SWALLOWING FOREIGN BODIES AS AN EXAMPLE OF IMPULSE CONTROL DISORDER IN A PATIENT WITH INTELLECTUAL DISABILITIES: A CASE REPORT

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ABSTRACT

Objective. Foreign body ingestion can be a challenge to multiprofessional approaches involving medical, surgical, neurological, and psychiatric teams.

Case presentation. A 41-year-old male patient with intellectual disabilities presented after having swallowed approximately 20 sharp objects. While admitted to a psychiatric ward, surgeons removed a glove from his stomach endoscopically and pharmacologically facilitated the objects' complication-free bowel passage. The patient explained the swallowing as a means to release himself from tension induced by stress. His aberrant behavior also seemed to serve as a means to exert pressure on psychosocial workers. Other deviations included the pushing of sharp objects under the skin and multiple paraphiliae. As a child, the patient suffered from early psychological and physical traumatization. Both parents were allegedly physically abusive alcoholics.

Conclusion. Apart from possible alcohol embryopathy and traumatic brain damage, meningitis, which the patient had at the age of three, is discussed as the most likely reason for his oligophrenia, associated with

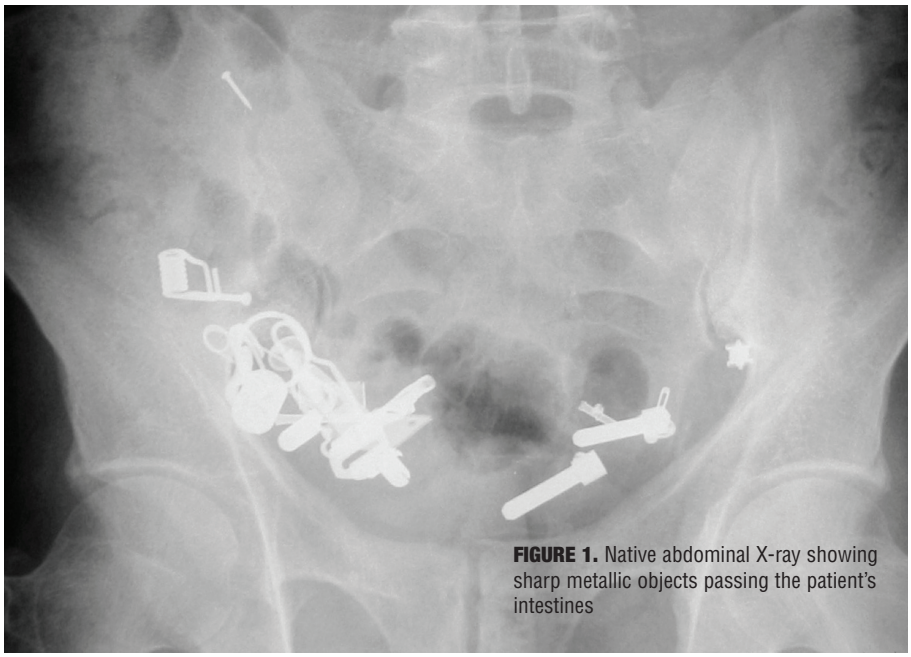

FIGURE 1. Native abdominal X-ray showing sharp metallic objects passing the patient's intestines

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left-sided, temporo-parietal atrophy and epilepsy.

INTRODUCTION

The deliberate ingestion of foreign bodies is a comparatively rare psychopathological behavior. In children, it can occur in regressive states due to developmental disturbances.[1] Among adolescents and young adults, it may be interpreted as self-injuring or suicidal behavior[2] or associated with eating disorders.[3] Moreover, challenging behaviors, such as the ingestion of non-food items, i.e., pica disorder, frequently occurs with severe autistic disorders and intellectual disability.[4] Although rarely, this pathological behavior has also been reported in patients suffering from psychosis and personality disorders.[5] Swallowing foreign objects can also present in Munchhausen syndrome or as an act of malingering, often seen in prisons.[6] The presented patient gives a particularly striking example of foreign body ingestion and other bizarre behavioral aberrations on the background of different neurological and psychopathological findings, challenging both medical interdisciplinary and ethical viewpoints of hospital staff.

CASE PRESENTATION

A 41-year-old male patient with intellectual disability was admitted after having swallowed about 20 small, mostly sharp objects (Figure 1), such as nails and spirals, and a suede leather glove with a diameter of about 15cm. To prevent him from repeating this potentially dangerous behavior, he was admitted to a psychiatric ward with his consent, though the main medical concern was the removal and passage of the ingested objects.

The patient was known for different forms of potentially self-destructive behavior. The ingestion of objects dated back as far as childhood. Alternatively, he suffered from spells of pushing sharp metallic objects like wire and nails under the skin of his arms and legs. Because of this, since the age of 19, the patient was hospitalized many times and had multiple x-rays, endoscopic procedures, and surgeries, which ultimately led to joint deformities. The patient explained his outbursts of compulsive behavior as a way to cope with stressful situations and to stop circulating thoughts.

The psychiatrist and health workers who provided care to the patient at his home partly agreed with this interpretation, but also saw a strong malingering character in his actions. Because of his malingering, he was frequently transferred between different homes and protected jobs since he moved at the age of 18 from his grandmothers house to a residential placement for individuals with intellectual disabilities.

For the first 14 years of the patient's life, he lived with his parents who allegedly were abusive to him and suffered from alcoholism. Neither his parents nor the patient himself were willing to talk about his early years. However, on one occasion, he mentioned that his mother would beat him with barbed wire.

Prior to admission, he admitted that his recent ingestion had been a reaction to a conflict with his much older male partner, who allegedly engaged him in prostitution. Moreover, the patient was known to perform diverse sadomasochistic sexual habits. Most of the time, the patient behaved infantile; however, periodically, he tried to adopt what he thought was the behavior of a mature adult, including shopping and gambling, also in an impulsive manner. Moreover, he repeatedly got engaged to older, usually handicapped women. Yet, he was never able to cope with these situations and frequently exhibited behavioral outbursts.

It is unknown whether the patient's brain damage with resulting grand mal epilepsy, minor right-sided spasmodic paresis, and oligophrenia was due to alcohol embryopathy, the alleged severe physical abuse, or meningitis at the age of three. Frequently performed electroencephalograms (EEGs) did not reveal a focal or general epileptic potential, but showed light general changes with inconsistent results. Yet, two out of six EEGs revealed left-sided temporoparietal changes indicating cerebral atrophy. A cerebral computed tomography (CT) confirmed a left-sided temporo-parietal atrophy. Cerebrospinal fluid analysis was normal. Due to his general reluctance to cooperate, many diagnostic procedures could not be performed, including modified recalcification time (MRT) and neuropsychological testing. However, clinically, the patient's cognitive deficits were assessed as moderate.

The glove was removed successfully via gastroendoscopy (Figure 2). The metallic objects were observed radiologically on their way through the patient's intestines (Figure 1), facilitated by lactulose only, until they were excreted. There were no complications except for a transient rise of inflammation parameters. The patient did not seem worried at all about the possibility of perforating his bowels and seemed to be proud of his behavior. The patient promised not to ingest any more objects while in the hospital. Unfortunately, he secretly did not take his antiepileptic medication because the given generic carbamazepine did not look the same as the one he was used to taking, and his nonadherence led to an uncomplicated grand mal seizure at the end of his hospital stay. Apart from carbamazepine and lactulose, the patient did not receive any other medication while in the hospital and did not present with any other acute neurological or psychiatric pathology. However, because of his unusual behavioral patterns, he was perceived to be a potential threat, especially to the ward's female staff. In order to prevent him from manipulatively challenging our decision to discharge him as soon as possible, he was discharged abruptly, after the last abdominal x-ray showed that he was cleared of foreign bodies.

In the majority of cases, ingested objects are removed conservatively by vomiting or bowel movements. Sharp

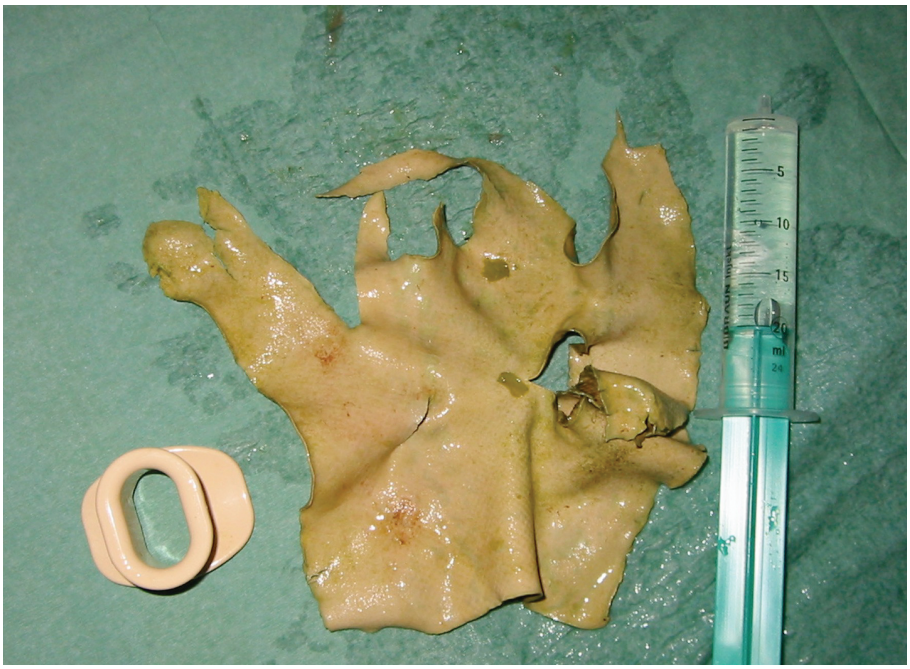

FIGURE 2. Photograph of a rubber glove that was removed endoscopically from the patient's stomach

objects especially can cause a high risk of perforation[7] and often have to be removed by endsocopy or even laparoscopy.[8,9] The treatment of this patient was limited to management by the surgical team, while the patient was maintained in the psychiatric department. It is striking but common that ingested sharp objects, such as blades, pass the digestive system without damage.[10]

The patient's impulsive affective state was actually neutralized by his risky behavior, so he did not present in an acute psychopathological state. He did not exhibit any initiative to develop a more mature way of coping with stress and objected to changes in his current medication.

DISCUSSION

Though the patient's paraphiliae and his incorporation of objects could be interpreted as sadomasochistic acts, the swallowing does not seem to have a sexual implication to him since it has, to our knowledge, never occurred during sexual practice. More likely, this patient has adopted the bizarre behavior of incorporating objects both orally and through the skin as a way of reacting to stress. In fact, self mutilation and the swallowing of foreign bodies are often described in association with impulse control disorders.[3] A similar case without a clearcut interpretation due to a well-described psychopatholgy has been presented by Mbanaso et al[11] in which a young Nigerian man had 497 sharp metallic objects in his stomach. Magical ideation, poverty, isolation, neglect, and loneliness were seen as an explanation. For our patient, it became a way of communicating nonverbally when facing an outer limit and inner tension was rising. It could be argued that the patient warded off psychological decompensation, possibly as a dissociative state, by grounding himself through incorporating physical objects. The patient obviously had a poor subject-object differentiation, due to both mental retardation and possible traumatization in his early development.

The early developmental disturbance in this case seems to be mostly of physical nature, since the patient suffered from severe meningitis at a young age, which led to a chronic brainorganic syndrome with a slight spastic hemiparesis, mental retardation, and epileptic fits. As far as we know, the spells of compulsive aberrant behavior did not occur in the wake of an epileptic fit. Therefore, temporal lobe epilepsy was ruled out as etiology, though psychomotoric fits with strange patterns of oral behavior have been described in literature.[12] How far the left-sided temporoparietal damage contributed to the psychopathology remains unclear, but it is possible that there are limbic or frontal damages as well, leading to dysfunctional emotional response patterns. Other possible explanations for the neuropathology are alcohol embryopathy with infantilism, hyperdynamic syndrome, and deviant behavior or traumatic physical abuse.[13] A more refined diagnostical program, especially MRT and neuropsychological testing, would be desirable for a better interpretation but were denied by this patient.

CONCLUSION

In conclusion, it is difficult to determine a precise etiology to the psychopathology of our patient. However, more likely than the psychological interpretation that early traumatization fixated the patient in the transition between oral and anal phase, is the neurobiological explanation that a functional frontal deficit has led to spells of compulsive bizarre behavior. The presented case may show how difficult but crucial multiprofessional diagnostic procedures and therapeutic interventions may be in the treatment of patients with intellectual disabilities with a complex psychiatric and medical picture.

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