

Serial Swallower

Salvatore Marchese*; Rachel Aguilo

*Salvatore Marchese

Emergency General Surgery, Homerton University Hospital NHS Foundation Trust, London, United Kingdom

Email: salvatore.marchese@nhs.net

Description

A 24-year-old girl, well known to Accident and Emergency department, presented again overnight in handcuffs accompanied by four psychiatric staff members. She had been a psychiatric inpatient since the age of 17, sectioned in a forensic ward due to behavioural explosions of self-harm, often with repeated ingestion of foreign bodies, and aggression and violence towards members of staff. She was affected by severe borderline and antisocial personality disorders, in addition to acquired brain injury following auto defenestration.

She sincerely affirmed she had swallowed few hours before two electronic cigarettes. She had also ingested a toothbrush and two alkaline batteries a week earlier. Chest x-ray identified one e-cigarette projected at the distal oesophagus level and the other one over the stomach (Figure, left panel). Due to the risk of perforation caused by the e-cigarette at the oesophagus, an urgent endoscopy was performed by the Gastroenterology team, even though there was a previous agreement not to perform endoscopy unless high risk, as it might reinforce further ingestion of foreign objects. The two e-cigarettes and toothbrush were successfully retrieved. The batteries were left in the bowel for spontaneous evacuation.

Two months later, she represented with severe abdominal pain, fever (38.8°C), tachycardia (107 beats per minute) and increased CRP (147 mg/L). Abdominal plain film demonstrated 13 foreign bodies (Figure, central panel). In particular, five e-cigarettes projected over the stomach and additional two e-cigarettes, four batteries and two wire-like objects throughout over the bowel.

A CT scan was requested when clinical improvement did not occur and CRP increased to 307 mg/L. Surprisingly, it detected a 14th ten-cm-linear object, only partially radio-opaque, that had perforated the caecum (Figure, right panel), with evidence of collection forming in the pelvis adjacent to the extraluminal end of this foreign body.

She was brought to theatre for urgent diagnostic laparoscopy. A spoon handle was immediately identified coming out from the caecum and retrieved. The perforation was then successfully primarily repaired. The patient recovered well and was discharged back to her psychiatric facility ten days later. So far, no new encounter has been recorded.



Figure 1: Chest X-ray showing two e-cigarettes, projected over distal oesophagus and stomach (left panel). Abdominal X-ray performed two months later demonstrating 13 foreign objects (central panel). Partially opaque hand spoon at CT scan perforating the caecum (right panel).

Discussion

Intentional ingestion of foreign objects is commonly observed as “repetitive behaviour” and interpreted in the young as self-injury behaviour and in adults as malingering, often observed among inmates for “secondary gain” purposes [1,2]. The recurrent swallowing of foreign bodies in patients affected by personality disorders was described for the first time in 1950 [3]. Currently, it is classified as “nonsuicidal self-injury”, mainly associated with borderline personality disorder [4], as confirmed in our case.

Swallowed objects pass spontaneously in the majority of cases (over 80%), although in the setting of intentional ingestion the rate for endoscopy (63–76%) or surgery (12–16%) is estimated to be higher than believed in the past [5]. Any case of suspected ingestion of foreign body requires at least chest and abdominal X-ray. Unfortunately, fish bones, wood or plastic objects are radiographically transparent. Therefore, CT-scan becomes mandatory to detect non-metallic objects [6].

Updated guidelines [5] recommend urgent endoscopic retrieval for all foreign bodies stuck in oesophagus, as we accomplished the first time. Despite once through the oesophagus they generally pass uneventfully through the gastrointestinal tract [5], perforation, obstruction or gastrointestinal bleeding might develop. A perforation remains the most feared among the complications and requires surgical treatment [5,6]. Nevertheless, the typical picture with free gas under diaphragm at chest X-ray is not commonly observed (15.9%). This is believed to be the consequence of the slow perforating process that covers the site with fibrin, omentum and bowel loop, thus obstructing gas from flowing into the peritoneal cavity [6].

Avoidance of unneeded endoscopic procedures may prevent reinforcing repetitive ingestion behaviour [2]. In addition, prompt discharge reduces secondary-gained comforts coming from being hospitalized. Restriction on access to potentially ingestible objects is paramount but, unfortunately, it remains technically unfeasible [6].

References

1. Te Wildt BT, Tettenborn C, Schneider U, Ohlmeier MD, Zedler M, Zakhalev R, et al. Swallowing Foreign Bodies as an Example of Impulse Control Disorder in a Patient With Intellectual Disabilities: A Case Report. *Psychiatry*. 2010; 7: 34–37.
2. Palese C, Al-Kawas FH. Repeat intentional foreign body ingestion: The importance of a multidisciplinary approach. *Gastroenterol Hepatol (NY)*. 2012; 8: 485-486.
3. Carp L. Foreign bodies in the gastrointestinal tracts of psychotic patients. *Arch Surg*. 1950 ; 60: 1055-1075.
4. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. American Psychiatric Publishing, Arlington, VA; 2013.
5. ASGE Standards of Practice Committee, Ikenberry SO, Jue TL, Anderson MA, Appalaneni V, Banerjee S, Ben-Menachem T, Decker GA, Fanelli RD, Fisher LR, Fukami N, Harrison ME, Jain R, Khan KM, Krinsky ML, Maple JT, Sharaf R, Strohmeyer L, Dominitz JA. Management of ingested foreign bodies and food impactions. *Gastrointest Endosc*. 2011; 73: 1085-1091.
6. Gałczyński A, Cieplińska E, Konturek A. Habitual Intentional Foreign Body Ingestion - A Literature Review. *Pol Przegl Chir*. 2016; 88: 290-297.

Manuscript Information: Received: May 26, 2018; Accepted: November 13, 2018; Published: November 15, 2018

Authors Information: Salvatore Marchese*; Rachel Aguilo

Emergency General Surgery, Homerton University Hospital NHS Foundation Trust, London, United Kingdom

Citation: Marchese S, Aguilo R. Serial Swallower. *Open J Clin Med Case Rep*. 2018; 1485.

Copy right statement: Content published in the journal follows Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>). © **Marchese S 2018**

Journal: *Open Journal of Clinical and Medical Case Reports* is an international, open access, peer reviewed Journal focusing exclusively on case reports covering all areas of clinical & medical sciences.

Visit the journal website at www.jclinmedcasereports.com

For reprints and other information, contact editorial office at info@jclinmedcasereports.com