
12	<i>Majja Basti²³</i>	<i>Bruhana</i>	<i>Majjadhatu Vardhana, Vatashamana</i>

CONCLUSION

The sign and symptoms of *Pangutva* (syringomyelia) can be successfully improved by *shaman Chikitsa* like *Guduchi Churna Quatha, Gokshura Churna, Trayodashang Guggulu Asthimajja Pachak Quatha, Sudarshan Ghanavati, Gandharva Haritaki Churna, Bruhatvata Chintamani*

Rasa-1gm, Rajatbhasma 5gm, guduchisatva 30gm, Sutshekhra 20 tab, Varunadi Quath. Shodhan Chikitsa like Matrabasti Balataila, Majjabasti, localised therapy Pindasweda, Prishtavansh Basti, Pizinchil and Pathya Apathya without any harmful effect.



REFERENCES

1. Alagappan R., Manual of Practical Medicine, 5th ed. Jaypee Brothers Medical Publishers (P) LTD New Delhi, 2014, Chapter no 9, page no 732.
2. Schwartz S. I., ed. *Principles of surgery*, 7th edition, Library of congress cataloguing-in-publication data, 1999, chapter no 19, page no 1924.
3. Brain R. Walkar, et al, ed. Davidson's Principles and Practice of Medicine, 22st ed. Publish Churchill Livigstone Elsevier, 2014, Chapter no 26, page no 1165.
4. Dennis L. K., Stephen L. H. et al, *Harrison's Principle of Internal Medicine*, Volume 2, 19th ed. Published by McGraw Hill Education New Delhi, 1999, Chapter no 17, page no 2658.
5. Sukla V., Tripathi R., ed. Charak Samhita, Vaidyamanorama Hindi commentary, Choukhamba Sanskrit Sansthan, Varanasi, 2013 Sutrasthana 20/11, page no 293.
6. Shastri A., Mehata P. M., *Ayurvedatvasandipika* a hindi commentary of *Sushrut Smhita*, Choukhamba Sanskrit Prakashana Varanasi, 2014, Chikitsasthan 5/24, page no 43.
7. Shastri S., Upadhyay Y, *Madhavanidanam*, Vidhyotini hindi commentary, Choukhamba Prakashana Varanasi, 2014, Chapter no 22/ 60, page no 488.
8. Sukla V., Tripathi R., ed. Charak Samhita, Vaidyamanorama Hindi commentary, Choukhamba Sanskrit Sansthan, Varanasi, 2013 Sutrasthan 25/45, page no 347.
9. <https://www.rehab.research.va.gov> pdf (assessed on dated 6 march 2019)
10. Sharma P. V., *Drvyaguna Vigyana*, Choukhamba Bharti Academy Varanasi, 2015, Chapter no 9/342, page no 761.
11. Sharma P. V., *Drvyaguna Vigyana*, Choukhamba Bharti Academy Varanasi, 2015, Chapter no 38 page no 98.
12. Sharma P. V., *Drvyaguna Vigyana*, Choukhamba Bharti Academy Varanasi, 2015, Chapter no 340, page no 753.
13. Sukla V., Tripathi R., ed. Charak Samhita, Vaidyamanorama Hindi commentary, Choukhamba Sanskrit Sansthan, Varanasi, 2013 Chikitsasthan 3/201-203, page no 993.
14. Vaidhya L., Shastri H. et al. *Bhaishajyaratnavali*, 8th ed., Published by Motilal Banarasidas. 41 U. A. Banglo Road Javahar nagar, Delhi-110 007, 2016, Chapter no 29, page no 331.
15. Sharma P. V., *Drvyaguna Vigyana*, Choukhamba Bharti Academy



Varanasi, 2015, Chapter no 268 page no 633.

16. Tripathi B. Dipikahindi commentary of *Sharangdharsamhita* Choukhamba Sanskrit Prakashana Varanasi, 2006, *MadhyamKhanda* Chapter no 2/128-130, page no 152.

17. Vaidhya L., Shastri H. et al. *Bhaisahjyaratnavali*, 8th ed., Published by Motilal Banarasidas. 41 U. A. Banglo Road Javahar nagar, Delhi-110 007, 2016, Chapter no 28/502-505, page no 358.

18. Gune G. *Ayurvediya aushadhigindharmashastra*, Choukhamba Sanskrit Prakashana Varanasi, 2014, part 1, chapter no 11, page no 79.

19. Gune G. *Ayurvediya Aushadhigindharmashastra*, Choukhamba Sanskrit Prakashana Varanasi, 2014, part 4, chapter no 79, page no 28.

20. Shamkuvar M. K., *Panchakarma Sangraha*, Lakshami Printers Nagpur, 2016, Chapter no 3, page no 128.

21. Shamkuvar M. K., *Panchakarma Sangraha*, Lakshami Printers Nagpur, 2016, Chapter no 3, page no 150.

22. Sukla V., Tripathi R., ed. *Charak Samhita*, Vaidyamanorama Hindi commentary, Choukhamba Sanskrit Sansthan, Varanasi, 2013 Sidhithana 4/54, page no 915.

23. Sukla V., Tripathi R., ed. *Charak Samhita*, Vaidyamanorama Hindi commentary, Choukhamba Sanskrit Sansthan, Varanasi, 2013 Chikitsasthana 28/93, page no 704.