

## A 32 YEARS OLD MALE RECOVERED FROM SYRINGOMYELIA WITH UNANI FORMULATION: A CASE REPORT

Md. Shafat Karim<sup>\*1</sup>, Shamim Akhtar<sup>2</sup>, Wasim Firoz<sup>3</sup>, Mohd Zulkifle<sup>4</sup>

<sup>1</sup>Assistant Professor, Department of Tahaffuzi wa Samaji Tibb, Government Tibbi College and Hospital, Patna, India.

<sup>2</sup>PG Scholar, Department of Tahaffuzi wa Samaji Tibb (PSM) Government Tibbi College and Hospital, Patna, India.

<sup>3</sup>PG Scholar, Department of Kulliyat Tibb Government Tibbi College and Hospital, Patna, India.

<sup>4</sup>Prof. & HoD, Department of Kulliyat Tibb National Institute of Unani Medicine, Bangalore.

Article Received date: 13 February 2024

Article Revised date: 04 March 2024

Article Accepted date: 24 March 2024



\*Corresponding Author: Md. Shafat Karim

Assistant Professor, Department of Tahaffuzi wa Samaji Tibb, Government Tibbi College and Hospital, Patna, India.

### ABSTRACT

Syringomyelia is a neurological disorder in which a fluid-filled cyst (syrinx) forms in the spinal cord. The syrinx can impact and exert enough force to damage the spinal cord and compress and injure the nerve fibers. The prevalence of syringomyelia is about 8.4 cases per 100,000 people, and men are more affected than women in the third to fourth decade. Symptoms may include pain, progressive weakness in limbs, stiffness in the back, shoulders, neck, arms, or legs, headaches, loss of sensitivity to pain or hot and cold, especially in the hands, numbness or tingling, imbalance, and loss of bowel and bladder control. MRI, in contrast, is the standard diagnosis for syringomyelia. Medical treatment has not been established; therefore, a 32-year-old male patient with syringomyelia, seeking a safe, effective, and alternative treatment, moved towards Unicure, Unani health care centre, Patna. After understanding the condition, we advised a three-month regime of Unani treatment. It includes *Takmeed* (hot fomentation), *Dalak* (massage), *Hammam* (steam bath), and two types of *sufoof*, of which one contains *Waj turki* (*Acorus calamus* Linn), *Jadwar* (*Delphinium denudatum*), *Filfil siyah* (*Piper nigrum* Linn), and *Darchini* (*Cinnamomum zeylanicum*), and another contains *Ustukhuddoos* (*Levandula stoechas*), *Aftimoon* (*Cuscuta reflexa* Roxb), and *Bisfaj* (*Polypodium vulgare* L) for oral administration. This regime was given keeping in mind that the disease of this patient is due to a *sard* (cold) *tar* (wet) *maddi* (matter) temperament, and the share of wetness is high in it. In such a situation, most of the drugs prescribed have an effect on the brain; their temperaments are warm and dry, and their action is *muqawwi-e-asab* (nervine tonic); *musakkin* (sedative); *mudirr-e-baul* (diuretic); *mufatteh* (deobstruent); *mohallil* (anti-inflammatory); *musakkin* (analgesic); *qabiz* (astringent); *dafe tashannuj* (anticonvulsant); *mane sara* (anti-epileptic); after completing the treatment schedule, symptoms eased. The patient's condition and the effectiveness of these medicines indicate that these medicines are effective in syringomyelia.

**KEYWORDS:** Syringomyelia, Unani Medicine, *Dalak*, *Ustukhuddoos*, *Takmeed*.

### INTRODUCTION

Syringomyelia is the development of a fluid-filled cavity, or syrinx, within the spinal cord. It is in communication with the central canal and contains CSF. Syrinxes may be long cysts extending over the whole length of the spinal cord, but they are often more localized. Syrinxes may also be associated with Arnold-Chiari malformations and spinal cord tumours, and they can occur as a late sequel to trauma. The pathogenicity of most syringes remains unclear.<sup>[1,2]</sup>

It is estimated that the prevalence of syringomyelia is about 8.4 cases per 100,000 people, and men are more affected than women. It usually occurs during the third or fourth decade of life. Rarely, syringomyelia may develop in children.<sup>[3]</sup> There are two main types of syringomyelia: congenital syringomyelia (also called communicant syringomyelia) and acquired syringomyelia (also known as primary spinal syringomyelia or non-communicative syringomyelia). Symptoms of syringomyelia develop slowly over time and can occur on one or both sides of the body. Symptoms may include pain, progressive weakness in

limbs, stiffness in the back, shoulders, neck, arms, or legs, headaches, loss of sensitivity to pain or hot and cold, especially in the hands, numbness or tingling, imbalance, and loss of bowel and bladder control. In contrast, magnetic resonance imaging (MRI) is the standard diagnosis for syringomyelia. Medical treatment has not been established to date. Surgery usually prevents the condition from worsening, although it is high-risk and costly.<sup>[4]</sup>

#### CASE STUDY

A 32-year-old male patient was non-diabetic and normotensive with no history of chronic illness. He gradually developed general weakness, pain in the whole body, loss of muscle power, blurred vision, loss of libido, and erectile dysfunction. He consulted a physician, and after a thorough examination, they advised him and referred him to a neurologist. The patient consulted a neurophysician and was diagnosed with syringomyelia on the basis of an MRI report. The neurophysician advised only conservative and symptomatic treatment. He further told the patient that the prognosis of the disease is not good; in cases of severity, surgery may be the option, although the post-surgical prognosis may be bad. In seeking a safe, effective, and alternative

treatment, he moved towards Unicare, Unani Health Care Center, Patna. After understanding the clinical history, thorough examination, and lab reports, we advised the three-month regime of Unani treatment. It includes *Takmeed* (hot fomentation), *Dalak* (massage), *Hammam* (steam bath), and two types of *sufoof* (a form of powder) for oral administration. One type of *sufoof*-1 [containing *Waj turki* (*Acorus calamus* Linn)– 1 part, *Jadwar* (*Delphinium denudatum*) 1 part, *Filfil siyah* (*Piper nigrum* Linn) 2 parts, and *Darchini* (*Cinnamomum zeylanicum*) 1/2 part] given 3 gm with *Arq ajwain* (*Trachyspermum ammi*) 20 ml bd thrice weekly. The second type of *sufoof*-2 [contain *Ustukhuddoos* (*Levandula stoechas*) – 1 part, *Aftimoon* (*Cuscuta reflexa* Roxb)-1 part, and *Bisfaij* (*Polypodium vulgare* L) -1/2 part] is administered 3 gm od before breakfast three times a week. *Dalak* (massage) with *Roghan arand* (*Ricinus cummunis*) applied on the neck to lower back once daily. We advised *Takmeed* (hot fomentation) with *Tukhm kharpaza* (Seeds of *Cucumis melo*)2 part and *Post kharpaza* (Peel of *Cucumis melo*) 1 part once a week for 20 minutes on the affected region of the body, followed by *Hammam* (hot bath).

**Table No-1: Details of treatment schedule.**

Sl. No	Regime	Form of regime	Treatment schedule
1.	<i>Sufoof</i> -1	Powder contains <i>Waj turki</i> – 1 part, <i>Jadwar</i> 1 part, <i>Filfil siyah</i> 2 parts and <i>Darchini</i> 1/2 part	Three gm with <i>Arq ajwain</i> 20 ml bd thrice weekly
2.	<i>Sufoof</i> -2	Powder contain <i>Ustukhuddoos</i> – 1 part, <i>Aftimoon</i> -1 part, and <i>Bisfaij</i> -1/2 part	Three gm od before breakfast thrice weekly
3.	<i>Dalak</i>	<i>Roghan arand</i> applied on neck to lower back	Once daily
4.	<i>Takmeed</i>	Fomentation of <i>Tukhm kharpaza</i> 2 part and <i>Post kharpaza</i> 1 part	Once a week for 20 minutes on affected parts
5.	<i>Hammam</i>		Once a week in empty stomach. It is applied after <i>Takmeed</i>

#### RESULTS

After 15 days of treatment, a remarkable improvement was noticed, and the patient again advised the same treatment to continue for 3 months. The patient complained of body pain at the time the drugs started; the visual analogue scale (VAS) score for body pain was between 3 and 4. As the treatment advanced, the wide range of pain gradually decreased and the pain intensity reduced. After completion of the regime, the VAS score was between 1 and 2 for body pain.

Initial complaints of general weakness and muscle weakness have resolved following the treatment regimen. Also, after completion of the treatment, it was found that the patient's sexual desire improved, and erectile dysfunction also resolved. The patient was economically indigent, so an MRI could not be done. After that, the patient was in follow-up for three years; during these times, he did not feel any symptoms of syringomyelia.

#### DISCUSSION

The term "syringomyelia" has been used to describe a syndrome brought on by spinal cord cavitation near the central canal, as well as any spinal cord cyst or dilated central canal and/or its expansion into the cord substance.<sup>[2]</sup> Men are more affected than women by syringomyelia, which typically develops in the third to fourth decade of life and has an incidence rate of 8.4 instances per 100,000 people. There is currently no established medical management. The prognosis is bad and progressively deteriorates the physical condition. Surgical treatment is a difficult and risky.

The Unani system of medicine has vast potential for the management of diseases, especially neurological disorders. In this case, we administer, *Waj turki*, *Jadwar*, *Filfil siyah*, *Darchini*, *Ustukhuddoos*, *Aftimoon* and *Bisfaij* in two different combinations in the form of *sufoof*. *Waj turki* removes phlegmatic and morbid fluid from the brain, stomach, and other parts of the body, and due to hot temperament, it is used in neurological disorders,<sup>[5,6,7]</sup> because it is nervine tonic and *mujaffife ratubate meda wa dimagh* (siccative to the secretion of

stomach and brain). Pharmacological studies support that it has anti-inflammatory and anti-depressant activity.<sup>[8,9]</sup> The roots of *Jadwar* (*Delphinium denudatum*) plant have various pharmacological actions include: *muqawwi-e-asab* (nervine tonic); *musakkin* (sedative); *jali* (detergent); *mudirr-e-baul* (diuretic); *mufatteh* (deobstruent); *mohallil* (anti-inflammatory); *musakkin alam* (analgesic); *qabiz* (astringent); *dafe tashannuj* (anticonvulsant).<sup>[10,11,12,13]</sup> It is used in the treatment of many ailments like *nazla muzmin* (chronic catarrh); *iltehab tajaweef-e-anaf* (sinusitis); *sara* (epilepsy); *laqwa* (paralysis); *junoon* (insanity); *mania* (psychosis); *ikhtinaqur reham* (hysteria); *istirkha* (atony); *shaqiqa* (migraine); *khadar* (numbness); *ra'sha* (tremors); *tashannuj* (convulsions).<sup>[13-15]</sup>

*Filfil siyah* is *muqawwi-e-asab* and it is has anti-inflammatory activity, anti-oxidant activity, anti-mutagenic activity, and anti tumor activity.<sup>[16-17]</sup>

*Darchini* has action like *dafe tashannuj* (anti convulsion), *qabiz* (astringent), *mufatteh* (deobstruent), *mulattif* (demulcent), *musakkin* (sedative), *jazib* (absorbent), *muqawwi-e-asaab* (nervine tonic), *muhallil* (resolvent). It is used in *asbi dard* (neuralgia), *sud'a* (headache), *faliy-e-lissa* (paralysis of tongue), *junoon* (mania), *rasha* (tremor).<sup>[18-26]</sup>

*Ustukhuddoos* is one of the drugs of choice for the disease of the brain and the plant has been credited with cephalic virtue and is called "*Jarub-i-Dimagh*" which means broom of the brain. It is useful to treat many ailments of the brain and nerves like epilepsy, tremor, flaccidity, chorea, migraine, and even concussion of the brain.<sup>[27]</sup>

Unani scholars have used *Aftimoon* (*Cuscuta reflexa*) for ages to treat various diseases such as neurological disorders, e.g., melancholia, schizophrenia, epilepsy. According to *Jalinūs*, it is a strong *muwallide-e-sauda* (melanogogue). It is *mufattih sudad* (deobstruent), *muhallil-i-awaram* (resolvent), *mulattif* (demulcent), *munaq-e-sauda*, *mushil-e-sauda*, *muqawwi asab* (nervine tonic).<sup>[12, 25, 28, 29]</sup> Therefore, it is used in *fālij* (paralysis), *sar'a* (epilepsy), *laqwa* (facial palsy), *malinkholia* (melancholia), *junoon* (insanity), schizophrenia, especially beneficial for diseases due to the involvement of *saudā*.<sup>[29]</sup>

*Bisfyej* is *muhallil* (anti-inflammatory), *mane sara* (anti-epileptic), *dafe tashannuj* (anti-convulsant).<sup>[30]</sup> *Ibn-e-Sina* told that, the *Bisfayej* removes excess of black bile from heart and performs good *muqawwi* and *mufarreh qalb* properties, and also removes morbid matters from the brain and whole body.<sup>[31,32]</sup> It is used to *iltuwae asaab* (tortuosity of nerve). It is also effective in *amraze saudavia wa balghamia* like, *sara* (epilepsy), *malinkholia* (melancholia).<sup>[31]</sup> *Roghan arand* used in *Dalak*, which evacuates the waste materials, liquefies the viscid materials, produces energy and strength the

muscles, and also acts as an antifibrotic effect on the affected muscular tissues. It helps in mobility of soft tissue, reduce the muscle spasm and pain, enhance circulation, and reduce oedema which is responsible for inflammation and necrosis.<sup>[33]</sup>

*Hammam* during fasting conditions will render the body extremely dry and make the person thin and debilitated. Bathing on an empty stomach causes dryness while in the full stomach causes wetness.<sup>[34]</sup> Similarly, *Takmeed* has the same effect as a *hammam* on the applied part of the body.

As we experienced in the first 15 days after the treatment, the patient was mildly relieved from the complaint of whole-body pain. He feels penile erection, increased muscle power, libido has increased, and vision has also improved. Then, we further advised continuing the same treatment for three months. After completion of the treatment, the patient recovered completely, and all the complaints subsided.

This regime was given keeping in mind that the disease of this patient is due to *sard* (cold) *tar* (wet) *maddi* (matter) temperament and the share of wetness is high in it, in such a situation, most of the drugs prescribed have an effect on the brain, their temperaments are warm and dry, action is *Muqawwi-e-asab* (nervine tonic); *musakkin* (sedative); *Mudirr-e-baul* (diuretic); *mufatteh* (deobstruent); *mohallil* (anti-inflammatory); *musakkin alam* (analgesic); *qabiz* (astringent); *dafe tashannuj* (anticonvulsant); *mane sara* (anti-epileptic). Correcting the patient's condition and the effectiveness of these medicines indicates that these medicines are effective in syringomyelia. Further study is required to understand it.

## CONCLUSION

The cause of the disease is the *sard tar maddi* (cold and wet) of the brain and spinal cord. Drugs advised in this case may resolve the collection of fluid from the spinal cord and brain. It corrects the syrinx, which was formed pathologically. That's why this treatment regime alleviated the symptoms and treated the disease in that particular case.

## Patient consent

Informed written consent for the publication of clinical details was obtained from the patient.

## REFERENCES

1. Dennis L. Kasper, et al. Harrison's Principle of Internal Medicine. 19<sup>th</sup> ed. New York: Mc Graw Hill Education, 2012; 2658-2659.
2. Syringomyelia. National Institute of Neurological Disorders and Stroke: An official website of the United States government [Internet]. 2023 [cited 2023 June 16] Available from: <https://www.ninds.nih.gov/health-information/disorders/syringomyelia#:~:text=Syring>

- omyelia is a neurological disorder, the brain to the body.
3. Hassan AHA, Selim RB. Syringomyelia. Medscape. [Internet] 2023 [cited, 17<sup>th</sup>, 2023 April] Available from: <https://emedicine.medscape.com/article/1151685-print/1/13>.
  4. Shah A, et.al. Concepts in the Management of Syringomyelia. *The journal of Spinal Surgery*, 2018; 5 (3): 120-127.
  5. Hakim MA. *Bustan ul Mufradat*. New Delhi: Idara Kitabul Shifa, 2002; 60: 85-86, 122-123.
  6. Haleem MA. *Mufradat e Azizi*. New Delhi: CCRUM, 2009; 17-18.
  7. Anonymous. *The Useful Plants of India*. New Delhi: National Institute of Science Communication (CSIR), 2006; 11-12.
  8. Neha T, Anil C, Ashutosh M, Ganesh B. Anti-inflammatory effects of the saponins obtained from the leaves of *Acorus calamus*. *Pharmacologyonline*, 2010; (2): 395-400.
  9. Pushpa V H, et.al. Antidepressant activity of methanolic extract of *Acorus calamus* leaves in albino mice. *International Journal of Pharmacy and Technology*, 2013; 5(2): 5458-5465.
  10. Anonymous. *Indian Medicinal Plants*. New Delhi: Indian Council Med Res., 2009; 218-19.
  11. Sharma KD, Singh BM, Saroop J. Current status of *Delphinium* species from north-western Himalayas. *Plant Generic Resources*, 2015; 149: 5-8.
  12. Anonymous. *Unani Pharmacopoeia of India, Part-I*. GOI, Ministry of Health and Family Education. New Delhi: Department of AYUSH, 2009; (6): 31-32.
  13. Rauf E. *Jadwar (Delphinium denudatum): A potent drug for various ailments*. *American J Pharm Health Res.*, 2013; 1: 22-26.
  14. Anonymous. *Standardization of Single Drugs of Unani Medicine*. New Delhi: CCRUM, 1992; (2): 170-174.
  15. Raza M, Shaheen F, Choudhary MI, Sombati S, Rafiq A, Rahman A. Anticonvulsant activities of ethanolic extract and aqueous fraction isolation from *Delphinium denudatum*. *Ethnopharmacology*, 2001; 78: 73-78.
  16. Anonymous. *The Unani Pharmacopoeia of India, P-I*. 4<sup>th</sup> Vol. Delhi: Department of AYUSH, Ministry of Health and Family Welfare, Government of India, 2007; 38 -40.
  17. Khare C. *Indian Medicinal Plants*. Heidelberg: Springer Science, 2007.
  18. Chopra RN, Nayar SL, Chopra IC. *Glossary of Indian medicinal plants*. New Delhi: CSIR, 1956.
  19. Khory RN, Katrak NN. *Materia Medica of India and their Therapeutic*. Delhi: Neeraj Publishing House, 1985; 527.
  20. Nadkarni AK. *Indian Materia Medica*, 3<sup>rd</sup> ed. Bombay: Popular Book Depot, Dhootapapeshwar Prakashan Ltd, 1954; (1): 328.
  21. Anonymous. *Standardization of Single Drugs of Unani Medicine, Part I*. New Delhi: CCRUM, 2006; 53-57.
  22. Ansari HJA. *Taleem-ul-Advia*. Lucknow: Yusuf Publication House, 1930; 51.
  23. Ayyub MM. *Tarjum-e-Aqseerai (Share moajjiz)*. Lucknow: Munshi Naval Kishor, 1907; (1): 681-82.
  24. Chopra RN, Chopra KC, Kapoor LD. *Indigenous Drugs of India*, 2<sup>nd</sup> ed. Calcutta: UN Dhur and Sons Private Limited, 2006; 126.
  25. Kirtikar KR, Basu BD. *Indian Medicinal Plants*, 2<sup>nd</sup> ed. Dehradun: International Book Distributers, 1996; (3): 2149.
  26. Evans WC. *Trease and Evans Pharmacognosy*, 16<sup>th</sup> ed. London: WB Saunders Company Ltd., 2009; (37): 491.
  27. Lee EJ, Chen HY, Hung YC. Therapeutic window for cinnamophilin following oxygen glucose deprivation and transient focal cerebral ischemia. *Experimental Neurology*, 2009; 217(1): 7483.
  28. Leena NK. Cinnamon and cassia. In: Parthasarthy VA, Chempakam B, Zacharia TJ (Eds), *Chemistry of Spices*. Wallingford: CABI, 2008; 7: 124-144.
  29. Shafat MK, Khatoon, F, Firoz W, Zulkifl M. A 5 years old female child recovered from Moyamoya Disease with Unani formulation: A Case Report. *International Journal of Medical Practitioners*, 2023; 1(1): 1-4.
  30. Baytār, I. *Al-Jame Al-Mufradat-wal-Advia wal Aghziyah (Urdu Translation) Vol-II*. New Delhi: CCRUM, Ministry of Health and Family Welfare, Govt. of India, 2000; 94-97.
  31. Ghani MN. *Khazainul Advia*. New Delhi: Idara Kitab-us-Shifa; YNM, 370- 371.
  32. Anonymous. *Bisfayej-Rhizome*. Unani Pharmacopoeia of India, Part- II. New Delhi: Department of AYUSH Government of India, 2007; 29-30.
  33. Alam MA, Azeez MNA, et.al. Muscular Dystrophy (Istirkha) and its management through Unani Medicine: A Review. *International Journal of Herbal Medicine*, 2014; 2 (4): 01-04.
  34. Ansari MKA, Rahman A, Bashir T. A review on the hammam: a regimen from asclepians. *J Pharm Sci Innov.*, 2020; 9(6).