A Press-Through-Pack in the Larynx

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—— A case of a 96-year-old male with a foreign body in the larynx is reported. The foreign body was a press-through-pack (PTP), a plastic packing for medicine, 16 mm × 16 mm × 3 mm in size. The PTP was safely removed from the larynx under general anesthesia. ——— press-through-pack; foreign body; larynx
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Foreign bodies in the larynx are more rare than those in the trachea or bronchus. Misswallowed objects are often lodged in the hypopharynx or fall through the glottis into the trachea or bronchus. Here, we report a case of a press-through-pack (PTP), commonly used in Japan as a packing for medicine, lodged in the larynx, and describe our treatment and management.

CASE REPORT

A 96-year-old man, who had complained of sore throat and stridor for one day after misswallowing a PTP, was referred to our clinic. There was no dyspnea or cyanosis. He had a history of chronic heart failure, obliterative arteriosclerosis, and dementia. Flexible fiberoptic observation showed the presence of the PTP in the supraglottic area (Fig. 1). The PTP was firmly wedged in between the laryngeal surface of the epiglottis and the arytenoid area, and seemed to be immobile by both respiration and deglutition. However, due to the high risk of asphyxia, the patient was immediately transferred to the operation room. After a brief discussion with the anesthetists, the patient went under general anesthesia, and the PTP was successfully removed by forceps and Macintosh laryngoscope. Subsequently, flexible bronchoscopy and direct esophagoscopy were performed after intubation, revealing no other foreign body.

The size of the PTP removed from the larynx was 16 mm × 16 mm × 3 mm.

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Fig. 1. Photograph of a press-through-pack lodged in the larynx observed by a flexible fiberscope.

Since there was no edema or hemorrhage in the laryngeal mucosa, the patient did not receive corticosteroid treatment or postoperative intubation. After recovery from anesthesia, hoarseness, stridor and sore throat disappeared. The patient was discharged the next day after operation.

DISCUSSION

In Japan PTPs made from plastic are widely used as a packing for medicine. Although some cases of PTP in the gastrointestinal tract and respiratory airway have been reported so far, foreign bodies in the larynx are rare. Foreign bodies are more likely to lodge in the hypopharynx or pass the glottis to the lower respiratory tract. Accordingly, the incidence of foreign bodies in the larynx is only 9% of all foreign bodies in the airway (Cohen et al. 1980). Moreover, foreign bodies in the supraglottic area are more rare than those in the glottic and subglottic areas (Kagesato et al. 1995). A variety of laryngeal foreign bodies such as

chicken bone (Weber and Kelly 1979), a fish bone (Kagesato et al. 1995), an eggshell (Naveh et al. 1975), and interestingly, a needle (Hammerlin and Kapadia 1996), a dollar shoe (Kent and Watson 1990), and an open safety pin (Hussain et al. 1994) are characterized as having sharp portions. To our knowledge, only one case in which a PTP was found in the subglottic area has been reported as a foreign body in the larynx (Ohno et al. 1979). A study in our institution for 5 years shows that the incidence of PTPs as foreign bodies in the air way is less than 5%, only one case, and swallowed PTPs are likely to fall into the esophagus. In the present case, the reason why the PTP was lodged in the supraglottic area is that its sharp corners stuck to the laryngeal mucosa and it was too large to pass through the glottis. The present case resulted from the patient's carelessness in taking medicine due to advance age, dementia, probably decreased pharyngo-laryngeal reflex and the fact that he was taking more than ten kinds of medicine. If possible, for advanced aged patients, it would be better if doses of many kinds of medicine were used with one-dose-packs than with PTPs.

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