

# A Useful and Safe Method for Retrieving a Round Metallic Object from an Airway

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## Abstract

We experienced a case with accidental aspiration of a metallic round foreign body. As there is no established technique for retrieving a metallic round ball from an airway, we propose that endoscopic net forceps with the support of a laryngeal mask airway is the best choice for such occasions.

## Key Clinical Message

The endoscopic net forceps with the support of a laryngeal mask airway is a dependable choice for retrieving a round metallic object from an airway

## KEYWORDS

airway foreign body, laryngeal mask, metallic round body, net forceps

## CLINICAL IMAGE

An 85-year-old man with a 2-day history of dyspnea and general malaise was admitted to our hospital with hypopnea and acidosis. Chest radiograph and CT scan identified a round high-density shadow about 1cm in diameter (Figure 1). We deduced that a pachinko-ball (Pachinko is a Japanese pinball gambling game) obstructed the right inferior lobar bronchus. Forced coughing and back blow failed to remove it. To remove the obstacle with minimal invasion, we considered several devices with an endoscope under mechanical ventilation; a magnet, a basket type or a pentatope type grasping forceps, or an endoscopic net forceps, with the support of a laryngeal mask airway, which we selected. The pachinko ball was successfully retrieved without severe damage to the patient (Figure 2). The patient received non-invasive positive-pressure ventilation for one day and antibiotic administration for 14 days. Rehabilitation improved his general condition, and he was transferred to a long-term hospital on day 48. There is no consensus on how to retrieve a metallic round ball from an airway. Based on our experience, we propose that endoscopic net forceps with the support of a laryngeal mask airway is a dependable choice for such occasions.

199 words

## CONSENT STATEMENT

Informed consent was obtained from the patient for this study.

## ACKNOWLEDGMENTS

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## CONFLICT OF INTEREST

None declared.

## AUTHOR CONTRIBUTIONS

DJ, YM, SU, KS, MS, HT, HW, and NK substantially contributed to the diagnosis and clinical care of the patient. DJ wrote the draft of the manuscript, and DJ and AH critically revised it for important intellectual content. HW gave final approval of the version to be published.

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## REFERENCES

No references.

## Legend to Figures

### Figure 1

Chest radiograph (**A**) and CT scan (**B**) show a round, high density shadow nearly 1cm in diameter. The right inferior lobar bronchus seems to be obstructed by a metallic round substance.

### Figure 2

(**A**) Bronchoscopic examination revealed complete obstruction of the right inferior lobar bronchus by a metallic round foreign body. (**B**) The foreign body was successfully removed by endoscopic net forceps with the support of a laryngeal mask airway. The foreign body was a pachinko-ball.

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