Deliberate Foreign Body Ingestion

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Introduction: Patients who deliberately swallow objects are among the most challenging you'll work with. Deliberate foreign body ingestion (DFBI) is costly and resource intensive, in part because of these patients' extremely high rate of repeated swallowing attempts: Over 80% of DFBI presentations occur in patients with prior ingestions. Pens, toothbrushes, and batteries are among the most commonly ingested items.

Common causes of DFBI

- Malingering: DFBI in institutionalized settings, like jails, is often for secondary gain. Incarcerated individuals who swallow foreign objects are more likely to select highly injurious items, like sharp metallic objects, which require transfers to hospitals and prolonged treatment
- Borderline Personality Disorder: Swallowing foreign objects can reflect a variety of pathologies in BPD. It may resemble other forms of self-injury (eg, cutting, burning), in which patients gain temporary relief from emotional pain by redirecting focus onto physical sensations or ensuing medical interventions. BPD patients may also find that this behavior allows them to manipulate others, forcing staff to show care and attention that they desperately crave.
- Psychosis: about a quarter of DFBI patients have a history of psychosis, and delusions/command hallucinations can prompt swallowing behavior.
- Pica: refers to the repeated consumption of non-nutritive substances (eg, dirt, paint) and is most often diagnosed in children, pregnant women, and those with iron deficiency. In adulthood, pica primarily occurs in cases of severe intellectual disability, autism spectrum disorder, and schizophrenia.

Management of DFBI

First step: Imaging

- Non-contrast CT (better than x-rays; if the ingested object is radiolucent, x-rays are of no use)

Medical guidelines

- Sharp objects (knives, razor blades), batteries, packages of narcotics, or any objects that may result in the obstruction or perforation of the esophagus: Emergent surgical removal (< 6 hours).
- Sharp objects that have already progressed to the stomach or duodenum or objects greater than 6 cm in length and/or greater than 2.5 cm in diameter: Removal by endoscopy within 24 hours.
- Blunt objects with rounded edges (eg, coins, buttons), smaller than 2.5 cm in diameter, and/or smaller than 6 cm in length: Non-emergent removal.
- Small, blunt, non-toxic objects: Monitor for spontaneous passage. Once objects reach the stomach, most will pass within 4–6 days. Seek surgical consultation if the object fails to progress after 72 hours or the patient develops symptoms of perforation, obstruction, or peritonitis.

Prevention of repeated DFBI incidents:

- Minimize access to swallowable items (eg, utensils, pens, combs, toothbrushes).
- Specific management principles vary depending on the subtype.
    - Due to malingering: minimize the secondary gain; keep transfers for hospital treatment as brief as possible.
    - Due to BPD: utilize dialectical and cognitive behavior therapy; target impulsivity and self-injurious behavior with pharmacotherapy (e.g., use mood stabilizers or naltrexone).
    - Psychosis: treat with antipsychotic medications
    - Pica: SSRIs can be helpful