

CLINICAL IMAGE

Large laryngeal polyp causing airway obstruction

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A 62-year-old woman smoker presented with 1 week of common cold and worsening hoarseness. She presented with dyspnea, which had been worsening over the past few days. On the initial examination in the emergency room, she could not lie down, stridor was evident and fiberoptic laryngoscopy revealed large laryngeal mass causing airway obstruction. Large laryngeal mass disappeared in subglottis with inspiration (Fig. 1a) and appeared in supraglottis with expiration (Fig. 1b). She had a normal white cell count ($7.5 \times 10^3/\mu\text{l}$; normal $4.0\text{--}9.0 \times 10^3/\mu\text{l}$) and a raised C-reactive protein (0.55 mg/dl; normal 0.00–0.30 mg/dl). Because intubation was judged impossible, an emergency tracheotomy was performed

under local anesthesia. Subsequent direct laryngoscopy under general anesthesia identified a valve-like large laryngeal mass attached to the right vocal cord. I removed it by a pair of microscissors. Pathological diagnosis was laryngeal polyp. The patient recovered well and was discharged after 2 weeks. Although she had no recurrence and was uneventful during the 1-year follow-up, I have been telling her strongly not to smoke.

Laryngeal polyps are among the most common lesions of the vocal cords and are generally benign, both histologically and in their clinical behavior. Although their usual presenting symptom is hoarseness, acute airway obstruction from laryngeal polyps is

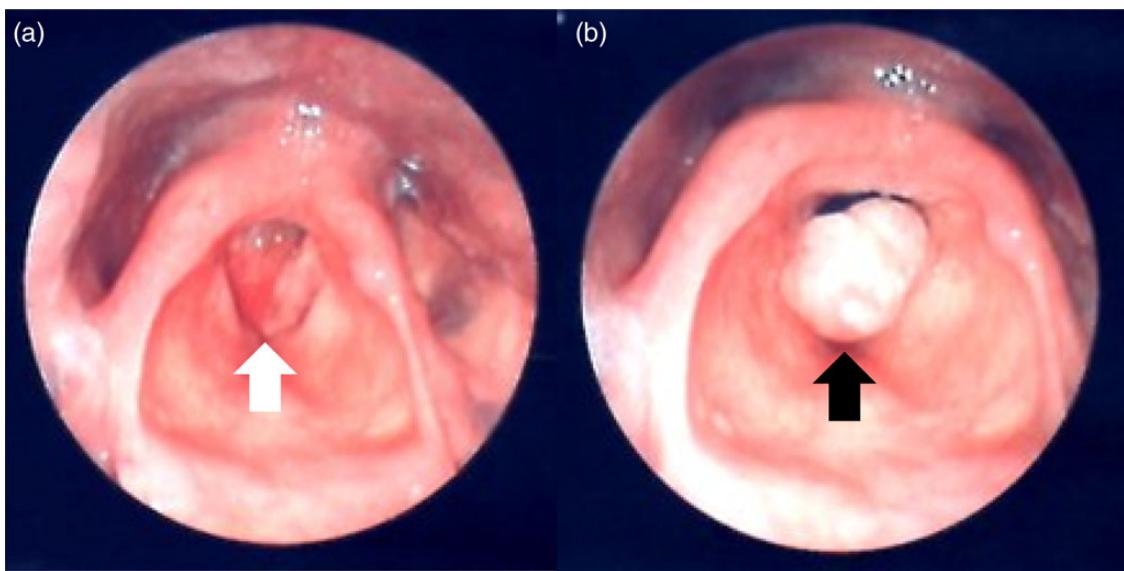


Figure 1: (a) Large mass disappeared in subglottis with inspiration (white arrow). (b) Large mass appeared in supraglottis with expiration (black arrow).

uncommon. A large laryngeal polyp, however, may produce severe paroxysmal respiratory distress and, in some cases, sudden airway obstruction [1]. Emergency treatment for airway obstruction secondary to large laryngeal mass is obviously the rapid establishment of an airway. Although it needs to keep airway, most of cases are difficult to intubate. Repetitive attempts of intubation might result in edema and/or bleeding and cause airway obstruction [2]. Therefore, early tracheotomy is recommended. Sudden airway obstruction can be caused by other laryngeal lesions in the upper aerodigestive tract. These include esophageal polyps, pseudosarcoma of the larynx and so on [3, 4].

CONFLICT OF INTEREST STATEMENT

None declared.

FUNDING

There are no sources of funding.

ETHICAL APPROVAL

No ethical approval is required.

CONSENT

Patient consent was obtained.

GUARANTOR

A.O. is a guarantor of the study.

REFERENCES

1. Yanagisawa E, Hausfeld JN, Pensak ML. Sudden airway obstruction due to pedunculated laryngeal polyps. *Ann Otol Rhinol Laryngol* 1983;92:340–3.
2. Kanaya N, Kawana S, Watanabe H, Niizuma Y, Niizuma T, Nakayama M, et al. The utility of three-dimensional computed tomography in unanticipated difficult endotracheal intubation. *Anesth Analg* 2000;91:752–4.
3. Cochet B, Hohl P, Sans M, Cox JN. Asphyxia caused by laryngeal impaction of an esophageal polyp. *Arch Otolaryngol* 1980;106:176–8.
4. Lambert P, Ward P, Berci G. Pseudosarcoma of the larynx. *Arch Otolaryngol* 1980;106:700–8.