Sudden onset dysphagia in a patient with dementia

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DESCRIPTION

An 81-year-old female patient with vascular dementia attended the emergency department with sudden onset dysphagia and hearing loss. She was pleasantly confused at her baseline and therefore unable to give a history. On presentation, she was able to tolerate her own saliva but unable to tolerate sterile water, spitting it back up immediately. An upper oesophageal foreign body or food bolus was suspected and a lateral soft tissue neck X-ray was performed (figure 1). This showed a radio-opaque foreign body opposite the C5 vertebral body. Her relatives arrived and noted that she was not wearing her right in-the-ear hearing aid, and it could not be found at home. There was a high level of suspicion that she may have ingested it. She underwent a combined urgent rigid oesophagoscopy by the ear, nose and throat surgeon and flexible oesophagogastroscopy by the upper gastrointestinal surgeon, as the hearing aid was slippery and needed a basket to safely retrieve it. The hearing aid was checked to confirm it was completely removed, with the button battery found to be still safely inside the device (figure 2). There were no visible visceral injuries seen on repeat endoscopy following removal of the hearing aid.

A button battery is a small, flat and cylindrical single cell battery, usually 5–25 mm in diameter. Button battery ingestion is a recognised public health concern around the world, particularly in children.[1–3] If not removed promptly, they can lead to severe complications and death. Button batteries can be identified on X-rays due to the characteristic 'halo sign'.[4] Oesophageal perforations were identified in 189 cases of fatal or severe battery ingestions with oesophageal lodgment (53 fatal, 136 severe; 95.2% in children ≤4 years).[5] Implicated batteries were predominantly lithium (91.0%) and 92.0% were ≥20 mm diameter. Button batteries are used to power many hearing aids; hence, the concern in this case was that the button battery could slip out and cause fatal injury.

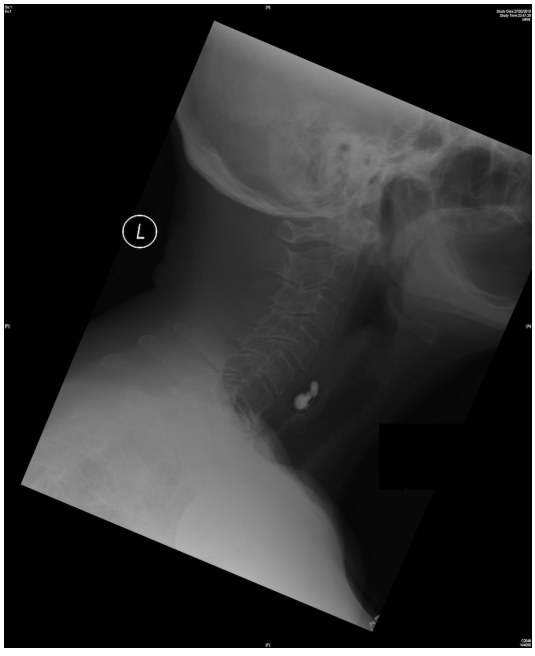

Figure 1 Lateral soft tissue neck X-ray.

Figure 2 In-the-ear hearing aid retrieved with button battery inside.

Patient's perspective

We are relieved that the hearing aid was quickly and safely removed, now knowing the danger posed by swallowing button batteries (Daughter-in-law).

Learning points

- Collateral history is important in patients with dementia, clinicians should have a low threshold for performing investigations.
- Button battery ingestion is associated with severe morbidity and death, and they must be removed as a matter of emergency.

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The patient recovered well from her procedure and resumed a normal diet the following day. She was discharged 6 days after admission while waiting for a dementia reassessment and an improved social package of care. She was referred to audiology for a new behind-the-ear hearing aid.

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