

Foreign Body Ingestion/Insertion

Care Guide Summary

October 2019



CALIFORNIA CORRECTIONAL
HEALTH CARE SERVICES

Information contained in the Care Guide is not a substitute for a health care professional's clinical judgment. Evaluation and treatment should be tailored to the individual patient and the clinical circumstances. Furthermore, using this information will not guarantee a specific outcome for each patient.

SUMMARY

GOALS

- ✓ Ensure patients with Foreign Body Ingestion/Insertion (FBI) are managed at the appropriate level of care.
- ✓ Consider risk/benefit of repeated imaging in asymptomatic patients
- ✓ In most cases surgery should be avoided as many of these patients engage in self-harm behaviors and repeatedly open abdominal wounds.
- ✓ Identify patients with repeated FBI and follow closely with a multidisciplinary approach.

ALERTS

- Most of our patients who ingest foreign bodies (FB) do it intentionally and repeatedly, and the severity of ingesting behavior often increases.
- Disk or button batteries lodged in the esophagus can rapidly cause liquefaction necrosis and perforation, and need emergent removal.
- Inserted objects (i.e., in rectum, vagina, urethra, nose, ears, and/or subcutaneous tissues) may perforate and travel to distant sites.
- A multidisciplinary approach working with Mental Health (MH) and custody should be used for repeated ingesters/inserters.

DIAGNOSTIC CRITERIA^{1, 5}

- Studies have shown that male sex, incarceration, and the presence of a psychiatric diagnosis are significant predictors of a recurrent FBI event. Once an FBI has occurred, the presence of any of these factors should prompt a heightened awareness for an impending recurrent event.
 - One study divided the behavior of intentional FBI into 4 distinct diagnostic subgroups: psychosis, personality disorder, pica, and malingering.
 - In the prison population particularly, FBI can result in transfer to an offsite location, sometimes for several days. Commonly when the FB has successfully passed (or been removed) without complications, this behavior may be repeated.
- In the **community**, FBIs are a common problem in Gastrointestinal (GI) clinical practice. The large majority of cases in community-dwelling patients with FBIs are accidental or food impactions and do not require intervention. Most objects pass spontaneously, although 10% to 20% of GI FBIs will require endoscopic intervention and 1% may require surgical intervention.
- In the **correctional setting**, patients commonly present with repeated intentional ingestions, often with multiple items ingested at the same time. Some studies have shown a higher rate of endoscopic intervention or surgery required in these patients, but the data is undoubtedly skewed as many patients with repeated ingestions may be managed conservatively at the institution.

EVALUATION

- **History and Physical:** Complete a comprehensive history and physical exam of the patient. Review MH history and use interdisciplinary team to co-manage patients with MH diagnosis or intentional ingestion. Look for signs of esophageal obstruction (inability to handle secretions) or perforation (signs of peritonitis on exam).
- **Diagnostic Tests/Procedures:** While radiographic localization and identification of FBs can be helpful in guiding management, there is also risk of repeated radiation exposure. Providers need to use clinical judgment based on the patient's presentation, history of prior ingestions, and the patient's current housing location/possible items available to the patient to ingest at time of reported ingestion.
 1. If radiographs are done typically a CXR (2 view: PA and Lateral) and/or abdominal X-Ray (2-3 views AP, lateral, and upright if concerned about free air) may be required to spatially locate FB. A neck X-Ray (2 views) may be needed if the patient is symptomatic in the neck.
 - **Radiopaque FBs:** paper clips, metal, razor blades, wire, batteries, magnets, some aluminum objects may be visible if sufficiently dense;
 - **Potentially Radiolucent FBs:** aluminum (pieces of cans), plastic, wood, thorns/splinters, thin metal, food impactions may not be seen.

2. Patients with abdominal pain, fever, GI bleeding, or other symptoms typically require computed tomography (CT) scanning to evaluate for the presence of bowel perforation or other pathology. In addition, if FB is known to be radiolucent and patient is symptomatic, consider doing a CT may be needed.
- **Determine type of FB:** Risky FB is anything lodged in the esophagus, batteries, magnets, sharp objects, and objects > 6 cm long or > 2.5 cm wide.⁵
 - **Consult** MH and communicate any patient statements regarding the motivation for FBI.

TREATMENT OPTIONS/MONITORING (SEE PAGE 4)

Foreign Body/Patient Factors – Asymptomatic (imaging not done or is negative for FB)

Level of Care – Typically can manage at institution

Monitoring – Observe, send to a higher level of care (HLOC) if symptoms develop. Consider imaging when available.

Foreign Body/Patient Factors - FB in stomach

Level of Care - Manage at institution if asymptomatic (unless FB is risky – see page 4, then ED)

Monitoring – If risky FB in stomach (or esophagus) send to ED for attempt at removal. If not risky FB, may observe; FB will typically pass in 4-6 days. If FB remains in stomach > 3-4 weeks, consult GI provider. Patient may eat regular diet, send to an HLOC if symptoms develop.

Foreign Body/Patient Factors - FB past duodenum (even if item considered “risky”)

Level of Care - Manage at institution if asymptomatic

Monitoring - If sharp FB distal to duodenum, observe for passage. Consider surgical consultation if FB is the same location for > 3 days. If blunt FB observe for passage, consider surgical consultation if object in the same location for > 1 week. Patient may eat regular diet, send to an HLOC if symptoms develop.

Foreign Body/Patient Factors - FB lodged in esophagus

Level of Care - Emergency Department (ED)

Monitoring - See timing of endoscopic retrieval on page 4.

Foreign Body/Patient Factors - Symptomatic or unstable

Level of Care - ED

Monitoring - At any time if any patient is unstable, transfer to an HLOC.