

Massive Ingestion of Foreign Bodies by Patients with Schizophrenia

Soumya Basu, Subhash C Gupta, Sayeed Akthar, Mritunjay Sarawgi

Abstract

Ingestion of foreign bodies has been reported in patients with schizophrenia, sometimes leading to severe complications. This report is of a patient with schizophrenia, who ingested a variety of non-edible substances as a manifestation of the illness and developed acute intestinal obstruction. The number of articles, their shape and size were unusual. The psychopathology that led the patient to indulge in this behaviour is discussed.

Key words: *Foreign bodies, Pain threshold, Pica, Schizophrenia*

Introduction

Ingestion of foreign bodies has been reported in several patients with schizophrenia.¹ This behaviour can lead to severe complications.² There has been a report of death due to aspiration after a woman with schizophrenia swallowed a large number of foreign bodies.³ The occurrence of pica, or craving for non-edible items, is a common occurrence in individuals with mental handicap and also occurs as a manifestation of severe psychopathology.¹⁻³ This paper reports a patient with schizophrenia who, as a manifestation of the illness, ingested a variety of non-edible substances and developed acute intestinal obstruction. The number of articles, their shape, and size were varied.

Case History

A 25-year-old unmarried unemployed man first consulted the Central Institute of Psychiatry in Ranchi, India, in 1989 and was clinically supervised at the Institute for the next 7 years. He had normal developmental milestones, was a graduate, was premorbidly well-adjusted, and did not have any history of substance abuse. He did not have any evidence of brain damage or any major medical illness. There was no family history of mental illness. During the 7 years of

supervision, he was variously treated as an outpatient and an inpatient. Due to exacerbation of symptoms he was admitted to the Institute on 4 occasions and the course of his illness showed a fluctuating clinical picture. Follow up and compliance with the prescribed medications was poor. During the initial phase, he had prominent negative features, occasional violent outbursts, and a well-systematised delusion of persecution against his neighbours. Throughout the period of supervision, it was difficult to establish a rapport with him.

All the admissions were due to psychotic exacerbations, which initially manifested as violent behaviour, delusions of persecution, delusion of reference, and bizarre delusions — delusions of grandeur became one of the prominent features. He was diagnosed with paranoid schizophrenia.

During the initial period, he was seen to be fearful and was having delusions of persecution against all his neighbours and the local ruling party. However, he gradually became defiant and claimed he was powerful and capable of bringing doom to all humanity. At times he claimed that he was 'Ravana' (the king of demons according to the Hindu epic Ramayana). He abused tobacco in a large quantity and experienced a gross deterioration in personal care.

The treatment schedule included chlorpromazine 500 mg and trihexiphenidyl 2 mg for the initial 2 years. This regimen was changed to trifluoperazine 15 mg for 1 year and ultimately to fluphenazine-decanoate 25 mg intramuscularly every 21 days for the next 3 to 4 years. For a period of 1 year he was additionally prescribed 900 mg of lithium carbonate with a serum lithium concentration between 0.6-0.96 meq/l. During the hospital admissions he made a steady recovery but his follow up and compliance was poor.

During his fourth and last admission in 1996, the major complaint was that he was eating dead insects, dead lizards, dead snakes, a dead frog, and animal bones. He also had florid delusions of grandiosity during this period and claimed that he had acquired all the power from the divine sources. However, he remained guarded about the reasons for his abnormal eating behaviour.

Dr Soumya Basu, MD, Central Institute of Psychiatry, Kanke, Ranchi, India.

Dr Subhash C Gupta, DPM, MD, Central Institute of Psychiatry, Kanke, Ranchi, India.

Dr Sayeed Akthar, MD, DNB, Central Institute of Psychiatry, Kanke, Ranchi, India.

Dr Mritunjay Sarawgi, MS, Rajendra Medical College and Hospital, Bariatu, Ranchi, India.

Address for correspondence: *Dr Sayeed Akthar, Central Institute of Psychiatry, Kanke, Ranchi-834006, India.*

Tel: (91 651) 223 2209/223 2618/245 0971; Fax: (91 651) 223 1841; E-mail: soumya_basuin@yahoo.co.in

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Figure 1. X-ray of the abdomen revealing multiple radio-opaque shadows.



One month after he was discharged from hospital, he complained of abdominal discomfort and vomiting. Examination revealed a lump in the epigastric region with increased intestinal peristaltic sound. He was referred for surgical opinion and a diagnosis of intestinal obstruction was made. X-ray of the abdomen revealed multiple radio-opaque shadows (Figure 1). The cause of the intestinal obstruction was attributed to foreign bodies. An emergency laparotomy was performed and 36 metallic items were recovered from his abdomen (Figure 2). The cumulative weight of the items was 275 g and they ranged from nails, screws, door-latches, parts of a bullock cart, parts of a spoon, razors, and blades. The largest item weighed nearly 50 g, with a length of 12 cm. The patient had an uneventful postoperative recovery.

At the subsequent follow-up visit, he was asked about his abnormal eating habits and he revealed that he had been eating non-edible items for many years. He was always fearful and believed that he would be killed by his enemies, so he was eating these things to make himself immune to any attack. He believed that by consuming the metallic objects and dead creatures, he would imbibe universal powers. This would not only help him to become all-powerful but would also help him to defend himself from

Figure 2. Thirty-six metallic items that were recovered from the patient's abdomen.



his enemies. He also believed that the metals would become absorbed by his stomach and end up in all his organs, making them impregnable from inside. This belief amounted to delusion. The patient attended the outpatient department twice after this incident. He continued to harbour delusions of persecution and reference, but was prevented from ingesting any non-food items by his family members, who kept a constant vigil. In September 1997, he committed suicide by hanging himself. In the days before his suicide, he was found to be increasingly fearful, and kept saying that people were coming to kill him and it was difficult to defend himself from these enemies.

Discussion

This patient provides insight into the diversity of clinical manifestations with which a patient with schizophrenia can present. The evolution of the symptomatology and the morbid thought process responsible for such a dramatic manifestation is apparent from this patient. Plagued by the fearful delusion of persecution and reference, the patient apparently adopted this abnormal behaviour to 'defend' himself. This perhaps accounted for the emergence of the grandiose delusions. However, throughout the illness, persecution remained at the core. The explanation that the patient offered for his eating behaviour cannot be explained from any religious belief or any sub-cultural norm and can be best classified as bizarre delusion.

The uniqueness of this case is the range of non-edible items ingested, including dead animals and iron objects, the largest of which was 12 cm long and weighed 50 g. Although reports of intestinal obstruction from ingestion of foreign bodies, with subsequent perforation and peritonitis, are noted among patients with schizophrenia,¹⁻⁷ the number and variety of objects ingested by this patient has rarely been reported.⁶

Unlike other common disorders in which pica has been commonly reported, for example pregnant women, iron deficiency anaemia, and mental retardation,⁴ patients with schizophrenia are likely to have forms of pica that are more atypical and dramatic. This is due to a manifestation of psychopathology in patients with schizophrenia.^{2,3,6} There

was no apparent evidence to indicate that the abnormal behavioural manifestation was due to brain damage or organicity in this patient, therefore it can be presumed that the behaviour was a manifestation of the schizophrenic illness.

Along with the psychopathology, (manifested as bizarre delusion) patients with schizophrenia are known to have altered visceral and taste sensations.⁸⁻¹² There have been reports of silent myocardial infarctions, burst appendix without complaints of pain, and decreased cough reflex in patients with schizophrenia.⁸⁻¹² This apparent alteration of visceral pain perception may account for the endurance of pain caused during the repeated intake of heavy metal objects. The altered taste sensation of patients with schizophrenia,¹³ along with the gross personality disorganisation may also account for the capability of this patient to tolerate the taste of non-edible items such as dead animals and insects.

Unlike most of the earlier case reports in which foreign bodies were a post-mortem finding,¹⁻³ this patient survived the operation to remove the items. His suicide was not directly related to his eating behaviour but may have been due to his feelings of defencelessness when he was forced to stop his abnormal eating. Although it is impossible to exactly pinpoint the cause of the abnormal eating behaviour, a possible explanation is the patient's bizarre delusion and possible altered visceral and taste sensation.

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Erratum

On page 26 of the March 2003 issue of the *Hong Kong Journal of Psychiatry*, an error occurred in the Review Article 'Ng RMK, Cheung M, Sun L. Cognitive-behavioural Therapy of Psychosis: an Overview and 3 Case Studies From Hong Kong. *Hong Kong J Psychiatry* 2003;13(1):26-33.'

The author names, and affiliations in the article should have appeared as:

RMK Ng, M Cheung, L Sun

Dr RMK Ng, MBChB, MSc, MRCPsych (UK), FHKAMPsych,

Department of Psychiatry, Kowloon Hospital, 147, Argyle Street, Hong Kong, China.

Miss M Cheung, MSc (Clin Psych), Department of Psychiatry, Castle Peak Hospital, Tuen Mun, Hong Kong, China.

Miss Lina Sun, MSc (Clin Psych), Department of Psychiatry, Castle Peak Hospital, Tuen Mun, Hong Kong, China.

The *Hong Kong Journal of Psychiatry* sincerely regrets any confusion caused by this error.