

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.453

Volume 14, Issue 17, 825-831.

Case Study

ISSN 2277-7105

AN AYURVEDIC APPROACH TOWARDS MANAGING TRAUMATIC BULLOUS MYRINGITIS – A CASE REPORT

Dr. V. Archana^{1*} and Dr. Rathi S.²

*1PG Scholar, Department of PG Studies in Shalakya Tantra, Government Ayurveda Medical College, Dhanvantari Road, Bengaluru, Karnataka, India-560009.

²Professor, Department of PG Studies in Shalakya Tantra, Government Ayurveda Medical College, Dhanvantari Road, Bengaluru, Karnataka, India-560009.

Article Received on 12 August 2025,

Revised on 14 August 2025, Accepted on 17 August 2025,

DOI: 10.20959/wjpr202517-38059



*Corresponding Author Dr. V. Archana

PG Scholar, Department of
PG Studies in Shalakya
Tantra, Government
Ayurveda Medical College,
Dhanvantari Road,
Bengaluru, Karnataka,
India-560009.

ABSTRACT

A wide range of traumatic ear conditions can be observed in day to day clinical practice. Trauma to ear can occur from several factors like accidental injuries during boxing, improper instrumentation during examination, self cleaning of ear, RTA and many more. They can be as minor as a laceration to as threatening as skull base fracture, etc. Traumatic bullous myringitis presents as an acute condition with severe ear pain. In Ayurveda, *Raktaja Karnashula* is a condition wherein *Rakta* vitiated due to *Abhighatadi nidana*, produces severe pain in the ear. This study is about a 7-year old girl presenting with severe right ear pain following a self-inflicted injury to ear. On examination, the external auditory canal was congested with inflammation and bullous over tympanic membrane. Hence the case was treated with *Pravala pishti*, *Samshamani vati* and *Triphala guggulu*. Appreciable results were noted by 7 days. No complication was reported during the treatment period as well as follow up period of

next 7 days. Altogether Ayurvedic approach proved to be an effective management strategy in the case.

KEYWORDS: Traumatic bullous myringitis, *Raktaja karnashula*, *Samshamani vati*, *Pravala pishti*.

INTRODUCTION

Young and active individuals are at risk for ear trauma from the activities in which they engage. The ear trauma can have various dimensions of impacts ranging from a laceration in the pinna to skull base fractures. Bullous myringitis is an inflammatory or infectious condition disease primarily believed to be viral. But it can also be induced from a trauma. Inflammation of the tympanic membrane can occur as a direct result of trauma such as a foreign body, accidental trauma while cleaning the ear canal, sudden loud noises, changes in airline cabin pressure, and even an inflicted blow to the ear. Bullous myringitis is an acute inflammatory condition affecting the tympanic membrane characterized by the presence of bullae or vesicles on the surface of the TM. The bullae may be single or multiple, may affect a segment or the whole of the TM and may even spread on to the adjacent ear canal. Symptomatic management is the main line of treatment in the contemporary system of medicine. In Ayurveda, *Raktaja Karnashula* is a condition characterised by *Abhighata*, etc and presenting with *Karna Shula* and other *lakshanas*. Hence in this case the treatment was initiated considering *Raktahara kriva* and appreciable differences were noted.

PATIENT INFORMATION

A 7-year old female child with OPD no.XXX19 consulted Shalakya tantra OPD on 20/07/2025 with complaints of pain in the right ear since the previous day.

The patient had introduced a small stick into the right ear playfully, after which she developed sudden pain in the ear. The pain was constant and sharp in nature. It was not associated with fever, malaise or bleeding from ear. On examination, the tympanic membrane was inflamed and a bullous was evident over the TM as described in Table 1.

Table 1: Clinical findings.

Sl. No.	EXAMINATION	RIGHT EAR	LEFT EAR
1	Pinna	Normal in size, shape and position	Normal in size, shape and position
2	Pre and post auricular regions	No sinus or fistula, scar, swelling	No sinus or fistula, scar, swelling
3	EAC	CONGESTED	Minimum wax
4	Tympanic Membrane:		
	Colour	REDDISH	Pearly white
	Cone of light	ABSENT	Present in antero-inferior quadrant
	Bulging/ retraction	BULGING	Absent
	Transparency	TRANSLUCENT	Semi transparent

	Bullae/ vesicles	BULLOUS PRESENT IN POSTERO- INFERIOR QUADRANT	Absent
	Perforation	Absent	Absent
5	Mastoid	No swelling or tenderness	No swelling or tenderness
6	Auditory function	Normal	Normal
7	Vestibular function	Normal	Normal

DIAGNOSTIC ASSESSMENT

Based on otoscopic findings, the condition was diagnosed as *Raktaja Karnashula* (traumatic bullous myringitis) (Fig. 1)

TIMELINE OF TREATMENT

Table 2: Timeline of treatment.

Day	Presentation (Fig. 1 and 2)	Treatment
1	 Ear pain Inflamed tympanic membrane Bullous over tympanic membrane Cone of light absent 	For first 7 days: Pravala pishti: [9] 2 pinches, bd, After food, with honey Samshamani vati: [10] ½ tablet, bd, After food Triphala guggulu: [11] ½ tablet, bd, After food
7	 No ear pain Tympanic membrane normal No inflammation or bullous Cone of light present 	For next 7 days: Samshamani vati 1/2 tablet, bd, After food

RESULTS

The signs and symptoms like pain in the ear, inflammation of tympanic membrane and bullous over tympanic membrane subsided by seven days (Figure 2).

Tablet *Samshamani vati* internally was continued for another seven days to ensure complete expulsion of morbid *doshas* (~humours).

No adverse reaction and recurrence were found during the treatment period and follow up period of another week.

827

FOLLOW UP AND OUTCOMES

Follow up of the patient was done for another week. There was no recurrence reported.



Fig.1: Bullous myringitis and congested EAC of right ear- Before treatment.



Fig.2: Intact tympanic membrane and EAC of right ear- After 1 week of treatment.

DISCUSSION

Acharya Vagbhata has described 5 types of Karna Shula- Vataja, Pittaja, Kaphaja, Raktaja and Sannipatika. Raktaja Karnashula is a condition wherein Abhighata like nidana vitiate Rakta and results in ear pain along with other lakshana like daha, osha, sheeta ichha, shvayathu, jvara, pita lasika, ashu paka.

In this case, *pitta-rakta hara* and *sotha hara* medicines were advised.

PRAVALA PISHTI

Pravala is indicated in rakta shula and is pittahara. [12] Its Kshara, Madhura in rasa, laghu in guna, sita in virya ,deepana, pachana, balya, tridoshasamana, visaghna, virya and varna *vardhana*. [13] Hence it proves useful in *Raktaja roga*.

TRIPHALA GUGGULU

The ingredients of Triphala guggulu are Triphala churna, Pippali churna, Guggulu and is indicated in shotha.

In one study, oral administration of aq. resin, stem bark, and methanolic extract of Commiphora wightii (Arn.) Bhandari showed anti-inflammatory activity by decreasing carrageenan-induced paw oedema period of 5 hours at the dose level of 500 mg/kg BW, oral.^[14]

An aq. extract of dried fruit of *Terminalia chebula* Retz. showed anti-inflammatory effect by inhibiting inducible nitric oxide synthesis. [15]

Anti-inflammatory activities of Terminalia bellerica Roxb.extract was evaluated in the carrageenan-induced paw oedema model, in which inhibition of paw oedema was compared to control group, observed at different doses of 100, 200 and 400 mg/kg at 1, 3, and 5 hours and comparable efficacy of anti-inflammatory activity were shown for indomethacin at 200 mg/kg.^[16]

In a study, Emblica officinalis Gaertn. exhibit anti-inflammatory activities in carrageenaninduced acute and cotton pellet-induced chronic inflammation in Sprague-Dawley rats by reducing paw volume in acute inflammation and the granulomatous tissue mass and plasma extravasation in chronic inflammatory condition. [17]

It is seen that the fruit decoction showed anti-inflammatory activity against carrageenaninduced rat paw oedema.[18]

SAMSHAMANI VATI

The ingredient of samshamani vati- guduchi has been found effective in acute phase of inflammation. The alcoholic extract of T. cordifolia has been found to exert antiinflammatory actions in models of acute and subacute inflammation. [19]

CONCLUSION

The medicines Pravala pishti, Triphala guggulu and Samshamani vati had resolved the condition completely in the case. Hence, it was good choice in this case. As it is a single case study, further analysis would help understand the condition and treatment in a detailed way.

ACKNOWLEDGEMENTS: Nil.

REFERENCES

- 1. Mummidivarapu P, Ajjada BS, Bandaru RR, Vecham CS. Ear injuries in tertiary care centre - Government General Hospital Kakinada: a comprehensive review. Int J Otorhinolaryngol Head Neck Surg, 2023; 9: 516-19.
- 2. Mohan Bansal. Diseases of the External Ear. In: Diseases of Ear, Nose and Throat. 3rd edition, New Delhi, Jaypee Brothers Medical Publishers, 2022; 267.
- 3. Kasinathan S, Kondamudi NP. Bullous Myringitis. [Updated 2023 Aug 12]. In:StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK553029/
- 4. Kotikoski MJ, Palmu AA, Huhtala H, et al. The epidemiology of acute bullous myringitis and its relationship to recurrent acute otitis media in children less than 2 years of age. Int J Pediatr Otorhinolaryngol, 2003; 67(11): 1207–12.
- 5. McCormick DP, Saeed KA, Pittman C, et al. Bullous myringitis: a case-control Study. Pediatrics, 2003; 112(4): 982-6.
- 6. Roberts DB. The etiology of bullous myringitis and the role of mycoplasmas in ear Disease: a review. *Pediatrics*, 1980; 65(4): 761-6.
- 7. Marais J, Dale BA. Bullous myringitis: a review. Clin Otolaryngol Allied Sci., 1997; 22(6): 497–9.
- 8. Vagbhata: Uttara sthana, 17th Chapter: Karna roga vijyaniya. In: Pandit Hari Sadasiva Sastri Paradakara, editor. Ashtanga Hrudaya with the Commentaries Sarvangasundara of Arunadatta and Ayurveda rasayana of Hemadri. Varanasi:Chaukhambha Sanskrit Sansthan, 2018; Sloka 6,7: 835.
- 9. Alekya Bavisetti & K. Sreehari: Pravala An Overview. International Ayurvedic Medical Journal 2017 {cited 2017} Available from: {online} December, http://www.iamj.in/posts/images/upload/4504 4512.pdf
- 10. Vaidya Yadavji Trikamji Acharya: 1st Chapter: Jvara adhikara. In: Siddha Yoga Sangraha [Internet]2nd edition. Bombay: Chaukhamba Sanskrit Pustakalaya; 1946[cited 2025Aug

- 08]. Sloka 6.p.5. Available from: https://archive.org/details/omef_siddha-yoga-sangrahby-vaidya-yadavji-trikamaji-acharya-culcutta-1946-shri-baidyanath-ayurved-b
- 11. Sharngadhara: Madhyama khanda, 7th chapter: Gutika prakarana. In: Sharngadhara Samhita with commentaries Tatvadipika of Bhisakvachaspati Pt. Durgadatt Shastry. Varanasi. Chaukahamba Vidyabhavan, 2002; 82,83: 383.
- 12. Vadiya Shree Basavaraja: 25th chapter. In: Basavarajiya, translated by Prof. Dr. M.S.Krishnamurthy. Varanasi.Chaukhambha Orientalia, 2019; Sloka 605. P.716.
- 13. Sri Sadananda sharma: 23rd Taranga. Ratnadi vijnaniya. In: Pt. Kashinatha shastri. Editor. Rasatarangini with Prasadani commentary of Sri Haridatta Shashtri. Delhi: Motilal Banarasai Das, 2000; Sloka 139-141. 629.
- 14. Reeta M, Ravindra S, Tarun S, Ramamurthy A, Mita K. Comparative evaluation of the anti-inflammatory activity of oleo gum resin and stem bark extract of Guggulu in albino rats. World Journal of Pharmacy and Pharmaceutical Sciences, 2015; 4(10): 861-71.
- 15. Yang MH, Ali Z, Khan IA, Khan SI. Anti-inflammatory activity of constituents isolated from Terminalia chebula. Natural product communications, 2014 Jul; 9(7): 965-968.
- 16. Gupta R, Singh RL, Gupta A. Antioxidant, DNA protective and antibacterial activities of Terminalia bellerica extracts. Journal of Medicinal Plants Research, 2019 Nov 30; 13(18): 431-42.
- 17. Muthuraman A, Sood S, Singla SK. The anti-inflammatory potential of phenolic compounds from Emblica officinalis L. in rat. Inflammo pharmacology, 2011 Dec; 19(6): 327-34.
- 18. Sharma AK, Singh RH. Screening of anti-inflammatory activity of certain indigenous drugs on carrageenin-induced hind paw oedema in rats. Bull. Med. Ethnobot. Res., 1980; 2: 262.
- 19. Wesley JJ, Christina AJ, Chidambaranathan N. Effect of alcoholic extract of Tinospora Cordifolia on acute and subacute Inflammation. Pharmacologyonline, 2008; 3: 683–7.