

# Foreign body ingestions in a schizophrenic patient

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## Summary

**The topic of foreign body ingestion has received extensive coverage in the areas of surgery, emergency medicine and pediatrics. A subset of this topic, the intentional ingestion of foreign bodies, however, is much less common, and involves subtleties in evaluation and management not usually seen in accidental ingestions. Here, we report a case of ingestion of a rolled, metal tuna can lid in a male prison inmate previously diagnosed with depression and paranoid schizophrenia. Following evaluation by the surgical team, the foreign body was removed by laparotomy and the patient was discharged back to the prison without complication.**

**In many cases, ingestions of this type involve a command hallucination ordering the patient to swallow the foreign body. Interestingly, the patient in the present case reported auditory hallucinations commanding him *not* to swallow the can lid.**

**Keywords:** *Foreign body ingestion, Schizophrenia, Depression, Prison, Inmate.*

## Résumé

Le thème de l'ingestion du corps étranger a reçu une couverture approfondie dans le domaine de la chirurgie, médecine de la circonstance critique et pédiatriques. Un sous-ensemble de ce thème. L'ingestion du corps étranger intentionnelle, toutefois, est beaucoup moins courante, et implique des subtilités dans l'évaluation et la prise en charge pas normalement vu dans l'ingestion accidentelle. Ici, il s'agit d'un rapport d'un cas d'ingestion d'une couverture d'une boîte métallique de tuna enroulé dans une prison d'un détenu de sexe masculin diagnostiqué précédemment avec dépression et schizophrénie paranoïde. A la suite d'une évaluation par une

équipe chirurgicale, le corps étranger a été enlevé à travers la laparotomie et le patient était renvoyé à la prison sans des complications.

Dans bien des cas, l'ingestion de ce type implique une hallucination commandement qui ordre le patient d'avaler le corps étranger. De façon intéressante, le patient dans ce cas avait rapporté hallucination auditive qui lui donne l'ordre pas d'avaler la couverture de la boîte.

## Introduction

The topic of foreign body ingestion has received extensive coverage in the areas of surgery, emergency

medicine and pediatrics. A subset of this topic, the intentional ingestion of foreign bodies, however, is much less common, and involves subtleties in evaluation and management not usually seen in accidental ingestions. Additionally, the literature contains fewer reports on this topic that focus on the psychiatric issues involved.

This phenomenon has been seen with increasing frequency among prison inmates. Here, we report a case of intentional ingestion of a metal tuna can lid by a prisoner. Often, unusual ingestions of this kind involve a prior background of psychiatric illness and are often seen with command hallucinations ordering the patient to swallow the objects [1]. Interestingly, in the present case, the patient reports experiencing auditory hallucinations commanding him *not* to swallow the object.

To our knowledge, there have been no other reports of a similar case in the literature.

## Case report

The patient, G.B, was a 30- year- old black male prison inmate at a state correctional facility. He presented to the Emergency Department of a teaching hospital following reports of ingesting the rolled lid of a metal tuna can (see Figure 1). He stated that at the time of ingestion, he was attempting to kill himself. On admission, he stated that he had become distraught over his lack of visitors while in prison, and was preoccupied with the idea that he "had let his mother down" by being incarcerated. His records indicated a prior admission to the same teaching hospital following ingestion of sewing needles four years earlier. He underwent laparoscopic removal of these, and was discharged without complication. On further questioning, it was determined that the patient had at that time swallowed six sewing needles in a suicide attempt, though not all were recovered.

His past psychiatric history was notable for paranoid schizophrenia and major depression, diagnosed by prison psychiatrists during his first incarceration. Since that time, he had been receiving sertraline 100mg PO qd and olanzapine 10mg PO qhs, and reported being compliant with these medications. G.B described multiple suicide attempts, the first being an attempted overdose at age 19 but denied any history of pica. He denied any attempts of self mutilation such as cutting. He had had multiple psychiatric hospitalizations during the 2 years before his second incarceration.

The patient's medical history was significant for seizure disorder, for which he had been treated with phenytoin.

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He was also hepatitis C positive.

G.B was first incarcerated from 1998–2001. He was subsequently re-incarcerated in 2003 until the present, following charges for breaking and entering and larceny. Prior to his incarceration, he reported drinking alcohol, smoking approximately 2 packs per day of cigarettes, and smoking crack and marijuana daily. He denied intravenous drug use. His mother passed away approximately two years before admission. He was very close to her, and talked a lot of unresolved guilt over “letting her down.” His father left his family when the patient was very young, and had no contact with him since then. The patient had two brothers. He gave a family history of depression in his mother and alcohol abuse in his cousin.

Mental status examination the morning after his admission revealed a fairly groomed male who appeared his stated age. He showed no psychomotor changes, and had good eye contact. His affect was appropriate and within normal range. His mood was depressed. His

he was not suicidal, but did state that he had wanted to kill himself in the days prior to his admission, and had hoped that this ingestion would accomplish this. A brief cognitive examination revealed that he was oriented to person, place and date. His attention and memory were intact. He had good insight into his situation and his judgment was adequate.

Physical examination was essentially normal. The diagnoses of depressive disorder not otherwise specified and psychotic disorder not otherwise specific were made.

At exploratory laparotomy enterotomy was performed without complication and the can lid was successfully removed.

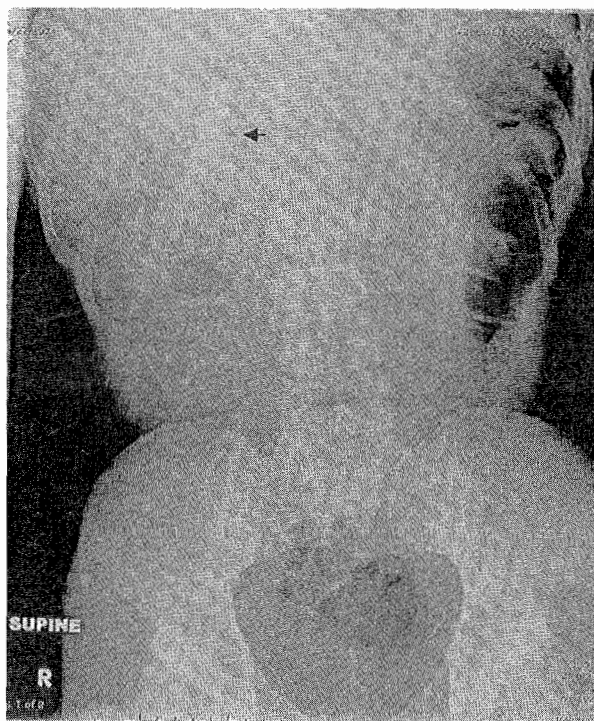
### Discussion

Deliberate foreign body ingestion can be motivated by a number of different factors. Common reasons for ingestion include attempted suicide, desire for transfer from prison environment to hospital, attention-seeking behavior in borderline personality disorder and command hallucinations in the presence of schizophrenia<sup>1,2</sup>.

Other reports have demonstrated that inmates often have access to razor blades and other potentially lethal instruments while in prison<sup>1,3</sup>. Previous reports have shown that rather than using the razor blade for cutting (as part of a suicide), the patients instead choose to ingest them<sup>1,4</sup>. This was also true in the present case, as the can lid, after removal via enterotomy, was found to be extremely sharp and could have caused serious injury if used as a cutting tool. In other cases, prisoners have swallowed sharp objects, but first covered them with paper<sup>5</sup>. This would suggest that the primary intention is not solely to cause self-injury. Indeed, the patient detailed by Cohen *et al* had access to two razor blades, but intentionally broke them apart into at least 15 fragments to swallow them, rather than use them as cutting instruments<sup>3</sup>. This suggests that this choice of behavior is rooted in a background that favors ingestion of objects over other suicidal or parasuicidal behaviors. To our knowledge, there have been no reports of this swallowing behavior seen in prison inmates before their incarceration.

Manipulation of the medical system for temporary transfer out of prison has been cited as a motivation in some foreign body ingestions<sup>1</sup>. In the present case, it is more likely that this behavior was related to his psychiatric illness rather than an attempt to temporarily exit the prison environment.

Oral fixation has been postulated as a reason for deliberate foreign body ingestions in young children<sup>6</sup>. Other authors have attempted to link psychosocial stress and an exacerbation of pica in children<sup>7</sup>. Attempted suicide has been seen with ingestion of unusual objects by schizophrenic patients<sup>8</sup>. In other reported cases, the ingestion of foreign bodies is often accompanied by command hallucinations. In this case, the patient did report visual and auditory hallucinations. Interestingly,



**Figure 1** Abdominal radiograph of patient. The rolled lid of an aluminum can is seen near antrum of stomach. Two sewing needles and a bent wire fragment are also present from prior ingestions, which occurred at an unknown time.

thought process was organized and logical. At the time of examination, he denied any form of hallucinations, but did report seeing his deceased mother the day before. He reported occasional tactile hallucinations of bugs crawling on his neck and hair. He also stated that he often felt that the television was “talking to him,” though he could not recall what it had said. In addition, he often felt that people were talking about him. At the time of examination

he reported seeing his deceased mother, who was telling him not to swallow the can lid. The comorbid depression in this patient lends support to an attempted suicide, but this reasoning does not fully explain his choice of ingestion over another more efficient means of suicide. Intentional foreign body ingestion has been seen in schizophrenic patients, especially in the context of command hallucinations<sup>2</sup>. In these cases, the ingestions are the result of delusional beliefs that these objects contain nutrients that the patient lacks or the result of communications with God<sup>9</sup>.

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