Retrospective Audit of the Management of Anal Insertion of Foreign Bodies:
A Holistic Approach

Ahmed Yahya, MBBS,[a,*] and Jude Chukwuma, MBBS, MRCPsych, DPM, MD[a]

ABSTRACT

Most patients with voluntary anal insertion of a foreign body (IFB) present to the emergency department and are then managed by the surgical team. This report reviews the medical literature on IFB and includes results of a chart review of operative logged interventions and clinically coded procedures for anal IFBs at a single acute hospital in the United Kingdom between May 2009 and September 2013. The objective was to establish the current practice in the management of anal IFB and update a framework for the initial workup, surgical procedure, and appropriate mental health intervention.

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[a]Department of Psychiatry, Chase Farm Hospital, Barnet, Enfield and Haringey Mental Health NHS Trust, Middlesex, United Kingdom

**Corresponding author:* Ahmed Yahya, MBBS, Great Ormond St Hospital, Child Psychiatry, Mildred Creak Unit, Level 5, Frontage Bldg, Great Ormond St, London, WC1N 3JH, United Kingdom 077895-49886 (yahyaas@live.co.uk).

The care of patients following voluntary anal insertion of a foreign body (IFB) leading to emergency surgical intervention has over the years suffered from an anecdotal and weak evidence base. Most patients with anal IFB present to the emergency department and are then managed by the surgical team. Advances in minimally invasive techniques and instrumentation suggest open laparotomies for IFB may be strictly limited to presentations with frank peritonitis or hemorrhagic insult.[1,2] Anal IFB can be a type of self-harm; the confluence of factors leading to self-harm and IFB mandates risk assessment and appropriate psychiatric and psychological interventions. Timely mental health assessment is of paramount importance.[3]

Patients presenting with IFB are from varying backgrounds, ages, and lifestyles. In the adolescent population, intentional insertion is often reflective of attention seeking, poor judgement, or risk taking. This behavior can be in the context of alcohol or drug use or a manifestation of other psychological abnormality.[3] It has been shown that adolescent girls with eating disorders show a propensity for toothbrush swallowing.[4] Adults who insert foreign objects often suffer from mental illness, harbor lingering curiosities that manifest as experimentation or as efforts to rekindle past experiences or relationships, or do so to enhance sexual stimulation.[3] Foreign body insertion can also be a presentation of Munchausen syndrome or factitious disorder.[5]

This report aims to establish the current practice with regard to the management of anal IFB and update a framework for the initial workup, surgical procedure, and appropriate mental health intervention.

METHOD

A literature search of electronic databases (MEDLINE, EMBASE, PubMed, and PsycINFO) was undertaken to identify relevant publications from January 2005 to September 2013. Further searches were completed using the Google search engine and by hand-searching relevant journal bibliographies. Key words included *management of foreign bodies*, *psychiatric*, and *surgical*; there were no language restrictions.

Using audit guidelines from Epsom and St Helier Hospitals NHS Trust, we retrospectively reviewed operative logged interventions and clinically coded procedures for anal IFBs between May 2009 and September 2013 at a single acute hospital in the United Kingdom. The trust audit committee reviewed and accepted our proposal with regard to data collection.

RESULTS

Literature Search

The literature search yielded 1 systematic review,[6] 21 multiple case series reviews,[7–27] 2 clinical practice guidelines,[1,26] and 7 case reports.[4,28–33] The first clinical practice guideline[1] identified described the surgical interventions and physical investigations required in such presentations. The other clinical practice guideline[26] was similar, describing the physical investigations and surgical procedures required to remove such foreign bodies. There was no mention of psychiatric care in either guideline.

Clinical Points

- Management of anal insertion of a foreign body (IFB) is complex; it is managed well from a surgical perspective, but psychiatric input is often limited and would appear to be a crucial part of the treatment process.
- A multidisciplinary and holistic approach to IFB management, including the involvement of mental health services, may reduce the potential for recurrence.

Chart Review

A retrospective review of medical records at a single acute hospital in the United Kingdom yielded 10 patients, aged 14–70 years (mean age of 26.2 years), who underwent emergency surgery following anal IFB. The male to female ratio was 5:1. Of these IFB cases, 40% resulted from a misadventure with a "sex toy." One in 4 patients had recurrent presentations and a psychiatric history. Routine workup in all patients included chest and abdomen plain radiographs, with computed tomography imaging undertaken in 1 case of suspected colonic perforation. We found that 90% of anal IFBs were removed transanally using a variety of techniques including manual manipulation, grasping forceps, and endoscopy. The mean inpatient stay was 2.3 days (range, 0–13 days). All anal IFB interventions were performed under general anesthesia, with 1 case requiring a laparotomy and enterotomy for removal of the impacted IFB at the rectosigmoid junction. There were no records of psychiatric assessments, intervention, or follow-up with these patients. No information was found regarding involvement of or referrals to mental health services in either the identified cases or the clinical practice guidelines.

DISCUSSION

Limitations

We did not carry out a power calculation. Our sample size was small and from a single acute hospital in the United Kingdom; our study, therefore, has low power and limited generalizability. Our search identified only 2 published clinical practice guidelines; some hospitals may have internally developed unpublished guidelines that may only be available to the hospital staff and thus were not identified in our search. It is possible that such guidelines may have taken a multidisciplinary approach that includes mental health care. Finally, our results, as with those of all observational studies, are subject to confounding by unmeasurable variables and thus are inherently imperfect.

Recommendations

All patients presenting with anal IFBs should receive an initial assessment to exclude deliberate self-harm. Those with deliberate self-harm or other psychological challenges should be referred to mental health services for comprehensive risk assessment and management. An awareness campaign to highlight the benefits of mental health intervention in the management of anal IFBs can be a quality improvement measure.

CONCLUSION

The majority of patients presenting with anal IFB do not have a mental disorder. However, in our chart review, 25% were patients with a mental disorder. Those patients with a mental disorder were more likely to have repeated presentations. We found no evidence to suggest that those with a mental disorder had any form of specific psychiatric input. A multidisciplinary and holistic approach to the management of anal IFB, including the involvement of mental health services, may reduce the potential for recurrence.

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