

**IMAGES IN EMERGENCY MEDICINE**

## Airway

**Food-related choking among older adults****Masafumi Fukuda MD<sup>1</sup> | Masakazu Nabeta MD<sup>2</sup> | Hideaki Uzu MD<sup>2</sup> |  
Osamu Takasu MD, PhD<sup>2</sup>**<sup>1</sup> Advanced Emergency and Critical Care Center, Kurume University Hospital, Kurume, Fukuoka, Japan<sup>2</sup> Advanced Emergency and Critical Care Center, Kurume University Hospital, Department of Emergency and Acute Intensive Care Medicine, Kurume University School of Medicine, Kurume, Fukuoka, Japan**Correspondence**

Masafumi Fukuda, MD, Advanced Emergency and Critical Care Center, Kurume University Hospital, 67 Asahi Kurume, Fukuoka 830-0011, Japan.

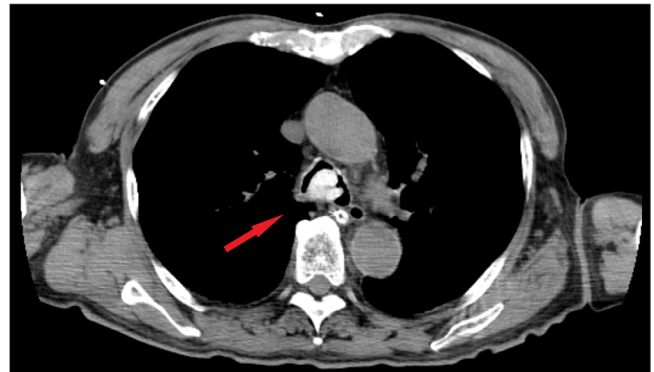
Email: [fukuda\\_masafumi@med.kurume-u.ac.jp](mailto:fukuda_masafumi@med.kurume-u.ac.jp)**CASE PRESENTATION**

We report the case of an 83-year-old male who choked while eating and was transferred to an emergency department in a state of cardiac arrest. Cardiopulmonary resuscitation was successfully performed immediately after removing the foreign body obstructing the airway under direct vision. However, because of insufficient dilation of the right thorax during ventilation after tracheal intubation along with reduced respiratory sounds, a computed tomography (CT) imaging test was performed. Carrying out assisted ventilation using an endotracheal tube restricted the respiratory expansion of the right thorax and diminished the breath sounds on the same side.

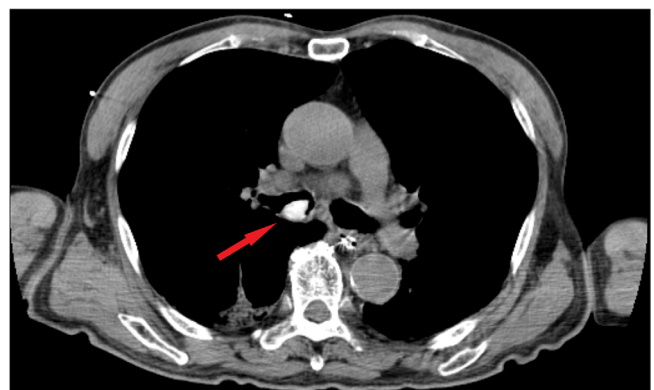
**DIAGNOSIS**

*Foreign body airway obstruction.* Figures 1 and 2 present the chest CT images of the patient. The foreign body obstructing the airway was a rice cake called *mochi*. *Mochi* is a traditional Japanese rice cake made by steaming and kneading glutinous rice (Figure 3), which can easily adhere to the pharynx and trachea, making it a common cause of choking among older adults in Japan.<sup>1</sup> It was detected as a nearly uniform high-density object on CT; its CT Hounsfield unit (HU, 120–170 HU) indicates a characteristic value among foods.<sup>2</sup> Therefore, distinguishing *mochi* from other foodstuff is possible.

Because it is not possible to remove *mochi* from below the glottis either with or without direct vision, a bronchoscope is used in the ED if CT shows that the *mochi* remains under the glottis. As rapid warming makes *mochi* sticky, dragging it by suction or forceps is often extremely challenging. Thus, a strategic approach, such as using multiprong snares



**FIGURE 1** Chest computed tomography image at the tracheal bifurcation level. The trachea was about to be obstructed by mochi (red arrow)



**FIGURE 2** Chest computed tomography image at the main bronchi level. The bronchus principalis dexter was about to be obstructed by mochi (red arrow)

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**FIGURE 3** Traditional Japanese rice cake, called mochi, made by steaming and kneading glutinous rice

or baskets,<sup>3</sup> is especially important when removing a foreign body obstructing the airway.

Foreign body airway obstruction is a serious public health problem worldwide. Because Japanese food has recently become globally

recognized, CT findings linking to a definitive diagnosis of specific foods are believed to be crucial.

#### CONFLICTS OF INTEREST

There are no conflicts of interest to declare.

#### REFERENCES

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