ISSN 2307-8960 (online)

World Journal of *Clinical Cases*

World J Clin Cases 2022 October 6; 10(28): 9970-10390

Published by Baishideng Publishing Group Inc

World Journal of Clinical Cases

Contents

Thrice Monthly Volume 10 Number 28 October 6, 2022

REVIEW

9970 COVID-19 and the heart

Xanthopoulos A, Bourazana A, Giamouzis G, Skoularigki E, Dimos A, Zagouras A, Papamichalis M, Leventis I, Magouliotis DE, Triposkiadis F, Skoularigis J

9985 Role of short chain fatty acids in gut health and possible therapeutic approaches in inflammatory bowel diseases

Caetano MAF, Castelucci P

MINIREVIEWS

10004 Review of the pharmacological effects of astragaloside IV and its autophagic mechanism in association with inflammation

Yang Y, Hong M, Lian WW, Chen Z

ORIGINAL ARTICLE

Clinical and Translational Research

10017 Effects of targeted-edited oncogenic insulin-like growth factor-1 receptor with specific-sgRNA on biological behaviors of HepG2 cells

Yao M, Cai Y, Wu ZJ, Zhou P, Sai WL, Wang DF, Wang L, Yao DF

Retrospective Study

10031 Analysis of the successful clinical treatment of 140 patients with parathyroid adenoma: A retrospective study

Peng ZX, Qin Y, Bai J, Yin JS, Wei BJ

10042 Efficacy of digital breast tomosynthesis combined with magnetic resonance imaging in the diagnosis of early breast cancer

Ren Y, Zhang J, Zhang JD, Xu JZ

10053 Prevention and management of adverse events following COVID-19 vaccination using traditional Korean medicine: An online survey of public health doctors

Kang B, Chu H, Youn BY, Leem J

10066 Clinical outcomes of targeted therapies in elderly patients aged ≥ 80 years with metastatic colorectal cancer

Jang HR, Lee HY, Song SY, Lim KH

10077 Endovascular treatment *vs* drug therapy alone in patients with mild ischemic stroke and large infarct cores

Kou WH, Wang XQ, Yang JS, Qiao N, Nie XH, Yu AM, Song AX, Xue Q

World Journal of Clinical Cases

Thrice Monthly Volume 10 Number 28 October 6, 2022

Contents

Clinical Trials Study

10085 One hundred and ninety-two weeks treatment of entecavir maleate for Chinese chronic hepatitis B predominantly genotyped B or C

Xu JH, Wang S, Zhang DZ, Yu YY, Si CW, Zeng Z, Xu ZN, Li J, Mao Q, Tang H, Sheng JF, Chen XY, Ning Q, Shi GF, Xie Q, Zhang XQ, Dai J

Observational Study

10097 Dementia-related contact experience, attitudes, and the level of knowledge in medical vocational college students

Liu DM, Yan L, Wang L, Lin HH, Jiang XY

SYSTEMATIC REVIEWS

10109 Link between COVID-19 vaccines and myocardial infarction

Zafar U, Zafar H, Ahmed MS, Khattak M

CASE REPORT

10120 Successful treatment of disseminated nocardiosis diagnosed by metagenomic next-generation sequencing: A case report and review of literature

Li T, Chen YX, Lin JJ, Lin WX, Zhang WZ, Dong HM, Cai SX, Meng Y

10130 Multiple primary malignancies – hepatocellular carcinoma combined with splenic lymphoma: A case report

Wu FZ, Chen XX, Chen WY, Wu QH, Mao JT, Zhao ZW

10136 Metastatic multifocal melanoma of multiple organ systems: A case report

Maksimaityte V, Reivytyte R, Milaknyte G, Mickys U, Razanskiene G, Stundys D, Kazenaite E, Valantinas J, Stundiene I

10146 Cavernous hemangioma of the ileum in a young man: A case report and review of literature

Yao L, Li LW, Yu B, Meng XD, Liu SQ, Xie LH, Wei RF, Liang J, Ruan HQ, Zou J, Huang JA

10155 Successful management of a breastfeeding mother with severe eczema of the nipple beginning from puberty: A case report

Li R, Zhang LX, Tian C, Ma LK, Li Y

10162 Short benign ileocolonic anastomotic strictures - management with bi-flanged metal stents: Six case reports and review of literature

Kasapidis P, Mavrogenis G, Mandrekas D, Bazerbachi F

10172 Simultaneous bilateral floating knee: A case report

Wu CM, Liao HE, Lan SJ

10180 Chemotherapy, transarterial chemoembolization, and nephrectomy combined treated one giant renal cell carcinoma (T3aN1M1) associated with Xp11.2/TFE3: A case report

Wang P, Zhang X, Shao SH, Wu F, Du FZ, Zhang JF, Zuo ZW, Jiang R

10186 Tislelizumab-related enteritis successfully treated with adalimumab: A case report

Chen N, Qian MJ, Zhang RH, Gao QQ, He CC, Yao YK, Zhou JY, Zhou H

World Journal of Clinical Cases

Thrice Monthly Volume 10 Number 28 October 6, 2022

Contents

10193 Treatment of refractory/relapsed extranodal NK/T cell lymphoma with decitabine plus anti-PD-1: A case report

Li LJ, Zhang JY

10201 Clinical analysis of pipeline dredging agent poisoning: A case report

Li YQ, Yu GC, Shi LK, Zhao LW, Wen ZX, Kan BT, Jian XD

10208 Follicular lymphoma with cardiac involvement in a 90-year-old patient: A case report

Sun YX, Wang J, Zhu JH, Yuan W, Wu L

10214 Twin reversed arterial perfusion sequence-a rare and dangerous complication form of monochorionic twins: A case report

Anh ND, Thu Ha NT, Sim NT, Toan NK, Thuong PTH, Duc NM

10220 Potential otogenic complications caused by cholesteatoma of the contralateral ear in patients with otogenic abscess secondary to middle ear cholesteatoma of one ear: A case report

Zhang L, Niu X, Zhang K, He T, Sun Y

10227 Myeloid sarcoma with ulnar nerve entrapment: A case report

Li DP, Liu CZ, Jeremy M, Li X, Wang JC, Nath Varma S, Gai TT, Tian WQ, Zou Q, Wei YM, Wang HY, Long CJ, Zhou Y

10236 Alpha-fetoprotein-producing hepatoid adenocarcinoma of the lung responsive to sorafenib after multiline treatment: A case report

Xu SZ, Zhang XC, Jiang Q, Chen M, He MY, Shen P

10244 Acute mesenteric ischemia due to percutaneous coronary intervention: A case report

Ding P, Zhou Y, Long KL, Zhang S, Gao PY

10252 Persistent diarrhea with petechial rash - unusual pattern of light chain amyloidosis deposition on skin and gastrointestinal biopsies: A case report

Bilton SE, Shah N, Dougherty D, Simpson S, Holliday A, Sahebjam F, Grider DJ

10260 Solitary splenic tuberculosis: A case report

Guo HW, Liu XQ, Cheng YL

10266 Coronary artery aneurysms caused by Kawasaki disease in an adult: A case report and literature review

He Y, Ji H, Xie JC, Zhou L

10273 Double filtration plasmapheresis for pregnancy with hyperlipidemia in glycogen storage disease type Ia: A case report

Wang J, Zhao Y, Chang P, Liu B, Yao R

10279 Treatment of primary tracheal schwannoma with endoscopic resection: A case report

Shen YS, Tian XD, Pan Y, Li H

10286 Concrescence of maxillary second molar and impacted third molar: A case report

Su J, Shao LM, Wang LC, He LJ, Pu YL, Li YB, Zhang WY

World Journal of Clinical Cases

Thrice Monthly Volume 10 Number 28 October 6, 2022

Contents

10293 Rare leptin in non-alcoholic fatty liver cirrhosis: A case report

Nong YB, Huang HN, Huang JJ, Du YQ, Song WX, Mao DW, Zhong YX, Zhu RH, Xiao XY, Zhong RX

10301 One-stage resection of four genotypes of bilateral multiple primary lung adenocarcinoma: A case report

Zhang DY, Liu J, Zhang Y, Ye JY, Hu S, Zhang WX, Yu DL, Wei YP

10310 Ectopic pregnancy and failed oocyte retrieval during *in vitro* fertilization stimulation: Two case reports

Zhou WJ, Xu BF, Niu ZH

10317 Malignant peritoneal mesothelioma with massive ascites as the first symptom: A case report

Huang X, Hong Y, Xie SY, Liao HL, Huang HM, Liu JH, Long WJ

10326 Subperiosteal orbital hematoma concomitant with abscess in a patient with sinusitis: A case report

Hu XH, Zhang C, Dong YK, Cong TC

10332 Postpartum posterior reversible encephalopathy syndrome secondary to preeclampsia and cerebrospinal fluid leakage: A case report and literature review

Wang Y, Zhang Q

10339 Sudden extramedullary and extranodal Philadelphia-positive anaplastic large-cell lymphoma transformation during imatinib treatment for CML: A case report

Wu Q, Kang Y, Xu J, Ye WC, Li ZJ, He WF, Song Y, Wang QM, Tang AP, Zhou T

10346 Relationship of familial cytochrome P450 4V2 gene mutation with liver cirrhosis: A case report and review of the literature

Jiang JL, Qian JF, Xiao DH, Liu X, Zhu F, Wang J, Xing ZX, Xu DL, Xue Y, He YH

10358 COVID-19-associated disseminated mucormycosis: An autopsy case report

Kyuno D, Kubo T, Tsujiwaki M, Sugita S, Hosaka M, Ito H, Harada K, Takasawa A, Kubota Y, Takasawa K, Ono Y, Magara K, Narimatsu E, Hasegawa T, Osanai M

10366 Thalidomide combined with endoscopy in the treatment of Cronkhite-Canada syndrome: A case report

Rong JM, Shi ML, Niu JK, Luo J, Miao YL

10375 Thoracolumbar surgery for degenerative spine diseases complicated with tethered cord syndrome: A case report

Wang YT, Mu GZ, Sun HL

LETTER TO THE EDITOR

10384 Are pregnancy-associated hypertensive disorders so sweet?

Thomopoulos C, Ilias I

10387 Tumor invasion front in oral squamous cell carcinoma

Cuevas-González JC, Cuevas-González MV, Espinosa-Cristobal LF, Donohue Cornejo A

World Journal of Clinical Cases

Thrice Monthly Volume 10 Number 28 October 6, 2022

Contents

ABOUT COVER

Editorial Board Member of *World Journal of Clinical Cases*, Kaleem Ullah, FCPS, MBBS, Assistant Professor, Solid Organ Transplantation and Hepatobiliary Surgery, Pir Abdul Qadir Shah Jeelani Institute of Medical Sciences, Gambat 66070, Sindh, Pakistan. drkaleempk@gmail.com

AIMS AND SCOPE

The primary aim of *World Journal of Clinical Cases* (*WJCC*, *World J Clin Cases*) is to provide scholars and readers from various fields of clinical medicine with a platform to publish high-quality clinical research articles and communicate their research findings online.

WJCC mainly publishes articles reporting research results and findings obtained in the field of clinical medicine and covering a wide range of topics, including case control studies, retrospective cohort studies, retrospective studies, clinical trials studies, observational studies, prospective studies, randomized controlled trials, randomized clinical trials, systematic reviews, meta-analysis, and case reports.

INDEXING/ABSTRACTING

The *WJCC* is now abstracted and indexed in Science Citation Index Expanded (SCIE, also known as SciSearch®), Journal Citation Reports/Science Edition, Current Contents®/Clinical Medicine, PubMed, PubMed Central, Scopus, Reference Citation Analysis, China National Knowledge Infrastructure, China Science and Technology Journal Database, and Superstar Journals Database. The 2022 Edition of Journal Citation Reports® cites the 2021 impact factor (IF) for *WJCC* as 1.534; IF without journal self cites: 1.491; 5-year IF: 1.599; Journal Citation Indicator: 0.28; Ranking: 135 among 172 journals in medicine, general and internal; and Quartile category: Q4. The *WJCC*'s CiteScore for 2021 is 1.2 and Scopus CiteScore rank 2021: General Medicine is 443/826.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: *Xu Guo*; **Production Department Director:** *Xiang Li*; **Editorial Office Director:** *Jin-Lei Wang*.

NAME OF JOURNAL
World Journal of Clinical Cases

ISSN
ISSN 2307-8960 (online)

LAUNCH DATE
April 16, 2013

FREQUENCY
Thrice Monthly

EDITORS-IN-CHIEF
Bao-Gan Peng, Jerzy Tadeusz Chudek, George Kontogeorgos, Maurizio Serati, Ja Hyeon Ku

EDITORIAL BOARD MEMBERS
https://www.wjgnet.com/2307-8960/editorialboard.htm

PUBLICATION DATE
October 6, 2022

INSTRUCTIONS TO AUTHORS
https://www.wjgnet.com/bpg/gerinfo/204

GUIDELINES FOR ETHICS DOCUMENTS
https://www.wjgnet.com/bpg/GerInfo/287

GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH
https://www.wjgnet.com/bpg/gerinfo/240

PUBLICATION ETHICS
https://www.wjgnet.com/bpg/GerInfo/288

PUBLICATION MISCONDUCT
https://www.wjgnet.com/bpg/gerinfo/208

ARTICLE PROCESSING CHARGE
https://www.wjgnet.com/bpg/gerinfo/242

STEPS FOR SUBMITTING MANUSCRIPTS
https://www.wjgnet.com/bpg/GerInfo/239

ONLINE SUBMISSION
https://www.f6publishing.com

World Journal of Clinical Cases

Submit a Manuscript: https://www.f6publishing.com

World J Clin Cases 2022 October 6; 10(28): 10279-10285

DOI: 10.12998/wjcc.v10.i28.10279

ISSN 2307-8960 (online)

CASE REPORT

Treatment of primary tracheal schwannoma with endoscopic resection: A case report

Yong-Shuai Shen, Xiang-Dong Tian, Yi Pan, Hua Li

Specialty type: Oncology

Provenance and peer review: Unsolicited article; Externally peer reviewed.

Peer-review model: Single blind

Peer-review report's scientific quality classification

Grade A (Excellent): 0
Grade B (Very good): B
Grade C (Good): C, C
Grade D (Fair): D
Grade E (Poor): 0

P-Reviewer: Faraji N, Iran; Li Y, China; Vyshka G, Albania; Yeh CY, Taiwan

Received: May 15, 2022
Peer-review started: May 15, 2022
First decision: June 8, 2022
Revised: June 21, 2022
Accepted: August 25, 2022
Article in press: August 25, 2022
Published online: October 6, 2022

Yong-Shuai Shen, Department of Endoscopy, Tianjin Cancer Hospital Airport Hospital, Tianjin 300000, China

Xiang-Dong Tian, Department of Endoscopy, Tianjin Medical University Cancer Institute and Hospital, Tianjin 300060, China

Yi Pan, Department of Pathology, Tianjin Medical University Cancer Institute and Hospital, National Clinical Research Center for Cancer, Key Laboratory of Cancer Prevention and Therapy, Tianjin's Clinical Research Center for Cancer, Tianjin 300060, China

Hua Li, Department of Endoscopy, Tianjin Medical University Cancer Institute and Hospital, National Clinical Research Center for Cancer, Key Laboratory of Cancer Prevention and Therapy, Tianjin's Clinical Research Center for Cancer, Tianjin 300060, China

Corresponding author: Hua Li, MD, Doctor, Department of Endoscopy, Tianjin Medical University Cancer Institute and Hospital, National Clinical Research Center for Cancer, Key Laboratory of Cancer Prevention and Therapy, Tianjin's Clinical Research Center for Cancer, North Huanhu West Road, Sports Institute, Hexi District, Tianjin 300060, China.
lihuatjmuch@163.com

Abstract

BACKGROUND

Schwannoma is a benign tumor originating from the peripheral nerve sheath. The clinical symptoms of tracheal schwannoma depend on the location of the tumor, and the most common clinical symptoms are cough and hemoptysis. The most effective treatment for benign tumors is complete resection of the primary lesion at an early stage. Our experience has demonstrated that primary tracheal schwannoma can be safely excised with a high-frequency electric knife in a minimally invasive manner.

CASE SUMMARY

We report a 61-year-old asymptomatic woman who underwent chest computed tomography (CT), which accidentally found an intraluminal tracheal mass without enlarged lymph nodes. Then, the patient underwent bronchoscopy, which found that the tracheal mass originated from the left wall of the upper trachea, was less than 1.5 cm in size, immovable, smooth and 4 cm away from the vocal cord, resulting in partial upper respiratory tract obstruction. Treatment was performed using an endoscopic resection for en bloc removal of the tracheal mass. The diagnosis was primary tracheal schwannoma. A follow-up was performed

after endoscopic surgery, and bronchoscopy and thoracic CT were used to monitor whether there was a recurrence. At present, there is no evidence of recurrence, and the patient had a good quality of life. Endoscopic resection may be effective and safe in the treatment of primary tracheal schwannoma.

CONCLUSION
Primary tracheal schwannoma is a very rare benign tumor. In this case, we cured it by complete endoscopic resection.

Key Words: Schwannoma; Tracheal tumor; Endoscopic therapy; High-frequency electric knife; En bloc; Case report

Core Tip: We report a case diagnosed with primary tracheal schwannoma using endoscopic resection. Primary tracheal schwannoma is an extremely rare benign tumor of trachea. To the best of our knowledge, only a few cases have previously been reported. Cough and hemoptysis are common in this disease, but many patients are misdiagnosed as having asthma. Our experience shows that primary tracheal schwannoma can be safely and completely resected by a high-frequency electric knife in a minimally invasive manner.

Citation: Shen YS, Tian XD, Pan Y, Li H. Treatment of primary tracheal schwannoma with endoscopic resection: A case report. *World J Clin Cases* 2022; 10(28): 10279-10285
URL: https://www.wjgnet.com/2307-8960/full/v10/i28/10279.htm
DOI: https://dx.doi.org/10.12998/wjcc.v10.i28.10279

INTRODUCTION

Primary tracheal tumors are uncommon[1,2]. It is estimated that approximately 0.2% of the entire respiratory system is occupied by primary tracheal tumors in the United States, and most of them are malignant[3]. Among them, primary tracheal schwannoma accounts for less than 0.5% of primary tracheal tumors[4,5]. There are two distinct types of primary tracheal schwannomas, schwannomas and neurofibromas, which arise from nerves located inside the trachea. As an extremely rare tumor with nonspecific symptoms and is sometimes misdiagnosed as asthma[6,7]. Less invasive endoscopic procedures can now be used to resect tumors that previously required surgery[8,9]. We herein present a rare case of a primary tracheal schwannoma with a high-frequency electric knife in a minimally invasive manner. In addition, we retrieved related literature found four primary tracheal schwannoma cases treated by endoscopic therapy that are reported in the literature in Table 1[7,9-11].

CASE PRESENTATION

Chief complaints

There were no complaints from the patient.

History of present illness

A 61-year-old woman with no history of chronic pulmonary disease was referred from the department of chest surgery for diagnosis and treatment of an accidental pulmonary nodule. She was a nonsmoker. No abnormal results were found in physical examinations or biochemical tests.

History of past illness

There was no relevant medical history for the patient.

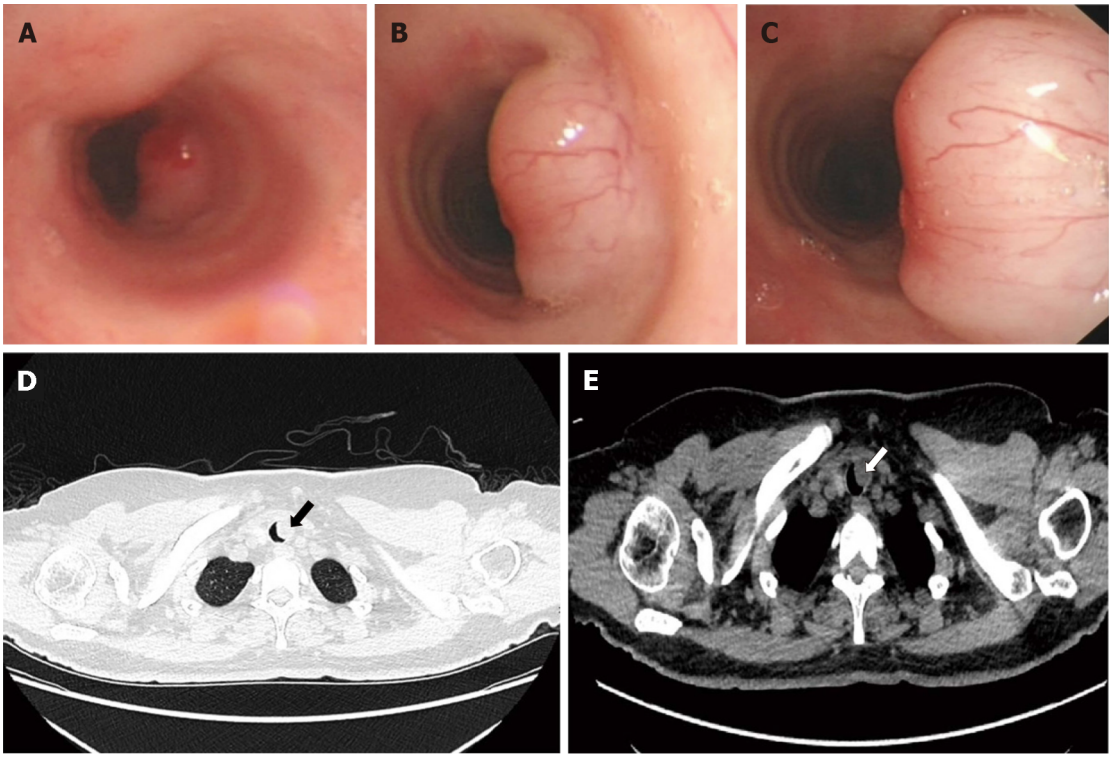
Personal and family history

The patient has no noteworthy family history. There was no family history of cancer in the patient's family. The patient's family members had no smoking history.

Table 1 Four primary tracheal schwannoma cases treated by endoscopic therapy are reported in the literature

Characters	Ge *et al*[7]	Gibb *et al*[10]	Sharma *et al*[9]	Horovitz *et al*[11]
Population	China	China	United States	NA
Age	53	16	63	38
Sex	M	F	M	F
Clinical presentation	Cough, expectoration	Cough, asthma	Dyspnea	NA
Location	Distal trachea	Distal trachea	Proximal trachea	NA
Size	2.0 cm	NA	2.0 cm	NA
Treatment	APC/electrocautery	APC/electrocautery	APC/electrocautery	Endoscopic excision
Prognosis	Recurrence, 2 wk after endoscopic resection	Uneventful for 18 mo	Uneventful for 8 mo	Recurrence, 12 yr after endoscopic resection

F: Female; M: Male; APC: Argon plasma coagulation; NA: Not applicable.



DOI: 10.12998/wjcc.v10.i28.10279

Figure 1 Bronchoscopic view and computed tomography scan of the chest showing the tracheal tumor. A-C: Three different observation positions were observed during bronchoscopy: Distant (A), middle (B), near (C); D: Computed tomography (CT) scan, lung window; E: CT scan, mediastinal window.

Physical examination

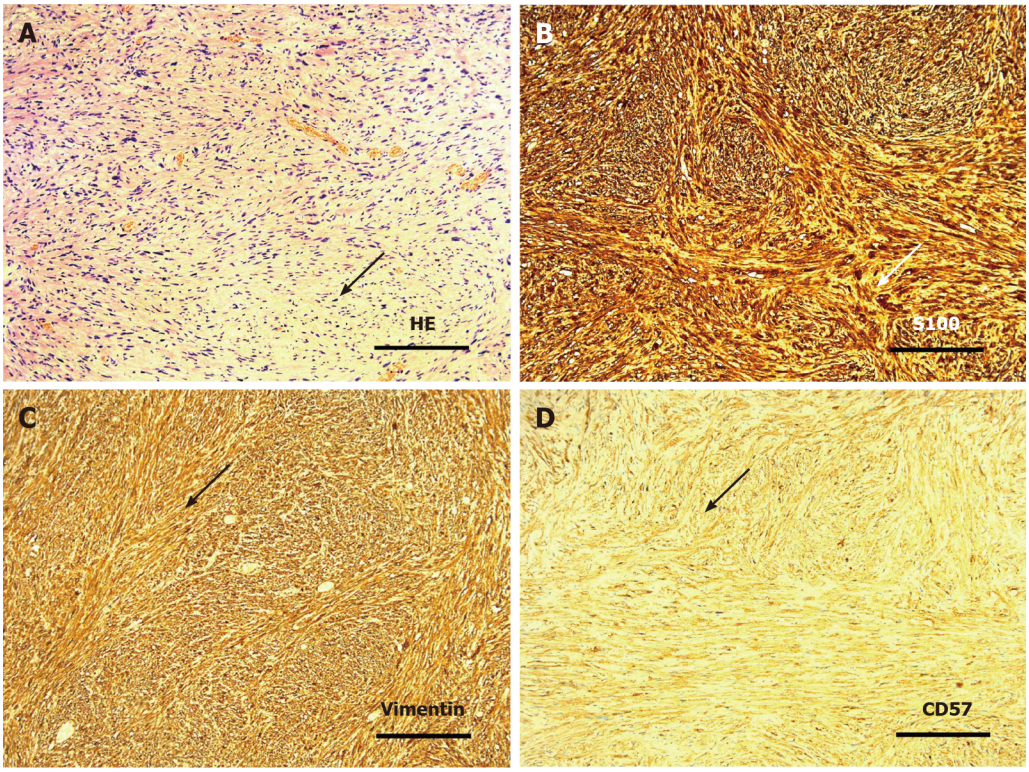
A physical examination revealed no clinically significant changes.

Laboratory examinations

No abnormalities were noted on laboratory examinations.

Imaging examinations

A bronchoscopy was performed, which confirmed that the lesion originated from the left wall of the upper trachea. The mass was less than 1.5 centimeters in size, immobile, smooth and 4 centimeters distal to the vocal cords, leading to partial upper airway obstruction (Figure 1A-C). A computed tomography (CT) scan of the chest revealed an intraluminal tracheal mass without enlarged lymph nodes (Figure 1D and E). Chest CT was performed and suggested the existence of a nodule on the left wall of the trachea



DOI: 10.12998/wjcc.v10.i28.10279

Figure 2 Results of hematoxylin and eosin staining and immunohistochemistry of tumors. A: Photomicrograph of hematoxylin and eosin staining; B: Photomicrograph of S100 staining; C: Photomicrograph of Vimentin staining; D: Photomicrograph of CD57 staining.

at the entrance to the thoracic cavity, considering benign lesions.

FINAL DIAGNOSIS

Pathological examination confirmed a spindle cell neoplasm with schwannoma features (Figure 2).

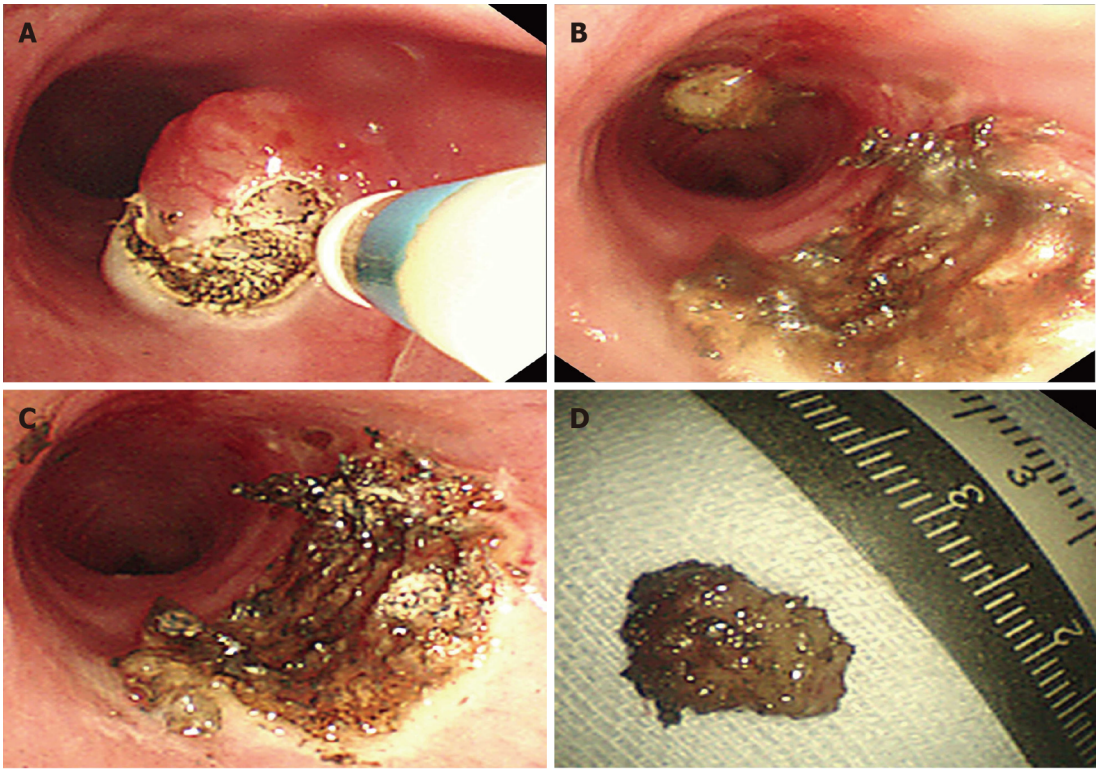
TREATMENT

The patient underwent endoscopic excision within 25 min. A BF TYPE 1T260 bronchoscope (Olympus, Tokyo, Japan) was used for the operation, and VIO200D (ERBE, Germany) was selected as the electrosurgical generator, with cutting set to the endo-cut mode (effect 3, duration 1, interval 5) and electrocoagulation set to the forced-coagulation mode (effect 3, 30 W).

The patient was positioned in a supine posture under intravenous anesthesia (propofol and fentanyl). Based on the measurement of blood oxygen saturation, intermittent mask oxygen inhalation was administered with an oxygen flow rate of 0-10 L/min, and the density of oxygen was controlled within a safe range. The mass was approximately 1.0 cm in diameter and involved the left side of the tracheal wall. Incision, stripping and hemostasis through the basal part of the tumor was conducted with a disposable high-frequency cutting tool (Olympus, KD-650U) rather than an endoloop. No obvious hemorrhage or edema existed (Figure 3).

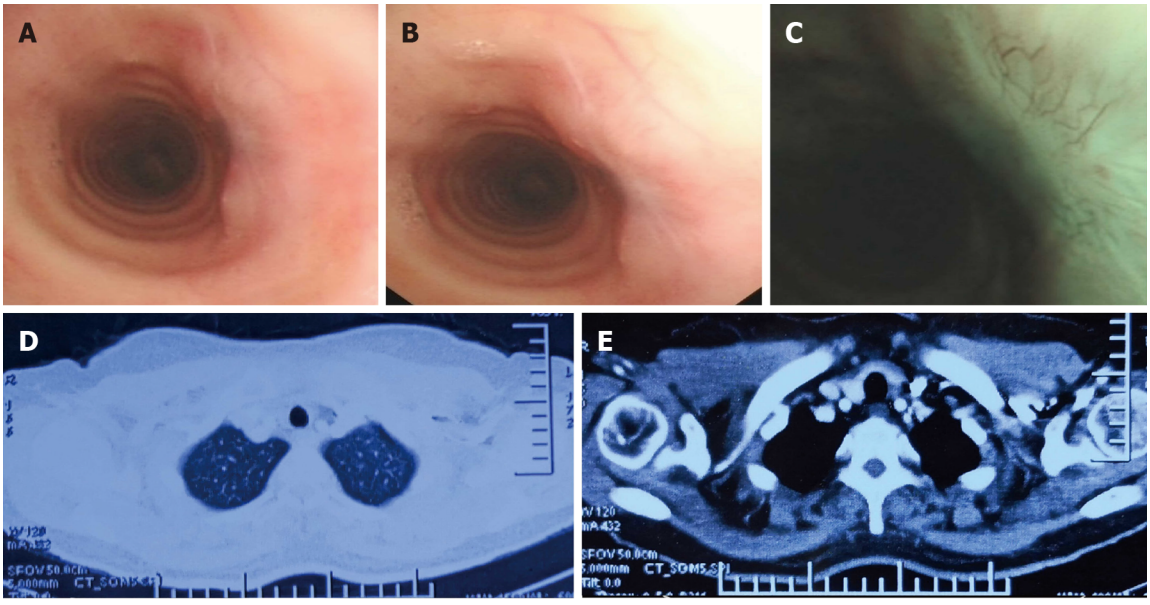
OUTCOME AND FOLLOW-UP

Bronchoscopy and CT were reviewed two months later, and a scar had formed without recurrence (Figure 4). The patient has recovered well and remains free of disease.



DOI: 10.12998/wjcc.v10.i28.10279

Figure 3 The process of tumor resection with a high-frequency electric knife. A-C: Diagram of surgery; D: Resected tumor specimen.



DOI: 10.12998/wjcc.v10.i28.10279

Figure 4 Postoperative re-examination. A-C: Bronchoscopic view; D and E: Computed tomography scan of the chest.

DISCUSSION

Tracheal schwannoma was first reported in 1951 and originates from Schwann cells of the intraluminal sheath; it commonly occurs in the distal trachea with a female sex predilection and excellent prognosis [4]. There are no pathogenic factors known to cause primary tracheal schwannoma, and how it develops is unclear. Fortunately, a previous study on the genomic landscape of schwannoma showed that the common genomic aberrations in sporadic schwannoma are NF2, ARID1A, ARID1B, and DDR1. The fusion expression of SH3PXD2A-HTRA1 leads to an increase in phosphorylated ERK, increasing proliferation, invasion, and tumorigenesis *in vivo*[12]. This study could provide a potential therapeutic

strategy for the treatment of schwannoma.

The clinical presentation of schwannoma is determined by the site of tumor origin, disease extent, degree of airway obstruction, and lung function damage. Patients with this disease can be asymptomatic, with the disease being diagnosed by chance after a routine medical examination. Cough and hemoptysis are often observed in the disease[13]. Unfortunately, many patients are misdiagnosed as having asthma[7].

Chest CT or magnetic resonance imaging (MRI) plays an important role in the accurate diagnosis of tracheal tumors[5]. On radiographic examination, the lesion often shows well-defined boundaries, and the tumor surface is usually smooth, without surrounding structure invasion[14]. Flexible bronchoscopy is employed not only for direct tumor visualization but also for biopsy and resection[2]. Immunohistochemical analysis reveals positivity for S-100 protein and Vimentin, confirming the diagnosis of schwannoma[13,15].

Complete resection of a tracheal schwannoma is the gold standard of treatment. There are a variety of treatment methods, including tracheal resection and minimally invasive treatment[13,16]. In the present case, considering the sessile tumor without extraluminal lesions and the low risk of tracheal fistula, we preferred endoscopic excision. A high-frequency electric knife is commonly used in the treatment of early esophageal and gastroenteric tumors in endoscopic resection[17]; however, there are no available data regarding its use, or its effectiveness and safety in the management of tracheal masses. In our case, we first reported a novel method of en bloc removal of a tracheal mass, complying with oncological requirements. This method is safe since the two major security elements of the resection are under control, including the density of oxygen and the operation depth. In addition, shorter operation time and less bleeding volume are two other advantages compared with traditional primary tracheal resection. Potential complications of tracheal resection would be avoided, thus benefitting the clinical outcome.

However, this study has some limitations. One limitation is the short follow-up time. Although no significant difference exists in the quality of life pre- and postoperation, local recurrence in endoscopic excision has been previously reported, suggesting that bronchoscopic surveillance is necessary[11]. Another limitation is the limited number of cases. As a result, the long-term effects require further patient follow-up.

CONCLUSION

Primary tracheal schwannoma is an extremely rare benign tumor that can be cured with complete endoscopic excision.

FOOTNOTES

Author contributions: Li H and Shen YS designed the report and wrote the manuscript; Tian XD provided manuscript recommendations; Pan Y collaborated with pathologists at our hospital to determine the pathological diagnosis; Manuscript was read and approved by all authors.

Informed consent statement: Informed written consent was obtained from the patient for publication of this report and any accompanying images.

Conflict-of-interest statement: The authors declare that they have no conflict of interest.

CARE Checklist (2016) statement: The authors have read the CARE Checklist (2016), and the manuscript was prepared and revised according to the CARE Checklist (2016).

Country/Territory of origin: China

ORCID number: Yong-Shuai Shen 0000-0001-7185-1812; Xiang-Dong Tian 0000-0002-9301-8415; Yi Pan 0000-0001-9117-9795; Hua Li 0000-0001-5257-889X.

S-Editor: Zhang H
L-Editor: A
P-Editor: Zhang H

REFERENCES

1 **Urdaneta AI**, Yu JB, Wilson LD. Population based cancer registry analysis of primary tracheal carcinoma. *Am J Clin Oncol* 2011; **34**: 32-37 [PMID: 20087156 DOI: 10.1097/COC.0b013e3181cae8ab]

2 **Hao ZR**, Yao ZH, Zhao JQ, Li DZ, Wan YY, Kang YM, Lin DJ. Clinical efficacy of treatment for primary tracheal tumors by flexible bronchoscopy: Airway stenosis recanalization and quality of life. *Exp Ther Med* 2020; **20**: 2099-2105 [PMID: 32782522 DOI: 10.3892/etm.2020.8900]

3 **Gaissert HA**, Mark EJ. Tracheobronchial gland tumors. *Cancer Control* 2006; **13**: 286-294 [PMID: 17075566 DOI: 10.1177/107327480601300406]

4 **Righini CA**, Lequeux T, Laverierre MH, Reyt E. Primary tracheal schwannoma: one case report and a literature review. *Eur Arch Otorhinolaryngol* 2005; **262**: 157-160 [PMID: 15060831 DOI: 10.1007/s00405-004-0778-0]

5 **Hamdan AL**, Moukarbel RV, Tawil A, El-Khatib M, Hadi U. Tracheal schwannoma: a misleading entity. *Middle East J Anaesthesiol* 2010; **20**: 611-613 [PMID: 20394267]

6 **Afsin E**, Yaksi O, Önal A, Bacaksiz E. Tracheal schwannoma mimicking asthma. *Int J Neurosci* 2022; 1-5 [PMID: 35924590 DOI: 10.1080/00207454.2022.2110494]

7 **Ge X**, Han F, Guan W, Sun J, Guo X. Optimal treatment for primary benign intratracheal schwannoma: A case report and review of the literature. *Oncol Lett* 2015; **10**: 2273-2276 [PMID: 26622833 DOI: 10.3892/ol.2015.3521]

8 **Xia C**, Liu M, Niu X, Li X, Chen J. Molecular Features of a Primary Transmural Tracheal Schwannoma: Clinical Experience and Review of the Literature. *Cancer Manag Res* 2022; **14**: 1125-1129 [PMID: 35308086 DOI: 10.2147/CMAR.S353146]

9 **Sharma PV**, Jobanputra YB, Perdomo Miquel T, Schroeder JR, Wellikoff A. Primary intratracheal schwannoma resected during bronchoscopy using argon plasma coagulation. *BMJ Case Rep* 2018; **2018** [PMID: 30232068 DOI: 10.1136/bcr-2018-225140]

10 **Gibb AP**, Sivaraman B. A second case of foul smelling urine in a boy caused by Aerococcus urinae. *Pediatr Infect Dis J* 2013; **32**: 1300-1301 [PMID: 24141805 DOI: 10.1097/INF.0b013e3182a64054]

11 **Horovitz AG**, Khalil KG, Verani RR, Guthrie AM, Cowan DF. Primary intratracheal neurilemoma. *J Thorac Cardiovasc Surg* 1983; **85**: 313-317 [PMID: 6823150 DOI: 10.1016/S0022-5223(19)38890-7]

12 **Agnihotri S**, Jalali S, Wilson MR, Danesh A, Li M, Klironomos G, Krieger JR, Mansouri A, Khan O, Mamatjan Y, Landon-Brace N, Tung T, Dowar M, Li T, Bruce JP, Burrell KE, Tonge PD, Alamsahebpour A, Krischek B, Agarwalla PK, Bi WL, Dunn IF, Beroukhim R, Fehlings MG, Bril V, Pagnotta SM, Iavarone A, Pugh TJ, Aldape KD, Zadeh G. The genomic landscape of schwannoma. *Nat Genet* 2016; **48**: 1339-1348 [PMID: 27723760 DOI: 10.1038/ng.3688]

13 **Han DP**, Xiang J, Ye ZQ, He DN, Fei XC, Wang CF, Che JM, Hang JB, Li HC. Primary tracheal schwannoma treated by surgical resection: a case report. *J Thorac Dis* 2017; **9**: E249-E252 [PMID: 28449512 DOI: 10.21037/jtd.2017.02.85]

14 **Parsons RB**, Milestone BN, Adler LP. Radiographic assessment of airway tumors. *Chest Surg Clin N Am* 2003; **13**: 63-77, v [PMID: 12698638 DOI: 10.1016/S1052-3359(02)00039-X]

15 **Jung YY**, Hong ME, Han J, Kim TS, Kim J, Shim YM, Kim H. Bronchial schwannomas: clinicopathologic analysis of 7 cases. *Korean J Pathol* 2013; **47**: 326-331 [PMID: 24009627 DOI: 10.4132/KoreanJPathol.2013.47.4.326]

16 **Hamouri S**, Novotny NM. Primary tracheal schwannoma a review of a rare entity: current understanding of management and followup. *J Cardiothorac Surg* 2017; **12**: 105 [PMID: 29183345 DOI: 10.1186/s13019-017-0677-2]

17 **Gambitta P**, Iannuzzi F, Ballerini A, D'Alessandro A, Vertemati M, Bareggi E, Pallotta S, Fontana P, Aseni P. Endoscopic submucosal dissection versus endoscopic mucosal resection for type 0-II superficial gastric lesions larger than 20 mm. *Ann Gastroenterol* 2018; **31**: 338-343 [PMID: 29720859 DOI: 10.20524/aog.2018.0237]

Published by **Baishideng Publishing Group Inc**
7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-3991568
E-mail: bpgoffice@wjgnet.com
Help Desk: https://www.f6publishing.com/helpdesk
https://www.wjgnet.com