

Symptomatic Ayurveda Management of a case having Cervical Rib: A Single Case Report

Jini Varghese P,^{1*} Smitha Mohan P. V.,² Shaji K.,³ Najma Mansoor A.P.⁴

¹Final year MS (Ayu) Scholar, ² Professor, ³ Associate Professor, ⁴Assistant Professor, Department of Shalyatantra, P.N.N.M. Ayurveda Medical College and Hospital, Cheruthuruthy, Kerala, India.

ABSTRACT:

A cervical rib also known as neck rib is a supernumerary rib in the cervical region. In many cases cervical ribs go unnoticed throughout life. However, in some cases they cause localized pain and compress surrounding structures. Anatomically it is a congenital overdevelopment of transverse process of cervical vertebra. It usually results in thoracic outlet syndrome. The current management is anti-inflammatory medicines and advanced cases are advised for surgery. While surgery is generally effective there are some potential complications for this procedure. The symptoms of cervical rib simulate *Manyastamba roga* in ayurveda. Hence the treatment protocol of *Manyastamba* is an adoptable protocol for the management of a cervical rib. Here is a case of cervical rib which was miss diagnosed initially and later diagnosed as an extra rib on cervical region. which was managed effectively by ayurveda managements and further possibilities for the management of the same. Therefore, practitioners should consider this possibility when treating patients with neck and shoulder pain accompanied by numbness.

KEYWORDS: Cervical rib, Cervical vertebra, Transverse process, *Manyastamba*, Thoracic outlet syndrome.

Received: 19.09.2025 Revised: 03.11.2025 Accepted: 02.12.2025 Published: 15.12.2025



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)
© 2025 International Journal of AYUSH Case Reports | Published by Tanaya Publication, Jamnagar.

QR Code



DOI 10.70805/ija-care.v9i4.807

*Corresponding Author:

Dr. Jini Varghese P

Final year MS(Ayu) scholar,
Department of Shalyatantra, P.N.N.M. Ayurveda Medical
College and Hospital, Cheruthuruthy, Kerala, India.

Email: jinivarghesep@gmail.com

INTRODUCTION:

A cervical rib is an extra rib in the cervical region. It is a congenital over development of transverse process of cervical spine vertebra. Cervical ribs tend to occur in

approximately 0.5 to 1% of population.^[1] They are commonly attached to C₇ vertebra. But may vary in size, shape, and attachment site. It can occur unilaterally or bilaterally. In many cases cervical ribs go unnoticed

throughout life. However, in some cases they cause localized pain and compress surrounding structures. Mainly they are of two types: Complete and incomplete cervical rib.^[2] Complete rib articulate with first rib. Incomplete rib is with free distal tip. Some are incomplete rib with free distal fibrous band attachment. But commonly incomplete cervical rib present as a short piece of bone extending beyond the C₇ transverse process. While coming to the embryology, ribs originate from mesenchymal cells. These cells are guided into the location by Hoxgenes and growth differentiation factor 11(GDF₁₁). Mutations in these genes have been thought to lead to abnormal development and patterning of ribs. Compression of subclavian artery may lead to diminished distal pulse. Compression of brachial plexus decrease, motor strength. Most cervical rib cases are asymptomatic and do not require treatment. However, those that present with symptoms need appropriate medical care. Modern surgeons initially prescribe anti-inflammatory medicines and later advice surgery. The surgery is excision of extra rib by supraclavicular approach. Even if surgery is effective there are potential complications, including nerve damage, bleeding, and infection.^[3]

Movement is an important characteristic of the human body. All kinds of movements in the body are due to vata dosha and its de-arrangement leads to loss of body movement.^[4] *Manyastambha*, *Urdhmajathrugata Vikara* is one among the *Naanathmaja Vataryadhi*. It is a condition in which aggravated *vata* lodges in the *Manya* region^[5] along with the involvement of *Kapha* leading to *Sthabdhatha* (restricted movements) and *Shoola* (pain).^[6]

Manyastambha term is a combination of the words 'Manya' and 'Stambha'. Manya means

nape of neck and Amarkosha describes 'Manya' as *Greeva paschat sira* (nerves of neck region) and 'Stambha' means stiffness and rigidity. In this disease *Kaphavruta vata* takes shelter in the *Sira* and *Snayu* of *Manyapradesha*. It is characterized by *Guruta*(heaviness), *Stambha* in *Manyapradesha*(stiffness of neck and shoulder), *ruke*(pain), and *cheshtastambha*(reduced movements). The clinical presentation of the thoracic outlet syndrome resembles *Manyastambha*. Here the reason for the thoracic outlet syndrome was cervical rib. Cervical rib is an *Adhyasthi* leading to *Srotorodham*(obstruction) of *Rasavaha*, *Raktavaha*, *Mamsavaha*, *Majjavaha strotas*. This makes *Rakta*(blood vessels), *Mamsa*(mamsa), *Asthi*(bones) and *Majja dushti*(bone marrow). Thus, lead to *sirasnayu sankocha*(contractions). So, the treatment protocol of *Manyastambha* can be adopted here as the management.^[7]

CASE REPORT:

A 27-year-old female homemaker presented at OPD with pain in the right shoulder region, radiating to the right forearm for one year. Gradually, she began to experience pain in the upper back and right shoulder region, which later extended to the right forearm. The pain worsened during work, especially in the sitting position, and improved with bed rest. There was no history of falls, accidents, or any other underlying diseases. Her personal history was unremarkable except for disturbed sleep due to pain. Patient did not suffer from any systemic illness and was not under any medications. Her menstrual and obstetric histories were normal. The patient had normal BMI of 24.6kg/m². Blood pressure was 110/70 mmHg and pulse rate was 72 beats per minute. On general examination, pallor, icterus, cyanosis, oedema and

lymphadenopathy were absent. Patient did not have any relevant family history. All physical examinations were done in sitting position with following findings.

Physical examinations

Inspection

- A mild swelling was noted at right supraclavicular region.

Palpation

- Mild temperature was present at supraclavicular region.
- The patient had tenderness at C₆- C₇ intervertebral joint space.

Tests

- Range of movement of neck and right shoulder was impaired due to pain.
- Patient's range of movement of left shoulder was normal.
- Abduction relief sign, Spurling's test, Lhermitte's sign, Adson's test, Roos test was positive.⁸

Investigations:

X- ray; cervical spine AP view was diagnosed as cervical rib as shown in figure-1.

With the help of examinations and investigations the condition was diagnosed as Thoracic outlet syndrome (TOS) due to Cervical rib (*Manyastambha*)

Treatment protocol

- *Rukshana-Lepana*
- *Snehana- Abyanga*
- *Swedana- Patrapotali swedam*

Detailed treatment plan for conservative management table – 1

Patient also suggested to do mild neck and shoulder exercise (physiotherapy) and advised review after 2 weeks.

1st assessment was done on previous day of treatment and next assessment was done after two weeks of treatment.

Table-1: Conservative management

Medicine name	Dose	Duration
<i>Rasnasumtyadi kashayam</i>	90ml- 0 – 90ml A/C	14 days
<i>Tab. Vyoshadiguggulu</i>	1 – 0 – 1 A/C	14 days with kashaya
<i>Tab. Dhanwantharam</i>	1 – 0 – 1 A/C	14 days
Medicines-external procedures	Procedure	Duration
<i>Nagaradi choornam</i> with lemon juice	Lepam	3 days
<i>Karpooradi tailam</i>	<i>Abyangam</i> - whole body <i>abyanga</i>	4 days – start from 4 th day
<i>Patrapotali</i> made up of <i>vatahara</i> drugs	<i>Swedanam</i>	7 days – start from 8 th day
Cervical traction		7 days – start from 8 th day

Table-2: Observations

Parameters	Previous day of treatment	After 2 weeks of treatment
Pain (VAS scale)	8	1
Numbness ⁹	Present	Absent
Muscle power ⁹	3	4



Figure-1: X- ray of the patient; Cervical spine AP view

RESULT:

A notable decrease in pain was observed, accompanied by an improvement in the patient's muscle power.^[9] After treatment, the patient experienced an absence of numbness. The corresponding scores are presented in table - 2.

DISCUSSION:

A cervical rib is an extra rib that can develop from the cervical vertebra. It is commonly seen in the C₇ vertebra. Symptomatic cases cause thoracic outlet syndrome by compressing nerves and blood vessels supplying the arm. Scalene muscle involvement can be seen in this condition. Hence differential diagnosis is thoracic outlet syndrome (TOS), supraclavicular mass, cervical radiculopathy, and nerve entrapment. Medical imaging studies like X-ray, CT scan, MRI; nerve conduction studies and electromyography (EMG) and evoked potential tests are helpful to rule out the differential diagnosis.^[10]

In ayurveda, this condition can be correlated to *Manyastamba*, a *Yapya roga*(manageable with medicines).^[11] The treatment aimed for *Amapachana* and *Srotorodhabara*. The condition can be managed by procedures like *rukshana*, *swedana*, *lepana* and parasurgical procedures. *Ama* could be assumed by local rise in temprature. *Rukshana*, *swedana* procedures were effective in this condition. Application of *Nagaradichoornam* in *dhanyamlam* as lepa reduced pain within the first three days.^[12] Later for improving muscle and nerve conduction, *abhyangam* and *Patrapotali swedam* were performed. Cervical traction also helped to reduce muscle spasm and overcome brachial nerve compression.^[13]

❖ *Rasnasundyadi Kashayam*, indicated in *Manyastambha*, has *Amahara* and *Srotorodhabara* actions. Ingredients like *Rasna* and *Shunthi* relieve pain, inflammation, and stiffness while improving digestion. *Vyoshadi Guggulu* from *Ashtangabridaya Chikitsasthana*

reduces *Medha*, *Shleshma*, *Ama*, and *Vata* disorders; *Guggulu* aids in pain relief due to its anti-inflammatory effect. *Dhanwantharam Tablet* corrects *Vata* imbalance through *Vatanulomana* and supports *Amapachana*.

- ❖ Physiotherapy also helps to improve muscle strength. Mild exercises, especially scapular setting exercises, were advised for the patient. Ergonomic corrections are necessary for working individuals.^[16]
- ❖ *Nasyakarma* may also serves the condition. *Nasya* balances *Vata* and *Kapha* relieves symptoms of pain and numbness. *Nasya* reverts the effect of *Kaphavarana* which mainly involved in pathogenesis of *Manyastambha*.^[17]
- ❖ Since here *Srotorodham* in *Rasa* - *Raktavaha srotas*, *Sringavacharana* at cervical region (at most tender area) may be effective for reducing symptoms as *Sringa* is *Madhura snigdha* and *Vatapradhana Raktasodhaka*.^[18]
- ❖ After *Amapachana* and *Srotorodhabara* medicine *Brmhana* medicine is advisable.

CONCLUSION:

Cervical rib is a rare and often overlooked condition, making early diagnosis essential to prevent complications. It can be detected through detailed history, examination, and investigations. As its features resemble *Manyastambha*, similar Ayurvedic management was adopted, resulting in reduced pain, relief from numbness, and improved strength. With proper rest and mild exercise, recurrence is unlikely. Effective Ayurvedic therapies can offer non-surgical management even in complete cervical rib cases, so practitioners should consider this in patients presenting with neck and shoulder pain with numbness.

Informed consent: Informed consent has been provided by the patient to publish the case report and X ray image.

Limitation of the study: This is a single case study. Hence a greater number of cases needs to be subjected to study for validation.

Conflict of interest: The author declares that there is no conflict of interest.

Guarantor: The corresponding author is the guarantor of this article and its contents.

Source of support: None

How to cite this article:

Jini Varghese P, Smitha Mohan P.V., Shaji K., Najma Mansoor A.P. Symptomatic Ayurveda Management of a case having Cervical Rib: A Single Case Report Int. J. AYUSH CaRe. 2025;9(4):863-868.

REFERENCES:

1. Fliegel BE, Menezes RG. Anatomy, thorax, cervical rib [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan– [updated 2023 Jul 17; cited 2025 Oct 27]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK541001/>
2. S. Das. A Concise textbook of Surgery. 11th ed. Kolkata (India): S.Das; 2020. Chapter 21, p-512-515.
3. Fliegel BE, Menezes RG. Anatomy, thorax, cervical rib [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan– [updated 2023 Jul 17; cited 2025 Oct 27]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK541001/>
4. K.R Srikantha Murthy. Susrutha Samhitha, Chikitsasthana (Dal. Commen.) Varanasi: Chaukambha

- Viswabharati; Reprint Edition 2004; p-396.
5. Samir suneri et al; Ayurveda management of manyastambha(cervical spondylosis) W.S.R therapeutic role of nasyakarma; wjpmr ; 2020; 6(10), 130-132.
 6. Brahmasankara shastri edited; yogaratnakara vatavyadhi reprint chaukambha Sanskrit sansthan Varanasi, 2009;p-510.
 7. Chaturvedi G, editor 12th ed. Varanasi: Chaukhambha Bharati Academy, Charaka samhitha Chikitsa sthana, 2018; p – 791.
 8. Rashmi Yadav, Dudhamal TS. A Rare Case of Bilateral Cervical Rib: Clinical Image; International Journal of AYUSH Case Reports (IJA-CaRe). 2024;8(1):158-160.
 9. Graham Douglas et al. Macleod's clinical examination, 12th edition, 2009; 267.
 10. Fliegel BE, Menezes RG. Anatomy, thorax, cervical rib [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan– [updated 2023 Jul 17; cited 2025 Oct 27]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK541001/>
 11. Samir suneri et al; Ayurveda management of manyastambha (cervical spondylosis) W.S.R therapeutic role of nasyakarma; World Journal Of Pharmaceutical And Medical Research; 020; 6(10), 130-132.
 12. Swapnil D et al; Comparative study of Nagaradi choorna and aabhadhi choorna in the management of Janusandhigata vata (osteoarthritis); World Journal of Pharmaceutical Research; volume 7, issue 9, 589-605.
 13. Stuart Porter. Tidy's Physiotherapy. 15th ed. Chapter 13, 2013;p- 273.
 14. Krishnanvaidyan K.V, Gopalapilla S. Sahasrayogam-sujanapriyavyakhyana, p- 70.
 15. Chaturvedi G, editor 12th ed. Varanasi: Chaukhambha Bharati Academy, Charaka samhitha Chikitsa sthana, 2018; p -791.
 16. Stuart Porter. Tidy's Physiotherapy. 15th ed. Chapter 13, 2013; p- 273.
 17. K.R Srikantha Murthy; Ashtangahridayam volume 1; Varanasi: Chaukambha Viswabharati, p- 255.
 18. Sushruta Samhita with Nibandha sangraha commentary of Sri Dalhanacharya. edited by Vaidya Yadavaji Trikamji Acharya, Chaukambha Surabharati Prakashan, Varanasi, Reprint - 2003, p-55.