A foreign body in the nasopharynx: missing tooth mystery solved

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A 72-yr-old male was admitted to the emergency department in asystole due to accidental hypothermia. Cardiopulmonary resuscitation was undertaken, and tracheal intubation, though difficult, was accomplished. Extracorporeal rewarming was subsequently initiated. Brain computed tomography (CT) was performed to assess the patient's neurologic status, and immediately following, he was transferred to the intensive care unit (ICU). The CT scan revealed a high-density tablet-like foreign body (2.3×0.9 cm) in the nasopharynx (Figure A, B; arrow). We were informed at ICU admission that the patient had lost a tooth; however, chest and abdominal radiographs were normal, and we could not find

the tooth in the oral cavity. Two hours after admission, the patient's hemodynamic status normalized and extracorporeal rewarming was discontinued five hours following his ICU admission. On day 2 of admission, transnasal endoscopy was undertaken to search for the foreign body, which was subsequently removed using forceps and identified as a tooth (Figure C).

Teeth may be injured if laryngoscopy is particularly difficult.¹ If the lost tooth cannot be found, chest and abdominal imaging must be performed to determine if the tooth had been aspirated or had entered the gastrointestinal tract. In our case, there was uncertainty surrounding the CT

Figure A) Axial CT image showing a high-density foreign body in the nasopharynx. B) Sagittal CT image showing a high-density foreign body in the nasopharynx. C) The photograph shows the tooth after removal from the nasopharynx. CT = computed tomography

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image of the foreign body, which necessitated direct endoscopic examination. In the operating or emergency room, lateral head and neck *x-ray* imaging may be useful for finding a tooth in the nasopharynx. Similarly, our case illustrates that CT is also useful for imaging teeth in the nasopharynx.

Physicians should consider that dental fragments can travel into the nasopharyngeal area,² respiratory tract, and gastrointestinal track. In cases of tooth loss, imaging studies should be continued until the missing tooth is either found or confirmed not present in the body. The patient provided written informed consent for all procedures and the publication of this report.

Conflicts of interest None declared.

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