



A Case of Cervical Schwannoma with Upper Tracheal Stenosis Followed up as Asthma for 4 Years: Short Communication

Akira Naomi*

Department of Thoracic Surgery, Haruhi Respiratory Medical Hospital, Achi, Japan

DESCRIPTION

In 1899, Ritter first reported cervical schwannoma, which is found in 25%-45% of patients in the neck and head. The most common is the parapharyngeal space, which is mostly derived from the vagus nerve and the V, VI, VII, XII nerves, rarely from the sympathetic chain [1]. Cervical schwannomas are found in people in their 20 s to 70 s, and there is no gender difference. They are often found as asymptomatic cervical masses and are benign peripheral nerve tumors that cause pain, tenderness, cough, headache, Horner's syndrome, facial paralysis, etc., depending on the location and origin of the tumor [2]. It is very rare for cervical schwannoma to compress the airway from the outside and cause airway stenosis as in this case. Surgical removal of the tumor is the basic treatment, but there are a certain number of patients who suffer from complications and after effects, and from a cosmetic point of view, conservative treatment may also be considered an option due to the nature of benign tumors.

A woman in her 40 s had visited another hospital for asthma for 4 years. She visited our hospital because there was no improvement. An autopsy was attempted in our hospital, but she almost suffocated due to bleeding, etc., so she was intubated urgently, so a subsequent percutaneous biopsy revealed schwannoma. Cervical schwannomas are typically well circumscribed, encapsulated, slow-growing, asymptomatic tumors that grow only 2.5 mm to 3 mm over the course of a year, adhere to the nerve of origin, and displace the internal vein and the carotid artery [3,4]. Based on the preoperative diagnostic information, determining whether it is definitely schwannoma, whether there is a possibility other than schwannoma, such as lymph node metastasis of cancer or salivary gland tumor and if it is schwannoma, nerve origin or the tendency of tumor growth predicted from images is also taken into consideration when determining surgical indications. To preserve nerve function, careful intercapsular enucleation with a nerve-sparing technique while using nerve stimulation monitoring is recommended [3]. In a review reported by Valentino et al., the author's state that

complete excision can be performed, in cervical schwannomas, in only 56% of cases; of these, 64% showed permanent and 29% showed transitory neuronal deficits compared to 29% and 43% respectively, in intracapsular enucleation or debulking techniques [5]. The predominant postoperative symptom was hoarseness (22.6%), associated or not with other less frequent symptoms (coughing, choking when eating, secretions, facial palsy, Horner's Syndrome) [6]. At this time, the patient was concerned about surgical wounds from the viewpoint of complications and beauty, and wanted a treatment method other than surgery. We removed the stenotic site in the trachea with hot biopsy forceps, and attempted ethanol injection therapy for the remaining tumor in the lumen. Ethanol infusion therapy is used as a treatment or for palliative purposes for malignant tumors of all organs including the liver, ovaries and thyroid, as well as nonmalignant tumors such as cysts and carcinoids [7]. Furthermore, bronchofiberscopic ethanol injection (BEI) was reported for the first time in 1986 by Fujisawa et al. for malignant tumors in the central airways [8].

Ethanol injected into the tumor

1. Fixes the tumor tissue and shrinks the tumor itself.
2. Blocks the intravasclar blood flow on the surface of the tumor, leading to necrosis of the tumor.

BEI therapy is simpler and less expensive than Nd-YAG lasers and stents in terms of procedure and equipment preparation, and can be performed at any institution with the technology to safely perform bronchoscopy. Regarding safety, leakage of ethanol injected into the tumor may induce severe coughing, but there have been no reports of pneumonia or other complications associated with this, and BEI appears to be a safe procedure.

No report has yet shown the effect of BEI on schwannoma, so the effects of ethanol injection on schwannoma are unknown due to the small number of cases, but there is no tumor growth even after 6 years of treatment, and this treatment may be a conservative treatment [9].

Correspondence to: Akira Naomi, Department of Thoracic Surgery, Haruhi Respiratory Medical Hospital, Achi, Japan, E-mail: akira.naomi@kiyosu-kokyuki.com

Received: 24-Apr-2023, Manuscript No. JCRB-23-21107; **Editor assigned:** 28-Apr-2023, Pre QC No. JCRB-23-21107 (PQ); **Reviewed:** 12-May-2023, QC No JCRB-23-21107; **Revised:** 19-May-2023, Manuscript No. JCRB-23-21107 (R); **Published:** 26-May-2023, DOI: 10.35248/2155-9627.23.14.460

Citation: Naomi A (2023) A Case of Cervical Schwannoma with Upper Tracheal Stenosis Followed up as Asthma for 4 Years: Short Communication. J Clin Res Bioeth. 14:460.

Copyright: © 2023 Naomi A. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

CONCLUSION

The basic treatment for cervical schwannoma is surgical resection, but complications such as Horner's syndrome and neurological deficits such as hoarseness may occur. Furthermore, it is thought that there are other people besides this case who shy away from surgery because they are concerned about surgical wounds from a cosmetic point of view. Due to the nature of benign tumors, it may take time for the patient and family to decide on surgery. In the above cases, we believe that it is necessary to devise ways to maintain the tumor in its original state. This case was a case of dyspnea due to tracheal stenosis due to tracheal schwannoma. By releasing the tracheal constriction site and injecting ethanol into the same site, not only did the symptoms improve but the size of the tumor was also maintained. In fact, 6 years have passed since the operation in this case, the tumor did not invade the trachea or tend to grow outside the trachea, and there were no complaints, the patient wishes to wait and see. Since there have been reports of malignant transformation of schwannoma, it may be necessary to perform a rebiopsy for evaluation if it shows a tendency to increase, but we believe that this procedure will be one of the conservative treatments

REFERENCES

1. Adouly T, Adnane C, Oubahmane T, Rouadi S, Abada R, Roubal M, et al. An unusual giant schwannoma of cervical sympathetic chain: A case report. *J Med Case Rep.* 2016;10(1):1-4.
2. Jaafar R, Ping TI, Hui DE, Yong TT, Narihan MSA. Cervical schwannoma: Report of four cases. *Med J Malaysia.* 2012;67:345-348.
3. Gibber MJ, Zevallos JP, Urken ML. Enucleation of vagal nerve schwannoma using intraoperative nerve monitoring. *Laryngoscope.* 2012;122(4):790-792.
4. Liu HL, Yu SY, Li GK, Wei WI. Extracranial head and neck schwannomas: A study of the nerve of origin. *Eur Arch Otorhinolaryngol.* 2011;268:1343-1347.
5. Valentino J, Boggess MA, Ellis JL, Hester TO, Jones RO. Expected neurologic outcomes for surgical treatment of cervical neurilemmomas. *Laryngoscope.* 1998;108(7):1009-1013.
6. Cavallaro G, Pattaro G, Iorio O, Avallone M, Silecchia G. A literature review on surgery for cervical vagal schwannomas. *World J Surg Oncol.* 2015;13:1-4.
7. Kubo N, Otsubo K, Nakajima N, Koto H. Bronchial artery embolization and local ethanol injection before interventional bronchoscopy in case of bronchial carcinoid. *J Japan Socie Resp Endo.* 2012;34:175-179.
8. Fujisawa T, Yamaguchi Y, Hongo H. Intratumoral injection of absolute ethanol for malignant disease invading the central airway. *J Japan Socie Resp Endo.* 1986; 8:251-257.
9. Chu YC, Yoon YH, Han HS, Han JY, Kim JM, Park IS. Malignant transformation of intrathoracic ancient neurilemmoma in a patient without Von Recklinghausen's disease. *J Korean Med Sci.* 2003;18(2):295-298.