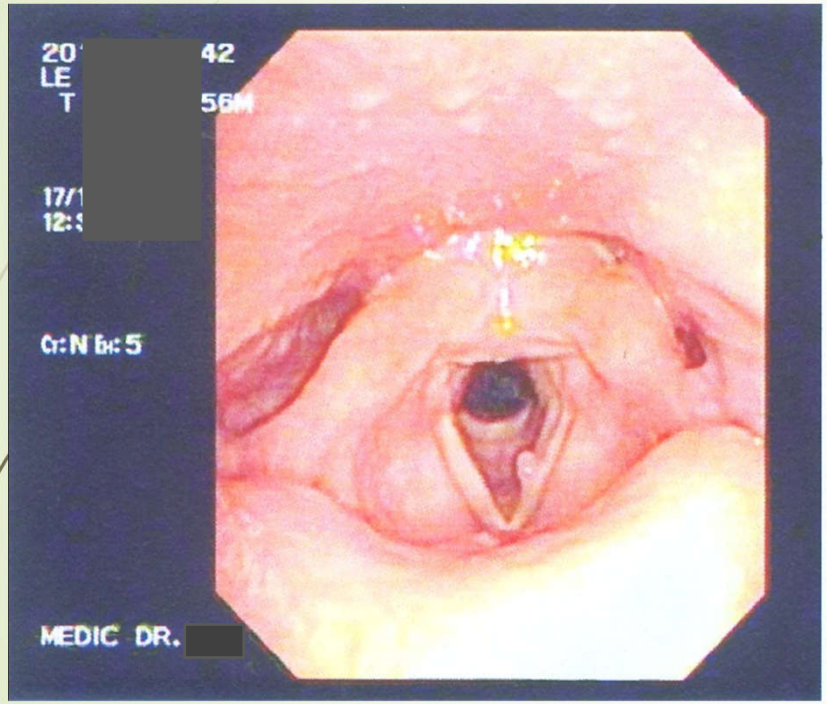
CASE REPORT
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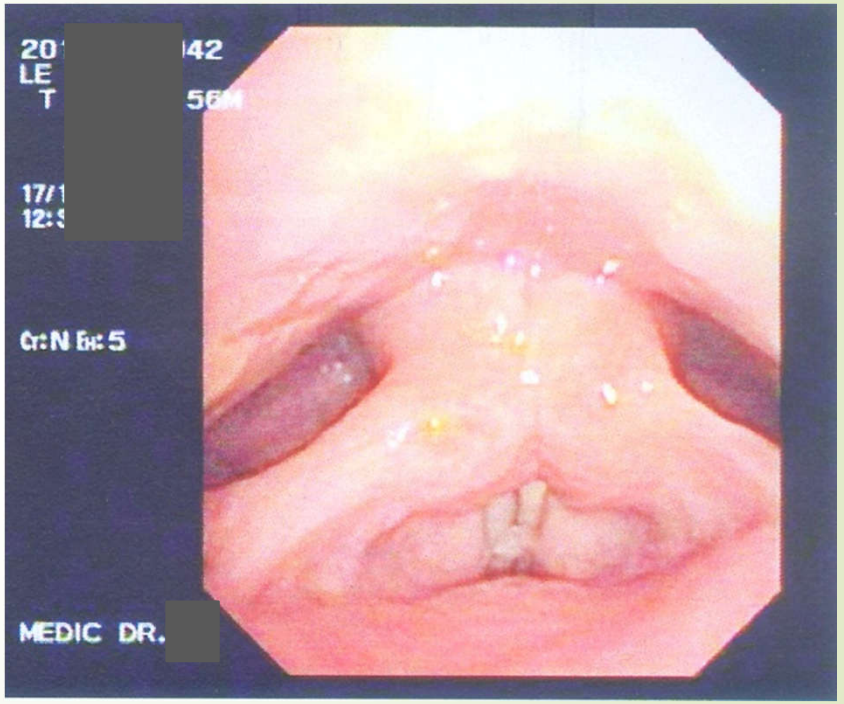
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CASE REPORT 1

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- ĐC:BẾN TRE
- LDĐK:PK TƯ GỞI ĐẾN : KHÀN TIẾNG KÉO DÀI

NỘI SOI VÒM HẦU THANH QUẢN

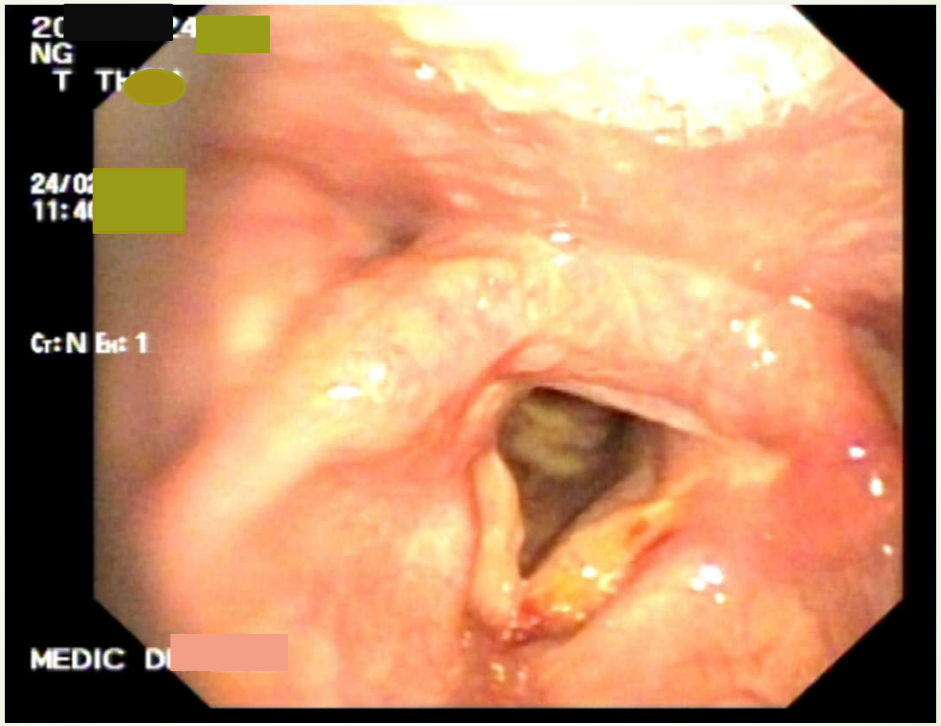




CASE REPORT 2

- BN NỮ,66 TUỔI
- ĐC LÂM ĐỒNG.
- LDĐK: KHÀN TIẾNG,ĐAU HỌNG.

NỘI SOI VÒM HẦU THANH QUẢN



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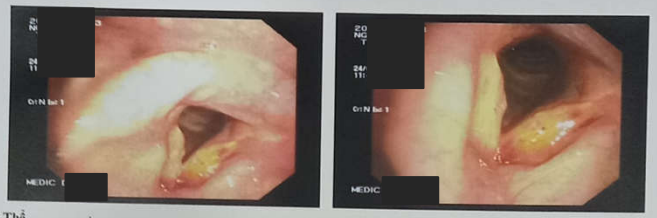
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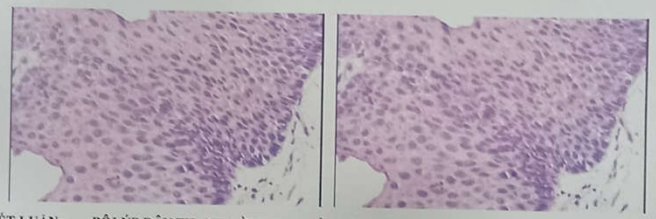
Bệnh nhân (Patient)
Địa chỉ (Address)
Bác sĩ (Physician)
Bệnh viện (Hospital)
Chẩn đoán sơ bộ
Ngày nhận mẫu

GPB ĐẠI THỂ : Mô 0.2 cm

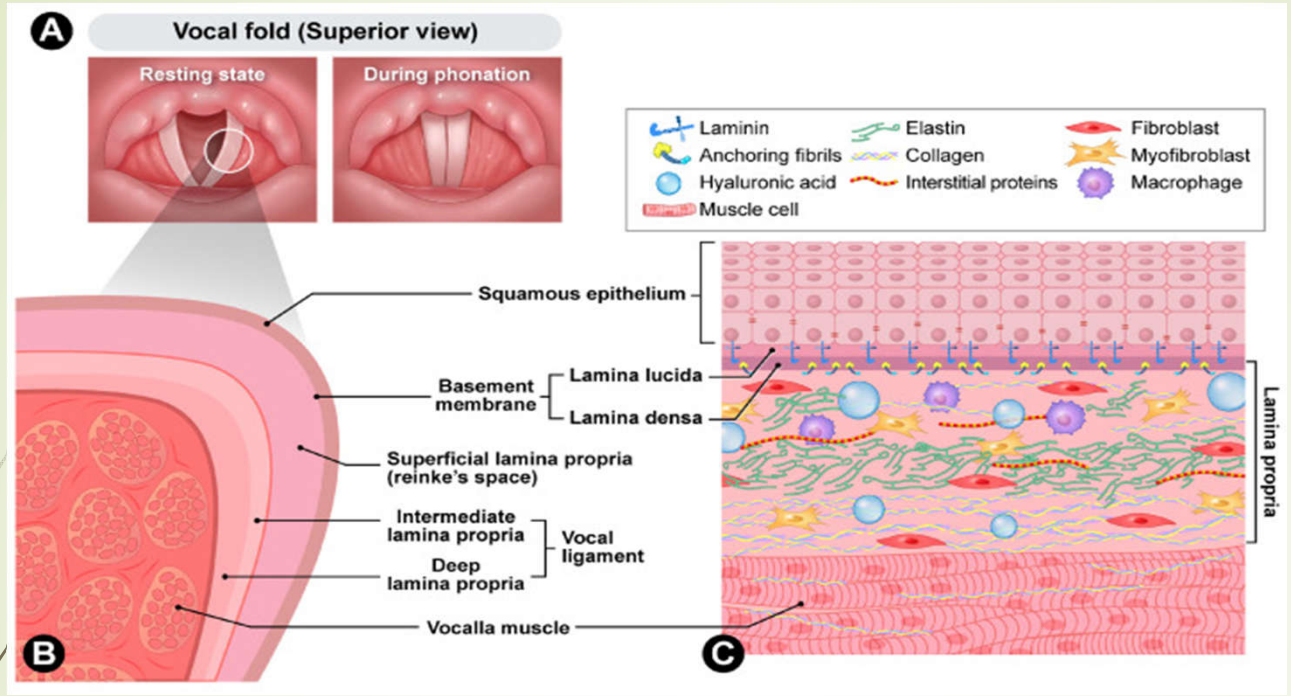


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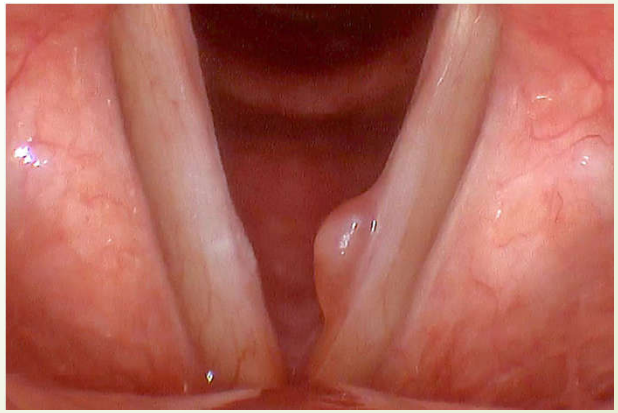
Pôlyp gồm lớp thượng mô phủ lát tầng kèm loạn sản độ thấp. Mô đệm tăng sản sợi,có nhiều nguyên bào sợi, sợi võng, sợi keo.



KẾT LUẬN : PÔLYP DÂY THANH KÈM LOẠN SẢN ĐỘ THẤP. (J38.1)

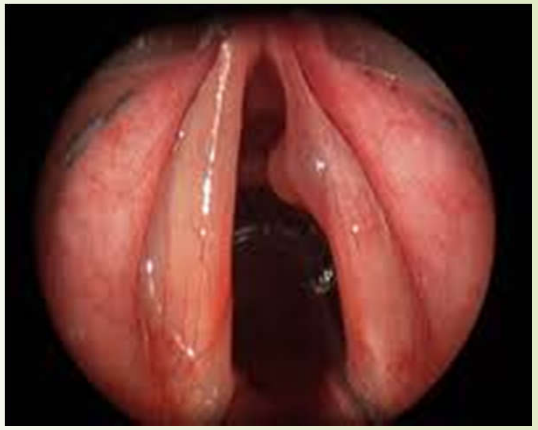

A
Vocal fold (Superior view)
Resting state
During phonation
Laminin
Elastin
Fibroblast
Anchoring fibrils
Collagen
Myofibroblast
Hyaluronic acid
Interstitial proteins
Macrophage
Muscle cell
Squamous epithelium
Basement membrane
Lamina lucida
Lamina densa
Superficial lamina propria (reinke's space)
Intermediate lamina propria
Deep lamina propria
Vocal ligament
Vocalla muscle
Lamina propria
B
C





Causes and risk factors

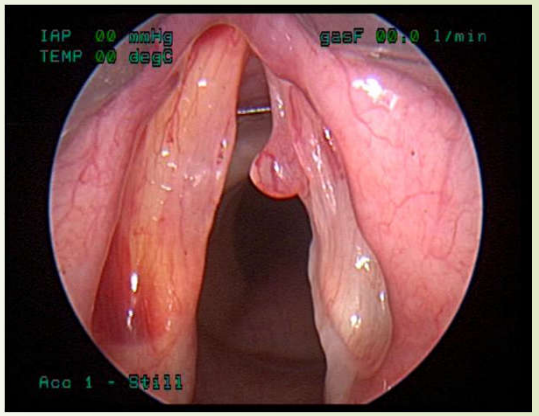
- Polyps may be caused by long-term vocal abuse but may also occur after a single, traumatic event to the vocal cords, such as yelling at a concert.
- Long-term cigarette smoking hypothyroidism, and GERD may also cause polyp formation.
- allergies
- tense muscles
- singing
- talking loudly
- drinking caffeine and alcohol (dries out the throat and vocal cords)

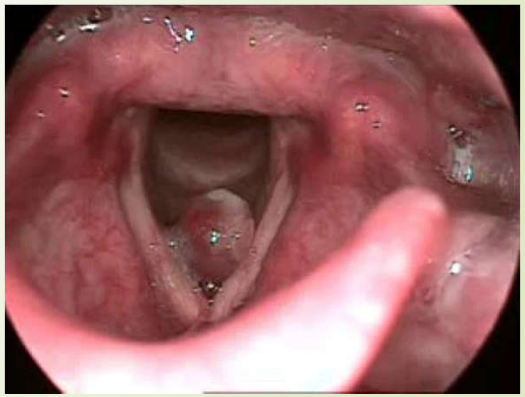




SYMPTOMS

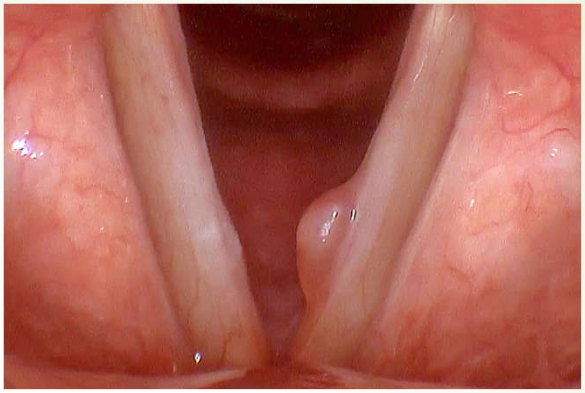
- hoarseness
- breathiness
- a "rough" voice
- a "scratchy" voice
- harshness
- shooting pain from ear to ear
- a "lump in the throat" sensation
- neck pain
- decreased pitch range
- voice and body fatigue

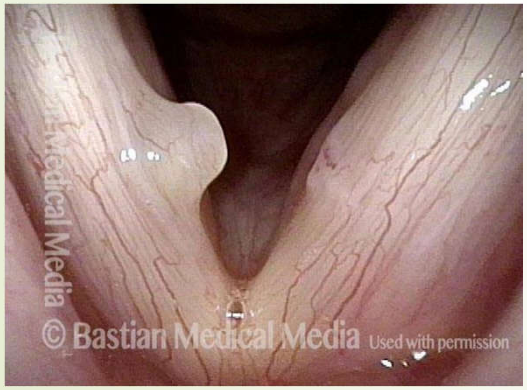


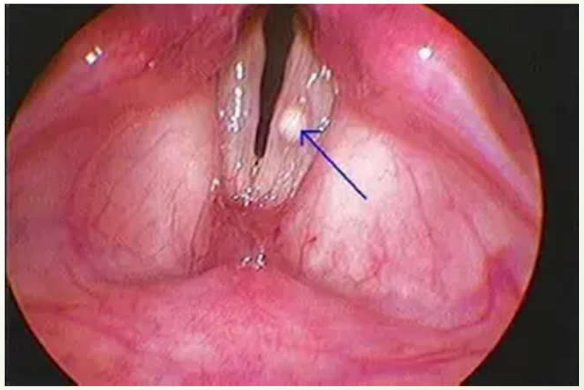


DIAGNOSIS





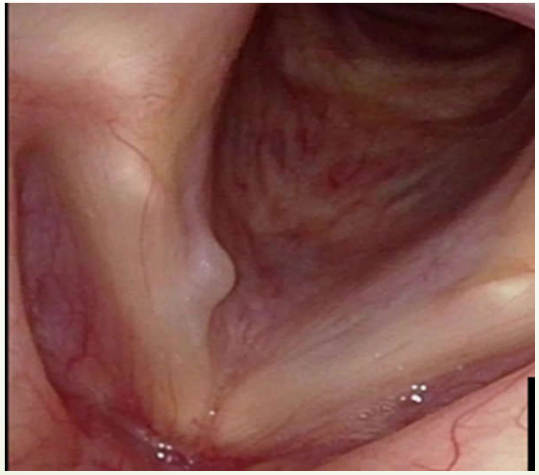






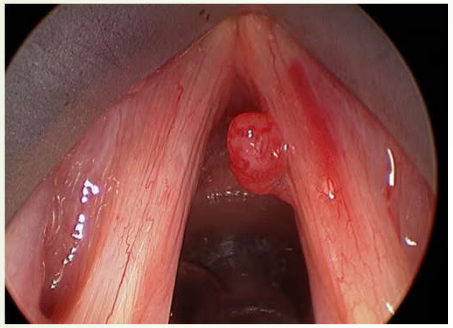
TREATMENTS

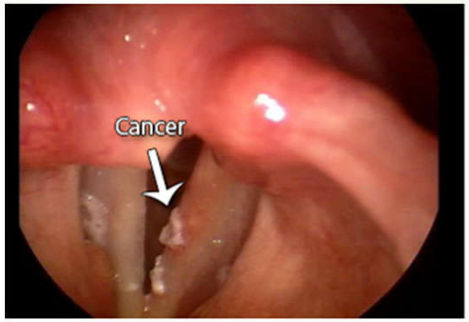
- Surgical intervention involves removing the polyp from the vocal cord. This approach only occurs when the polyps are very large or have existed for a long time.
- Other treatment :medical treatment, the use of endoscopic laser, steroid injection, flexible laryngostroboscopic surgery.
- Voice therapy



BÀN LUẬN

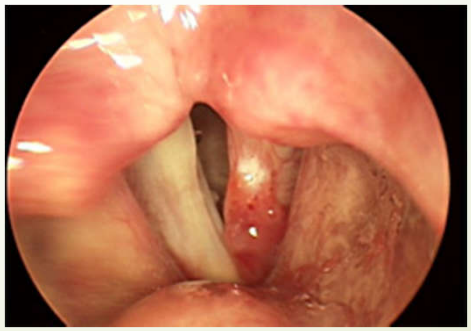
- Đa số trường hợp ,khi nội soi thanh quản, tổn thương có đặc điểm hình ảnh phân biệt rõ polyp hay K ở dây thanh(sần sùi).





- Một số trường hợp ,tổn thương khó phân biệt rõ lành tính (polyp dạng bẹt chân bám rộng) hay K giai đoạn sớm (tổn thương tiền ung thư,loạn sản)





Case Report

Spindle Cell Carcinoma of the Larynx: A Confusing Diagnosis for the Pathologist and Clinician

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Laryngeal spindle cell carcinoma (SpCC) is an uncommon subtype of squamous cell carcinoma which represents 0.5% of all laryngeal squamous cell carcinomas. It is a biphasic tumor consisting of the combination of a malignant mesenchymal spindle cell component and a squamous cell component that includes dysplasia, carcinoma in situ, or invasive carcinoma. Although it has aggressive biological features, the probability of making a diagnosis in the early stages is high as it often leads to obstructive symptoms in the early period. Due to its low incidence, there is no clear consensus on prognostic factors and optimal treatment strategies yet. In this paper, a 60-year-old laryngeal SpCC case that was effectively treated with wide local excision followed by adjuvant radiotherapy was presented with the literature.

1. Introduction

Spindle cell carcinoma (SpCC) is an uncommon subtype of squamous cell carcinoma. Morphologically, it is a biphasic tumor consisting of a squamous cell carcinoma in situ and/or invasively and a malignant spindle cell component with a mesenchymal phenotype [1]. Due to the heterogeneous and complex nature of the tumor, it was reported under various terms such as carcinosarcoma, sarcomatoid carcinoma, collision tumor, pleomorphic carcinoma, and pseudosarcoma. The improvements in our understanding of monoclonal epithelial origin of these tumors finally led to the proposal of using the term "spindle cell carcinoma" [2].

SpCC is observed mainly in the larynx, especially in the glottic region. Its incidence is 0.023 per 100,000, and it represents 0.5% of all laryngeal squamous cell carcinomas [3]. The tumor occurs usually as a smooth-surfaced polypoid mass that arises from the true vocal cord and anterior commissure [4]. Although it has an aggressive biological character, the probability of making a diagnosis in the early stages is high as it often leads to obstructive symptoms such as hoarseness, snoring, and coughing in the early period [5]. Due to its low incidence, there is no clear consensus on prognostic factors and optimal treatment strategies yet.

In this paper, a laryngeal SpCC case that was effectively treated with wide local excision followed by adjuvant radiotherapy was presented with the literature.

2. Case Presentation

The present study was conducted in accordance with the Declaration of Helsinki and was approved by the Ethics Committee of the Akdeniz University School of Medicine (Antalya, Turkey). Written informed consent was obtained from the patient.

A 60-year-old male patient was referred to the Akdeniz University School of Medicine with the complaint of chronic hoarseness that has existed for five years and noticeably increased in the last year. He had a history of 40 pack-years of cigarette smoking. Multiple medications prescribed by several different specialists due to diagnosis of vocal cord nodule failed to improve the symptoms. Although the head and neck examination was unremarkable, endoscopic examination revealed a submucosal nodular lesion with a



Figure 1: Endoscopic view of the submucosal nodular lesion with a smooth surface that is located in the middle of the right vocal cord.

smooth surface that was located in the middle of the right vocal cord (Figure 1).

The laryngeal nodule was totally excised for pathological examination under direct laryngoscopy. Microscopic examination of the tumor revealed atypical spindle cells that were dispersed in a desmoplastic stroma under an ulcerated surface epithelium with fibrinoid necrosis and invasive tumor foci of squamous cell carcinoma (Figure 2). Epithelial component of the tumor exhibited strong immunoreactivity for cytokeratin and p63. Surgical margins were negative for tumor infiltration, but focally close, with tumor less than 2 mm from the posterior margin.

Adjuvant radiotherapy was administered due to close surgical margins while metastatic work-up with positron emission tomography combined with computed tomography was negative for systemic dissemination. The patient is now in the 12th month of his follow-up after a complete clinical response to primary therapy.

3. Discussion

SpCC is an aggressive malignant tumor typically observed in upper aerodigestive tract, in which nearly half of the cases are of larynx origin [6]. It was first reported in the literature in 1933 by Figi, under the name of "larynx sarcoma" [7]. According to recent population-based analysis data, a total of 312 cases of laryngeal SpCC were diagnosed in the United States of America between 1973 and 2011 [3].

Macroscopically, the tumor mostly has a polypoid appearance but may rarely occur as an infiltrative ulcerative lesion [1]. It is diagnosed by histologically showing the combination of a malignant mesenchymal spindle cell component that can contain homologous or heterologous elements and a surface squamous cell component that includes dysplasia, carcinoma in situ, or invasive carcinoma [1]. Epithelial and mesenchymal components can be present either separately or in a nested form while the spindle cell component usually constitutes the larger part of the tumor [8].

The heterogeneous morphological structure of SpCC poses significant diagnostic difficulties. The pathological differential diagnosis includes squamous cell carcinoma, leiomyosarcoma, fibrosarcoma, rhabdomyosarcoma, malignant melanoma, and inflammatory myofibroblastic tumor [9]. The biopsy samples that are taken superficially or in small pieces can lead to missing one of the components of the biphasic tumor and therefore misdiagnosis of SpCC as squamous cell carcinoma or sarcoma. In some cases, the differential diagnosis may not be possible even with the totally resected specimens without immunohistochemistry.

The cytokeratin, which has been reported to be expressed in 40–85% of the cases, is the most sensitive immunohistochemical marker that shows the epithelial component of the SpCC [5]. Epithelial membrane antigen (EMA) and carcinoembryonic antigen are other epithelial markers that exhibit variable immunoreactivity in these tumors [9]. Mesenchymal component of the SpCC frequently exhibits positive immunostaining with vimentin, which is also an epithelial marker [1]. Such a staining pattern supports the idea that these tumors are of epithelial origin and the sarcomatous spindle cells occur as a result of mesenchymal metaplasia [2]. Immunostaining with vimentin may also be positive for leiomyosarcomas. However, leiomyosarcoma cells show negative immunoreactivity for cytokeratins and positive immunoreactivity for muscle-specific actin [9].

Immunohistochemical studies usually allow reliable discrimination of SpCCs and sarcomas. On the other hand, it may lead to ambiguous results in some cases where the tumor lacks specific immunoreactivity. In such cases, the p63, which is a transcription factor of epidermal stem cell origin, can be beneficial in the discrimination of SpCCs from sarcomas. In a study assessing the diagnostic utility of several immunohistochemical markers of epithelial differentiation including p63, MOC-31, and thyroid transcription factor-1 on SpCCs, Lewis Jr. et al. [10] reported that staining for p63 had the greatest diagnostic utility. While immunostaining with p63 was positive in 63% of SpCCs, it was negative in the control group of 73 various primary and metastatic sarcomas, melanomas, and benign spindle cell lesions. The p63 stains were positive in many cases where immunohistochemistry was negative for both pan-cytokeratin and EMA.

Electron microscopy is another diagnostic tool used in the differential diagnosis of SpCCs with sarcomas [11, 12]. Although its use has declined significantly with the use of immunohistochemical stains, it may still have a role in tumors with inconclusive staining pattern. While the SpCCs have the combined epithelial and myofibroblastic features of desmosomes, tonofibrils, and filaments with dense bodies, fibrosarcomas consist largely of fibroblastic cells and leiomyosarcomas are packed in forming small cell groups with constant junctional complexes of nexus and zonula adherens types [12].

Ruling out a laryngeal mesenchymal malignancy is of critical importance in the differential diagnosis of SpCCs, since these tumors have a different histogenesis, natural history, biological behavior, and prognosis. Dubal et al. [3] reported that the majority of laryngeal SpCC cases have T1 (62%) and stage I (61%) tumors at presentation. Lymph node metastasis may occur (12.6%) but distant metastasis is uncommon (3.7%). The surgery yields a favorable prognosis when compared to radiotherapy. The 5-year disease-specific survival (DSS) is 84.0% with surgery alone, 84.2% with surgery combined with radiotherapy, and 60.5% with



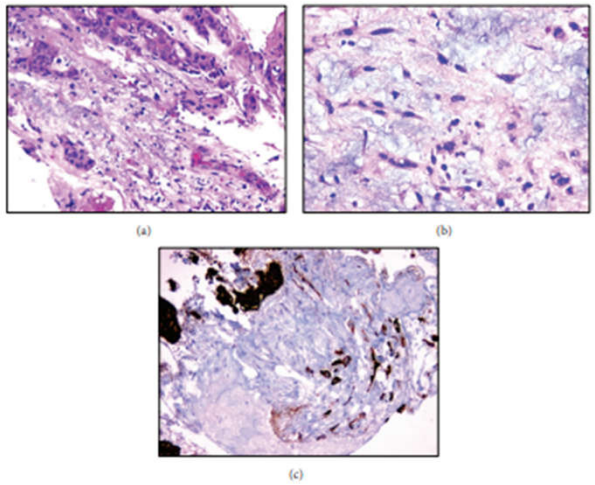


Figure 2: Microscopic appearance of atypical spindle cells and squamous cell carcinoma areas. (a) Hematoxylin and eosin (H&E), (magnification, ×20), (b) H&E (magnification, ×40), and (c) cytokeratin (magnification, ×20).

radiotherapy alone ($P < 0.012$). In addition, a glottic location of the tumor, as opposed to a nonglottic location, is significantly associated with improved prognosis (5-year DSS, 84.0% versus 51.9%, $P < 0.0001$). Compared to other laryngeal malignancies, SpCCs have intermediate (5-year) survival benefit (74.1% versus 64.6%, $P < 0.020$), but short-term (1-year, 90.9% versus 88%) and long-term (10-year, 57.9% versus 50.6%) survival rates are similar. Likewise, Thompson et al. [5] reported that a wide local excision should be the treatment of choice in most SpCC patients as these tumors are mostly of polypoid or pedicular nature and do not invade the stroma especially in the early period. The authors also suggested that radiotherapy might be used in the existence of recurrence or stromal invasion. On the other hand, in a retrospective study assessing the outcomes of early-stage (T1-T2) glottic SpCC cases ($n = 28$) treated with primary radiotherapy, Ballo et al. [13] reported that these patients had similar local-control rates to irradiated patients with similar volume disease with the more typical squamous cell carcinoma. Therefore, the authors suggested that the histologic diagnosis of SpCC instead of squamous cell carcinoma should not alter treatment recommendations in patients with early-stage disease.

In conclusion, laryngeal SpCC is an unusual occurrence that can be mostly diagnosed in the early stages despite its aggressive histological features. A wide local excision alone is mostly sufficient for definitive treatment in the early-stage disease. Adjuvant radiotherapy may be beneficial in local control of the disease in patients with close surgical margins.

Conflict of Interests

The authors declare that there is no conflict of interests regarding the publication of this paper.

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Inflammatory myofibroblastic tumor of the larynx: a case report

Marlene Reithofer[1], Lejla Pesto[1], Tobias Hütten[1], Anja Jurejevcic[1], Martina Rößmann-Tsybrovskyy[2], Hannaleena Tervonen[1] and Dietmar Thurnher[1]*

[1]Department of Otorhinolaryngology, Medical University of Graz, Graz, Austria, [2]Diagnostic and Research Institute of Pathology, Medical University of Graz, Graz, Austria

Background: Inflammatory myofibroblastic tumor (IMT) is a rare mesenchymal neoplasm characterized by myofibroblastic spindle cells and inflammatory infiltrates.
Case summary: We report the case of a 49-year-old female presenting with progressive hoarseness and a right vocal fold mass. Microlaryngoscopy with partial resection was performed without preoperative imaging. Histopathological, immunohistochemical, and molecular analyses were conducted. Histopathological and molecular analyses showed a myofibroblastic spindle cell proliferation with a TIMP3::ALK gene fusion, confirming the diagnosis of IMT. Postoperative recovery was uneventful, and follow-up examinations demonstrated complete remission.
Conclusion: Laryngeal inflammatory myofibroblastic tumor (IMT) is a very rare condition, particularly in adults. Complete surgical excision can lead to full remission, but regular follow-up is important due to the risk of recurrence. Immunohistochemical and molecular analyses, especially ALK testing, are essential for accurate diagnosis and evaluation regarding targeted therapy. Further studies are needed to establish clear recommendations for follow-up and treatment.

KEYWORDS
ALK fusion, case report, inflammatory myofibroblastic tumor, laryngeal tumor, microlaryngoscopy

Introduction

An Inflammatory Myofibroblastic Tumor (IMT) is an extremely rare neoplasm characterized by a proliferation of myofibroblastic and fibroblastic spindle cells, typically along with a prominent inflammatory infiltrate composed of plasma cells, lymphocytes, and eosinophils (1).

It usually occurs in the lung, abdomen, pelvis, or retroperitoneum and in children or young adults. There are only a few cases reported where this tumor affected the larynx (2).

Head and neck IMTs have mostly been reported in adults, without a clear sex predilection.

This tumor is described as a borderline tumor which means it shows a high tendency for local recurrence following excision, while their metastatic potential remains low (3).

Molecularly, clonal cytogenetic rearrangements of the ALK gene at chromosome band 2p23 can be detected in approximately 50–60% of IMTs, particularly in children and young adults (3). These rearrangements result in fusion of the 3′ kinase domain of ALK with a variety of partner genes, such as TPM3, TPM4, CLTC, CARS, SEC31L1, PPFIBP1, ATIC, EML4, PRKAR1A, FN1, DCTN1, LMNA, TFG, and HNRNPA1. More fusion partners are continuously being discovered (4).

Complete surgical excision is the treatment of choice for IMT, while targeted therapies such as ALK or ROS1 inhibitors are effective options in advanced or unresectable cases (4).

Case description

A 49-year-old female was referred to the Department of Phoniatrics at the Medical University of Graz by a private otolaryngologist with a suspected vocal fold mass. She reported progressive hoarseness up to aphonia for two months, accompanied by sore throat. Initially, she also experienced dyspnea. At the time of evaluation, however, no clinically relevant respiratory distress was present, and endoscopic examination showed no evidence of significant airway compromise. Therefore, no additional objective assessment of airway obstruction was performed.

The patient worked as an interpreter and was therefore exposed to significant occupational voice strain. Due to the hoarseness and aphonia she was unable to continue her professional activity. Before presentation to our department, she had received antibiotic therapy and inhalations without clinical improvement.

Her medical history was unremarkable, with no comorbidities. She has a 30 packyear smoking history. Alcohol consumption history was not obtained.

On physical examination, flexible laryngoscopy revealed a prominent, partially livid-colored tumor on the right vocal fold, causing incomplete glottic closure during phonation. Respiratory mobility of the vocal folds appeared normal (Figure 1). Based on the clinical presentation and endoscopic findings, the differential diagnosis included common benign vocal fold lesions such as a polyp, cyst, granuloma, or papilloma. Less common mesenchymal lesions and malignant neoplasms were also considered.

After initial presentation of the patient, a day-case microlaryngoscopy (MLX) under general anesthesia was scheduled. No preoperative imaging, such as MRI, was performed, as endoscopic examination showed a lesion limited to the vocal fold and there were no clinical signs of more extensive local involvement.



FIGURE 1
Clinical picture: tumor of the right vocal fold compatible with an IMT.

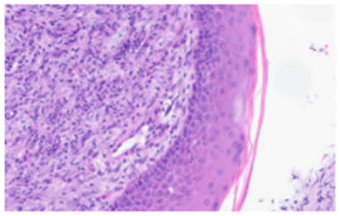


FIGURE 2
Histological picture (HE 20x): between the tumor cells there are scattered inflammatory cells.

The surgery was performed 19 days later without any complications. During the microlaryngoscopy the IMT was resected using a rasp.

Due to severe postoperative pain, the patient was admitted to our ward for observation and initiation of antibiotic treatment Flexible endoscopic examination at that time revealed unremarkable postoperative wound conditions. She was discharged in good condition two days later. Home care instructions included a further treatment of antibiotics (amoxicillin/clavulanic acid) for one more week, anti-inflammatory pain medication for three days and antiseptic/anesthetic mouthwash. She was advised to rest her voice for several days. A follow-up appointment was arranged for two weeks postoperatively for clinical and histological evaluation.

The histological examination showed squamous mucosa with a spindle-cell, myofibroblastic proliferation with myxoid stroma and associated chronic inflammatory infiltrate (Figure 2).

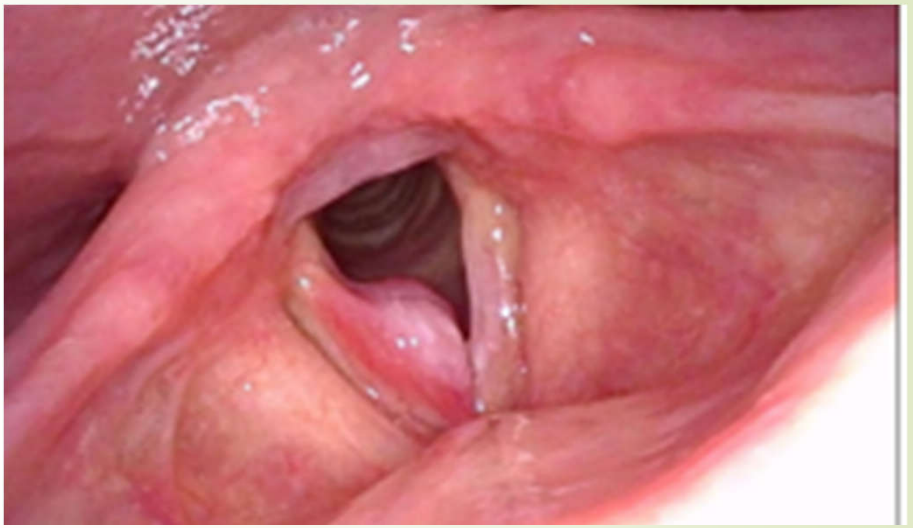
At the molecular level a "TIMP3::ALK" was identified (Figure 3). Integration of the histomorphological, immunohistochemical, and molecular findings was diagnostic of an IMT.

Timeline

A timeline summarizing the clinical course is provided in Figure 4.



FIGURE 3
Tumor cells are typically positive for ALK by immunohistochemistry.



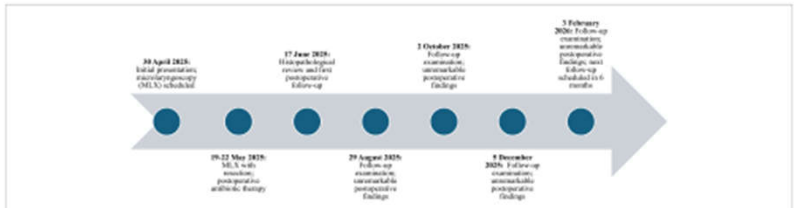


FIGURE 4
Timeline of clinical course: chronological overview of initial presentation, surgical intervention, histopathological diagnosis and follow-up examinations.

Diagnostic assessment

Histopathological examination demonstrated a spindle-cell proliferation within a myxoid stroma and inflammatory infiltrates. Immunohistochemical analysis showed ALK positivity. Molecular testing identified a TIMP3::ALK fusion, confirming the diagnosis of an IMT.

Therapeutic intervention

Complete microlaryngoscopic resection was performed under general anesthesia. No additional treatment was required.

Follow-up and outcomes

Flexible endoscopy continued to show an unremarkable postoperative appearance over a 9-month-follow-up period. At follow-up, the patient reported marked improvement in voice quality and was satisfied with the postoperative outcome. She was able to resume her professional activities as an interpreter without limitations. Continued surveillance was planned, with the next follow-up examination scheduled six months after the most recent visit.

Patient perspective

According to follow-up documentation, the patient reported marked improvement in voice quality and was satisfied with the treatment outcome.

Discussion

Inflammatory myofibroblastic tumor (IMT) is a rare neoplasm that has been described in various anatomical sites, most commonly in the lung and abdomen. Involvement of the larynx, however, is extremely uncommon, with only a few cases reported to date (5).

To place our case into a current clinical context, we performed a focused PubMed search limited to adult laryngeal IMT cases published within the past ten years (2015-2025). Only a very small number of reports met these criteria, showing the rarity of this entity in adulthood. Clinical characteristics were extracted and summarized in Table 1.

In the series by Coffin et al., only three of 84 extrapulmonary IMTs involved the larynx, and all occurred in children (6). IMTs can occur in any part of the larynx, but most frequently involve the true vocal folds, followed by the subglottic region (7).

TABLE 1 Reported cases of adult laryngeal inflammatory myofibroblastic tumors published within the last 10 years.

First author (ref.)	Year	Age (years)	Sex	Tumor location	Treatment
Izadi et al. (14)	2016	46	F	Right aryepiglottic fold and vallecula, Epiglottis	Laser resection
Zheng et al. (15)	2016	81	M	Right vocal fold	Surgical resection
Raggio et al (16)	2018	66	F	Epiglottis	Laser resection
Yorita et al (17)	2019	35	M	Left vocal fold	Surgical resection
Miralles et al (18)	2021	73	M	Left vocal fold	Laser resection
Sivesind et al (19)	2023	22	F	Right vocal fold	Surgical resection + steroid therapy
Ajmal et al (20)	2024	24	M	Right vocal fold	Surgical resection
Chen et al (21)	2025	39	M	Subglottis	Surgical resection + steroid therapy

Ref.: Reference; F: Female; M: Male.

The etiology of laryngeal IMT remains uncertain. Possible contributing factors include prior trauma, infections, neoplastic processes, and immune reactions. Smoking may play a role, as approximately one quarter of reported laryngeal IMT patients were smokers. However, a causal association has not been established. Although Epstein–Barr Virus (EBV) has been linked to IMTs in other anatomical sites, no such association has been demonstrated in laryngeal cases (8).

Histologically, IMT must be differentiated from various morphologic mimics, such as Inflammatory Pseudotumor (IPT), IgG4-related sclerosing disease (IGSD), pseudosarcomatous myofibroblastic proliferation (PMP), inflammatory fibroid polyp (IFP), nodular fasciitis (NF) and many more (4).

Cook et al. demonstrated that approximately 60% of IMTs show ALK positivity on immunohistochemistry, whereas other morphologic mimics such as nodular fasciitis, desmoid fibromatosis, or gastrointestinal stromal tumors remain ALK negative (9). Immunohistochemical analysis demonstrated strong positivity for ALK and focal positivity for SMA. Staining for desmin, SOX10, S100, AE1/AE3, and CD34 was negative. These findings supported the diagnosis of IMT and helped exclude other spindle cell lesions in the differential diagnosis.

The identification of a TIMP3::ALK fusion is a noteworthy finding, as TIMP3 represents an uncommon ALK fusion partner in IMT. This further shows the molecular heterogeneity of ALK-rearranged tumors and highlights the importance of molecular testing in establishing the diagnosis. ALK positivity is particularly relevant from a therapeutic perspective as it identifies patients who may benefit from targeted therapy. The study by Butrynski et al. showed that around half of IMTs contained ALK fusion genes, making them responsive to targeted therapy with ALK inhibitors such as crizotinib. Although resistance to crizotinib can develop after several months, newer-generation ALK inhibitors and combination regimes are being explored to improve long-term outcomes (10). Given the diagnostic and potential therapeutic relevance of ALK rearrangements, molecular testing should be strongly considered in all histologically suspected IMTs.

The diagnosis of rare head and neck neoplasms can be challenging and may require expert pathological evaluation as well as additional diagnostic tests. Filippini et al. showed that the diagnosis of rare head and neck tumors may change after expert pathological review, emphasizing the importance of detailed histopathological and molecular analyses in rare tumors such as laryngeal IMT (11).

Another challenge in managing IMTs is the potential for local recurrence, even after complete surgical resection. The recurrence rate of laryngeal IMTs ranges from 8% to 18%, typically occurring between 2 and 12 months after initial treatment. Contributing factors for recurrence may include incomplete surgical excision (7). Therefore, regular postoperative follow-up is recommended. However, due to the rarity of laryngeal IMT, surveillance strategies are largely based on case reports and small case series, and clear follow-up recommendations have not yet been established. Similar challenges have been described for other rare laryngeal neoplasms. In a recent systematic review of laryngeal mucoepidermoid carcinoma, Chiari et al. highlighted the importance of long-term surveillance because of the risk of local, regional, and distant recurrence (12).

In the study by Gao et al. the author evaluated the characteristic imaging features of IMTs in this region. It showed that although CT and MRI help assess the extent and anatomical relationships of the lesion, the imaging findings are generally nonspecific and cannot reliably distinguish IMT from malignant tumors (13). In this case, no preoperative imaging was performed.

Our case illustrates the diagnostic and therapeutic challenges and highlights the importance of considering IMT in the differential diagnosis of vocal fold masses. Increasing awareness of this tumor is essential for distinguishing it from other aggressive lesions. An accurate diagnosis of IMT is important to ensure appropriate patient management and follow-up, while at the same time avoiding unnecessary interventions and potential harm.

In the present case, complete surgical resection achieved full remission, which has been maintained up to the most recent follow-up. Nevertheless, targeted therapies are likely to gain importance in the future, and further studies are required to define the optimal management of this rare neoplasm. Most laryngeal IMTs reported in the literature occur in children, making this case in an adult patient particularly unusual and noteworthy.

Conclusion

Laryngeal inflammatory myofibroblastic tumor (IMT) is an exceptionally rare entity, particularly in adult patients. This case highlights the importance of considering IMT in the differential diagnosis of atypical vocal fold masses presenting with persistent hoarseness and demonstrates that complete surgical excision can lead to full remission. Immunohistochemical and molecular analyses, especially ALK testing, play a crucial role in confirming the diagnosis and may open the door to targeted treatment in recurrent, unresectable, or metastatic ALK-positive IMTs. Given the risk of local recurrence, regular postoperative follow-up should be considered even after complete resection.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material. Further inquiries can be directed to the corresponding author.

Ethics statement

Ethical approval was not required for the study involving humans in accordance with the local legislation and institutional requirements. Written informed consent to participate in this study was not required from the participants or the participants' legal

BÀI HỌC

- Thông thường, K thanh quản giai đoạn sớm xuất hiện với bề mặt không đều, có thể có mảng sừng trắng (bạch sản) hoặc loét. Tuy nhiên, một số trường hợp u phát triển ngay bên dưới lớp niêm mạc hoặc có dạng polyp nhẵn bóng, làm giảm mức độ nghi ngờ khi nội soi thông thường,dễ chẩn đoán muộn.
- Dưới kính nội soi thông thường (White Light Endoscopy - WLE), một số tổn thương ác tính giai đoạn sớm (như ung thư biểu tế bào gai - Squamous Cell Carcinoma) có thể có hình thái một polyp dây thanh bọng nước hoặc xuất huyết, gây khó chẩn đoán phân biệt.
- Để tránh bỏ sót cần phối hợp:

1. Nội soi dải tần ánh sáng hẹp (NBI): Giúp đánh giá cấu trúc mạch máu tăng sinh dưới lớp niêm mạc , nhận diện sớm dấu hiệu ác tính.

2. Sinh thiết sâu hoặc sinh thiết tức thì (Frozen Section).

3.CT/MRI: Đánh giá xâm nhập lớp sâu hoặc sụn thanh quản.

BÀI HỌC : Một số đặc điểm giúp phân biệt giữa polyp dây thanh lành tính và các tổn thương ác tính .

Đặc điểm	Polyp dây thanh lành tính	Tổn thương ác tính (Ung thư giai đoạn sớm)
Vị trí tổn thương	Thường ở 1/3 giữa hay 1/3 trước dây thanh.	Có thể xuất hiện ở bất kỳ vị trí nào,thường có xu hướng lan rộng về phía mỏm phễu hoặc mép trước.
Bề mặt và ranh giới	Bề mặt nhẵn bóng,đều đặn,dạng keo hoặc xuất huyết. Ranh giới với niêm mạc lành tính rất rõ.	Bề mặt có thể gồ ghề nhẹ,không đều,có thể có các mảng sừng hóa bạch sản. Ranh giới mờ nhạt,có thâm nhiễm chân tổn thương.
Mạch máu bề mặt	Có thể thấy 1 mạch máu nuôi chạy dọc trên bề mặt polyp .Hệ mạch máu giữ nguyên cấu trúc, phân nhánh tự nhiên,mềm mại.	Mạch máu tăng sinh không trật tự,có các đốm nâu hoặc mạch máu vặn xoắn.
Sự đối xứng	Thường đi kèm 1 tổn thương phản ứng (dầy niêm mạc) ở dây thanh đối diện do va đập.	Tổn thương đơn độc,không có tính chất tổn thương đối xứng do cơ học.

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CÁM ƠN QUÝ THẦY CÔ VÀ QUÝ ĐỒNG NGHIỆP ĐÃ THEO DÕI