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Radiologically Striking Colonic Fecal Impaction Due to Date Pit Ingestion in a Psychiatric Patient: A Case Report

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ABSTRACT

Fecal impaction is a frequent complication in elderly and neuropsychiatric populations, often due to multifactorial causes such as impaired motility, medication side effects, and behavioral abnormalities. In rare instances, ingestion of indigestible material, such as date pits, can lead to obstructive fecal loading. We report a 54-year-old woman with bipolar disorder and schizophrenia who presented with abdominal pain and constipation lasting three days. Laboratory findings were unremarkable, except for an elevated ESR. Imaging studies, including plain abdominal radiographs and abdominal ultrasound, showed no clear signs of obstruction but revealed colonic fecal loading. A CT scan without contrast demonstrated marked colonic dilatation and multiple hyperdense intraluminal foreign bodies, consistent with date pits. Upon questioning, the patient confirmed excessive ingestion of whole dates. Conservative management with enemas led to successful resolution, and the patient passed stool containing numerous intact date pits. Unusual causes of fecal impaction should be considered in at-risk populations, particularly psychiatric patients with erratic dietary behaviors. Recognizing the CT signature of ingested date pits is essential for accurate diagnosis and timely, conservative management.

Introduction

Fecal impaction is a prevalent complication in elderly and neuropsychiatric populations, often resulting from decreased gastrointestinal motility, chronic constipation, poor hydration, or the use of constipating medications [1,2]. Ingestion of indigestible materials whether intentional or accidental adds complexity to the diagnosis and management of such cases, especially in patients with psychiatric disorders [3]. Foreign-body ingestion, though more commonly involving coins, dentures, or food boluses, may occasionally involve natural items such as fruit pits or seeds. Date pits, in particular, are radiodense and can act as obstructive agents when ingested in large numbers [4]. Their presence in the colon may mimic other intraluminal pathologies on imaging, making CT a valuable diagnostic tool due to its high sensitivity for detecting fecal loading and

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foreign material [5].

Here, we present a rare case of colonic fecal impaction caused by the massive ingestion of date pits in a middle-aged woman with bipolar disorder. The striking CT findings underscored the importance of dietary history and non-invasive imaging in diagnosing unusual causes of bowel obstruction. Radiodense date pits on non-contrast CT can explain colonic fecal impaction in psychiatric patients with erratic eating. Prompt recognition and targeted dietary history enable simple, enema-based management, avoiding unnecessary invasive work-up.

Case Presentation

A 54-year-old woman with a known history of bipolar disorder and schizophrenia presented with abdominal pain and constipation persisting for three days. Her regular medications included sodium valproate and lorazepam. She denied nausea, vomiting, or fever. On examination, she was hemodynamically stable, with mild abdominal distension and diffuse tenderness. Bowel sounds were normoactive. Initial laboratory evaluation revealed a normal white blood cell count with no leukocytosis, normal serum sodium and potassium levels, BUN of 12 mg/dL, and creatinine of 1.1 mg/dL. Liver enzymes were within normal limits (AST 29 U/L, ALT 21 U/L). ESR was mildly elevated at 50 mm/h. Troponin was negative.

Abdominal radiographs in upright and supine positions showed no air-fluid levels or signs of bowel obstruction. Given persistent symptoms, an abdominopelvic CT scan without IV contrast was performed, revealing marked colonic dilatation with fecal impaction and multiple oval, radiodense foreign bodies consistent with date pits. Upon questioning, the patient admitted to recent excessive consumption of dates without removing the pits (Figure 1). The characteristic appearance of the date pits on CT imaging helped confirm the diagnosis and guide conservative management with enemas.

The characteristic appearance of the date pits on CT imaging helped confirm the diagnosis and guide conservative management with enemas. Abdominal ultrasound demonstrated grade I hepatic steatosis, mild intrahepatic bile duct ectasia, absence of the gallbladder (due to prior cholecystectomy), small subhepatic free fluid, and fecal-filled colonic loops. CT also showed minimal left-sided pleural effusion. The patient was treated with repeated enemas and supportive care. Over the next 24 hours, she passed large quantities of stool containing numerous intact date pits, with resolution of abdominal symptoms. She was discharged in good condition with dietary advice and psychiatric follow-up.

Discussion

Fecal impaction is a common clinical problem, especially among the elderly and those with neuropsychiatric conditions. Its pathogenesis is often multifactorial, involving decreased gastrointestinal motility, chronic use of constipating medications, cognitive impairment, and poor dietary habits [1,2]. In our patient, the presence of chronic psychiatric illness and the use of sodium valproate—an agent known to slow gut motility—likely contributed to reduced bowel transit. Psychiatric patients, particularly those with schizophrenia or bipolar disorder, may engage in abnormal dietary behaviors, including the ingestion of large quantities of indigestible material [3,4]. Date pits are an uncommon but potentially problematic form of phytobezoar, especially when consumed whole in significant numbers. Although most phytobezoars form in the stomach, their migration into the colon can result in distal fecal impaction, particularly if colonic motility is compromised [5].

In this case, the accumulation of radiodense date pits created a striking image on abdominal CT scan. Date pits are highly attenuating due to their dense fibrous structure, which allowed for easy visualization on non-contrast imaging [6,7]. Their presence should be considered in regions or populations where dates are commonly consumed, especially when a patient presents with unexplained constipation or abdominal discomfort. CT imaging remains the most sensitive modality for identifying the extent of fecal loading and the presence of intraluminal foreign bodies. It is particularly useful when radiographs are inconclusive, as in our patient [8]. The clear demarcation of individual date pits within a fecal mass helped avoid more invasive diagnostic interventions.

Management of fecal impaction is generally conservative, involving enemas, laxatives, and hydration [9]. Rarely, endoscopic or surgical interventions are required. Our patient responded well to enemas, passing large quantities of stool mixed with intact date pits, confirming the diagnosis. From a public health and preventive perspective, this case emphasizes the need for dietary education among psychiatric patients, especially those with limited insight or impaired judgment. Clinicians should inquire specifically about nonstandard dietary practices in such populations [10,11]. Moreover, radiologists and emergency physicians should be aware of the distinctive imaging appearance of

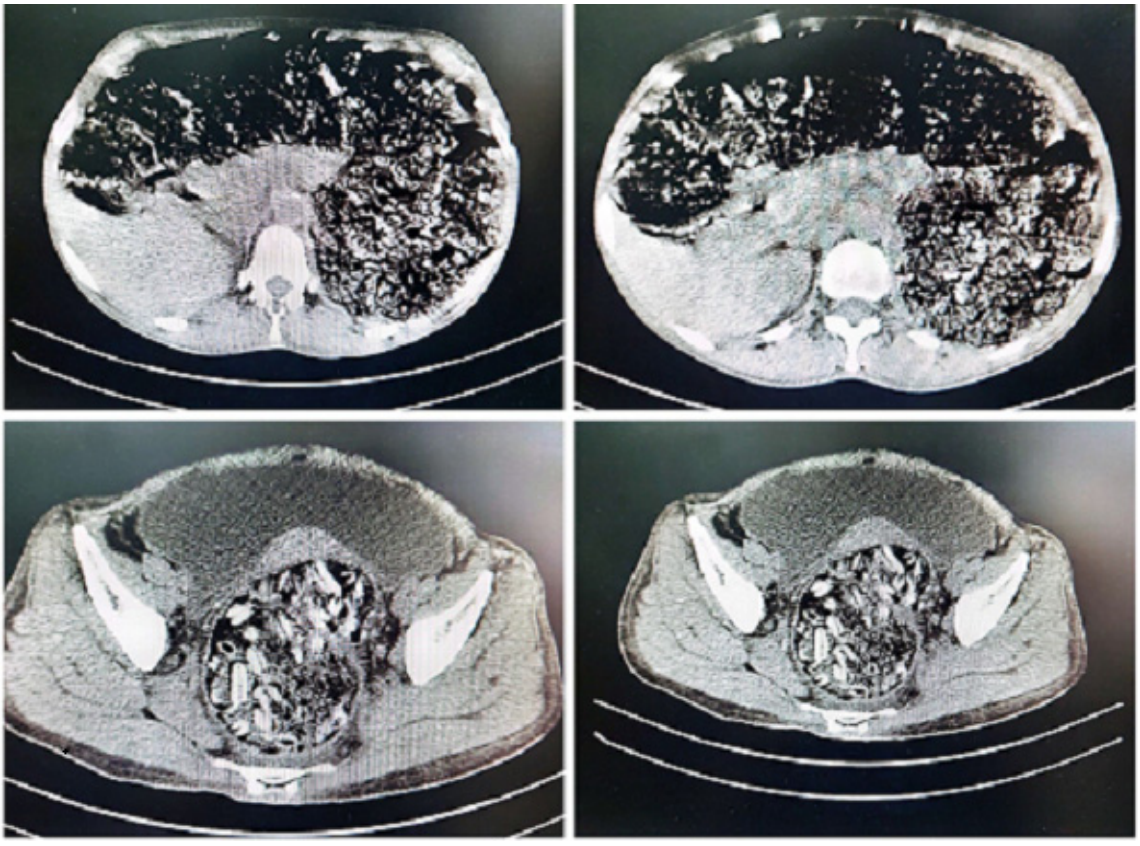

Fig. 1. CT images of the abdomen and pelvis showing marked colonic dilatation and fecal impaction with multiple radiodense foreign bodies in the colon. The images (top left and right, bottom left and right) demonstrate the presence of date pits (highlighted as oval, hyperdense structures) within the fecal mass, consistent with a diagnosis of colonic fecal impaction due to date pit ingestion in a psychiatric patient with bipolar disorder.

ingested date pits, which may mimic calcified foreign bodies or enteroliths [12,13].

Informed Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images. Identifying information has been omitted to protect anonymity. A copy of the written consent is available for review by the journal editor upon request.

(If consent was provided by a legal guardian due to impaired capacity, change the first sentence to: "Written informed consent was obtained from the patient's legal guardian…".)

Author Contributions

Maryam Soheilipour: Conceptualization; investigation and data curation; imaging review; writing—original draft.

Hoda Imani: Clinical management and supervision; methodology; writing—review & editing; corresponding author.

Elham Tabesh: Literature search; methodology; writing—review & editing.

All authors read and approved the final manuscript and agreed to be accountable for all aspects of the work.

Ethical Considerations

Compliance with ethical guidelines

There were no ethical considerations to be considered in this article.

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Conflict of Interests

The authors have no conflict of interest to declare.

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