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Case Report

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Obstructive laryngeal polyps presenting with dyspnea: report of five rare cases*

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Abstract

Generally vocal fold polyps are small lesions causing dysphonia. In rare occurrences they may be huge in size and may present with dyspnea, choking spells, wheezing and stridor. We present five cases with giant vocal fold polyps with hoarseness and severe respiratory problems. In this report, clinical presentation and management of large vocal fold polyps are discussed.

Keywords: Vocal fold, polyp, airway obstruction.

Özet: **Dispne ile seyreden obstrüktif laringeal polip: Ender görülen beş olgu sunumu**

Genel olarak ses teli polipleri disfoniye neden olan küçük lezyonlardır. Ender durumlarda aşırı büyüklüğe ulaşabilirler ve nefes darlığı, tıkanma, hırıltı ve stridora neden olabilirler. Çalışmamızda ses kısılması ve ciddi solunum problemleri olan beş adet aşırı büyüklükte ses teli polipi vakasını sunuyoruz. Bu raporda büyük ses teli poliplerinin tedavisi ve klinik değerlendirilmesi tartışılmıştır.

Anahtar sözcükler: Vokal kord, polip, havayolu tıkanıklığı.

Vocal fold polyps usually arise as a result of acute submucosal bleeding, followed by the formation of a locally organized hematoma.[1] Their morphology may range from a simple edematous mass arising from the true vocal fold to a mass with a gelatinous, hemorrhagic or hyalinized appearance.[2] Most of them are small lesions with hoarseness as the presenting symptom. Giant polyps in rare occurrence may present with stridor and dyspnea.[3]

Case Report

We report five rare cases of giant polyps presenting with dyspnea (Fig. 1).

Case 1

A 56-year-old woman presented to our emergency clinic with stridor and severe dyspnea. She had a 4-year history of hoarseness and was treated previously for her asthma symptoms. She smoked 40 cigarettes daily for 40 years. Endoscopic examination indicated a huge pedunculated mass occupying almost the whole glottic space. The patient was taken to the operating room. Microlaryngoscopic excision of the mass under general anesthesia was performed without complication. The histopathological diagnosis confirmed a diagnosis of vocal fold polyp.

Case 2

A 27-year-old man with progressive hoarseness and dyspnea presented to our clinic. He smoked 10 cigarettes daily for 7 years. Endoscopy revealed a huge pedunculated mass originating from right vocal fold. Suspension microlaryngoscopy was performed under general anesthesia. The polyp was totally excised with no complication. Histopathology report indicated a benign laryngeal polyp.

Case 3

A 51-year-old woman admitted to our clinic with dysphonia and dyspnea with exercise. She had a smoking history of 20

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cigarettes daily for 20 years. Endoscopy showed a bilobed polypoid mass originating from the right vocal cord occupying almost the entire glottic space. Microsurgical resection relieved her from respiratory and voice symptoms. Histopathological examination demonstrated a benign pathology.

Case 4

A 49-year-old man referred to our clinic with dysphonia, globus sensation and exercise-induced dyspnea for a few months. He had a moderate smoking history. Examination revealed a large polypoid mass originating from anterior commissure. He was operated using suspension microlaryngoscopy. Total excision of the mass was performed under general anesthesia. Histopathological findings indicated a diagnosis of laryngeal polyp.

Case 5

A 38-year-old man presented to our clinic with dysphonia and dyspnea. Laryngoscopic examination showed a large polyp originating from anterior part of the left vocal fold. Total excision was performed under general anesthesia. Histopathology indicated a benign laryngeal polyp.

Discussion

Vocal fold polyps generally present with dysphonia[4] but previously published data reported that huge ones may cause dyspnea, choking spells, wheezing and stridor.[3,5] They were sometimes misdiagnosed as asthma and treated with steroids in emergency clinics.[5,6] Large sized polyps can also result in a globus sensation, excessive mucus, and throat clearing.[7] Moreover cardiorespiratory failure and sudden death due to large obstructing vocal polyp was also reported.[3,8]

Although all four presented cases had exercise induced dyspnea one of them presented to our emergency clinic with stridor and severe dyspnea and an emergency operation was required. She was previously assumed to be an asthma patient and treated as such. After total excision of the polyp, asthma-like symptoms vanished.

Vocal fold polyps are generally attributed to smoking.[4] Since smoking is a well-known cause of Reinke's edema, it can be assumed that smoking induces inflammation or edema of the vocal fold.[1] Three of our presented cases had a significant smoking history.

The treatment of large polyps is surgical excision using suspension microlaryngoscopy. Surgical excision provides dramatic improvement in voice and respiratory complaints.

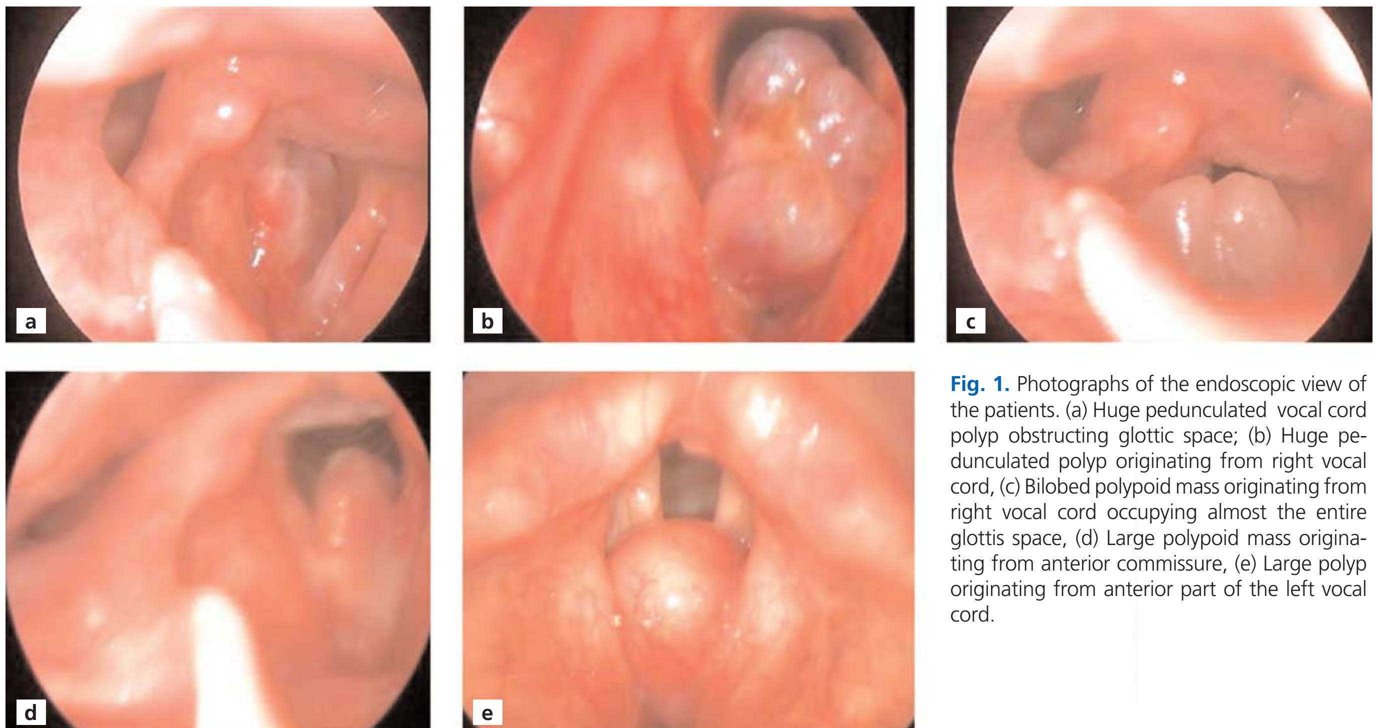

Fig. 1. Photographs of the endoscopic view of the patients. (a) Huge pedunculated vocal cord polyp obstructing glottic space; (b) Huge pedunculated polyp originating from right vocal cord, (c) Bilobed polypoid mass originating from right vocal cord occupying almost the entire glottis space, (d) Large polypoid mass originating from anterior commissure, (e) Large polyp originating from anterior part of the left vocal cord.

Histopathological examination is critically important in large vocal fold polyps. Distant metastases of colon adenocarcinoma and concomitant early glottic squamous cell carcinoma were reported.[4,9] All our cases had a benign histopathology.

Conclusion

Although huge benign laryngeal polyps are rare, they should be taken into account during the differential diagnosis of respiratory obstructive disorders.

Conflict of Interest: No conflicts declared.

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