

Case Report

Pregnancy delusion hinders the diagnosis of achalasia in a patient with life-threatening emaciation

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Abnormal eating behaviour among psychiatric patients is associated with several psychiatric conditions, but may also be caused by a comorbid physical condition. Clinical assessment of a psychiatric patient is often challenging, which contributes to an increased rate of undiagnosed medical conditions and an increased mortality rate. We present the clinical case of a 46-year-old woman with a long-term delusion of triplet pregnancy, and recurrent vomiting. She experienced intense weight loss and eventually faced a life-threatening situation due to achalasia, which was incidentally discovered on a chest X-ray during her second psychiatric hospitalization, after several other tests, including upper digestive endoscopy, returned normal results. After a successful laparoscopic Heller's myotomy, her digestive symptoms greatly improved. This report illustrates the difficulty of establishing clinical-surgical diagnoses in psychotic patients, as some delusions seem to explain clinical complaints, masking and delaying the diagnosis of comorbid conditions.

INTRODUCTION

People with psychotic disorders have a higher mortality rate than the general population [1]. Denial of symptoms, refusal to seek treatment, failure to establish differential diagnoses and difficulties in detecting comorbid diseases contribute to this increased risk [1]. Several clinical and surgical conditions may be associated with psychiatric symptoms, either as causal factors, as consequences of the symptoms, or co-occurring with primary psychiatric disorders [2–5].

The presence of abnormal eating behaviour among psychotic patients, such as pica, gorging, rumination syndrome and refusal to eat, due to negative or to positive symptoms, is well known in the psychiatric literature. Positive symptoms such as delusions and hallucinations are the main reason for restrictive food intake and weight loss among psychotic patients [6]. In this report, we describe the case of a woman with severe weight loss, whose psychotic symptoms were not the cause of, but represented an obstacle to, the diagnosis of a life-threatening clinical-surgical condition.

CASE REPORT

A 46-year-old female patient was referred to the outpatient psychiatric service of the University of Campinas, presenting with a body mass index (BMI) of 13.88 kg/m² (weight: 30.4 kg) and with the diagnosis of a delusional disorder and a suspected anorexia nervosa. She had experienced a structured delusion of pregnancy with triplets for the previous 7 years, causing a severe impact on her quality of life, including a near-total absence of social relationships and abnormal behaviour. For example, she redecorated her house, at considerable expense, for the sake of her 'babies'.

Despite many negative urinary pregnancy tests and pelvic ultrasounds, her beliefs were unchanged: she felt pregnant, argued that she was not menstruating, and claimed that she could see the babies' faces in the ultrasounds. She demanded medical explanations for the non-birth of the babies, and complained that the triplets were pressing her stomach, thus blocking the passage of food. She felt as if the food were lodging in her stomach, causing gastric discomfort. To attenuate this

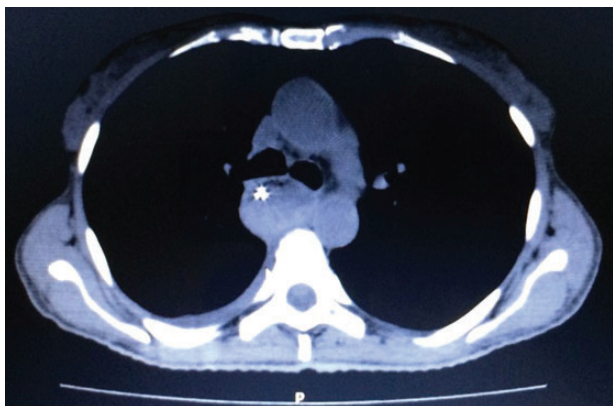


Figure 1: Computed tomography, at the level of the tracheal carina, showing esophageal dilatation. The patient had a nasogastric feeding tube.

symptom, she had, a year previously, begun to self-induce vomiting and to decrease food intake, leading to a 20 kg loss in 9 months. She denied using any other purgative methods or being afraid of gaining weight. Previous examinations, including upper digestive endoscopies, were normal. At the beginning of her follow-up, the only positive laboratory findings were subclinical hypothyroidism and iron-deficiency anemia. She had no hallucinations, her affect was partially blunted and she had no insight whatsoever. Owing to her low weight and very intense psychotic symptoms, she was admitted to a psychiatric ward and submitted to a broad clinical evaluation, without any other positive findings. She did not meet the criteria for anorexia nervosa. Instead she was diagnosed with a delusional disorder and hypothyroidism. Both food refusal and vomiting were considered secondary to her intense delusional beliefs. She was prescribed olanzapine 10 mg/day and levothyroxine 25 μ g/day and gained 2 kg in 2 weeks. After 20 days of involuntary hospitalization, she absconded from the ward and abandoned the course of treatment.

One year later, she voluntarily returned to the outpatient psychiatric service. She continued to hold delusional beliefs, including the delusion that unborn triplets were pressing against her stomach. She had experienced additional weight loss, and now weighed 25.1 kg (BMI: 10.8 kg/m²). She was readmitted to the psychiatric ward and prescribed clozapine. After 45 days of hospitalization, she had developed a fever and a cough. A plain chest X-ray revealed considerable esophageal dilation. She was then submitted to a chest tomography (Fig. 1), an esophageal manometry and a barium swallow study (Fig. 2), which confirmed the delayed esophageal emptying (Supplementary material Figure) and enabled the diagnosis of esophageal achalasia. A successful laparoscopic Heller's myotomy was performed, which greatly improved her digestive symptoms. She was discharged after 73 days of hospitalization, weighing 30.9 kg (BMI: 13.37 kg/m²) and taking clozapine 200 mg/day. At present, she remains delusional, but her weight has increased to 49.150 kg (BMI: 21.27), with no gastric complaints.

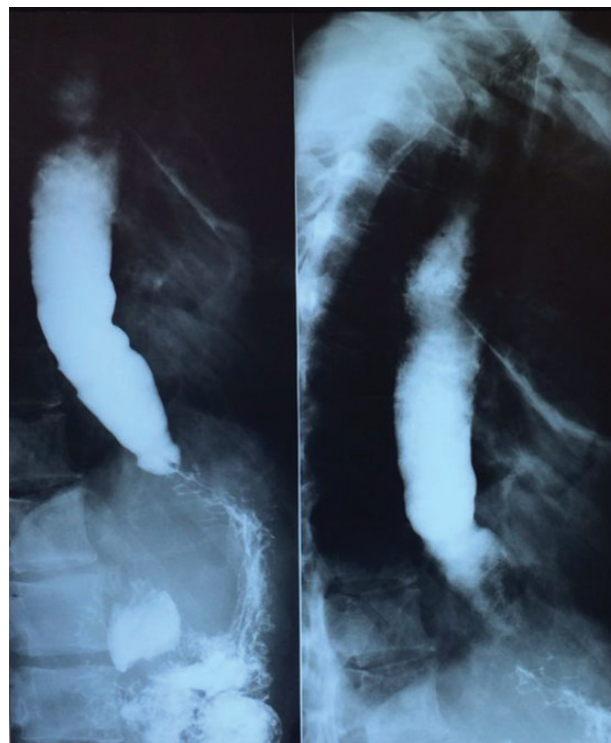


Figure 2: Barium swallow study with continuous fluoroscopy confirming the acute narrowing at the gastro-esophageal junction.

DISCUSSION

This report describes a patient with a delusional disorder and comorbid primary achalasia, in which digestive symptoms were given a delusional interpretation. This delusional misattribution contributed to the delay of the diagnosis of the esophageal disease, notwithstanding the several clinical examinations, laboratory and imaging tests and hospitalization. Association between achalasia and psychiatric symptoms is not rare: indeed, achalasia is a differential diagnosis to anorexia nervosa. There have also been reports that these conditions can occur simultaneously [1, 3–5]. In such cases, the initial diagnosis of anorexia nervosa may mask and delay the diagnosis of achalasia, potentially leading to worse clinical outcomes.

This was not the first case of a psychotic patient with a very low BMI (\sim 10) presenting to the outpatient psychiatric service of the University of Campinas. A young male patient refused to eat because his delusion forbade him to take the lives of other living beings, including plants. Another patient was so absorbed by her delusions that she repeatedly forgot to eat. Fawzi and Fawzi [7] showed that unusual eating attitudes are more common in schizophrenic patients than in the general population, especially in those with more active psychotic symptoms. Moga *et al.* [8] describe a 42-year-old woman with a long-standing history of anorexia nervosa who developed religious delusions, including the conviction that God prohibited her from eating. However, these patients did not present a co-occurring physical disease explaining their weight loss.

Renca *et al.* describe a 68-year-old patient who insidiously developed hypochondriac delusions followed by food refusal, persistent hypoglycemia and neuroglycopenic symptoms. The patient was treated as psychotic for 2 years until a diagnosis of insulinoma was made [9].

To the best of our knowledge, however, our report is the first description of a psychiatric patient with life-threatening weight loss, without anorexia nervosa, in which a complex delusion hindered the diagnosis of a co-occurring achalasia.

As exemplified by the cases mentioned above, the coexistence of psychopathological and physical symptoms is not only common, but the rule. The need for deeper investigation of physical diseases is vital, as either cause-effect or comorbid conditions may occur. Among psychotic patients, medical complaints can become the raw material for delusional elaboration, to the extent that the delusion may appear to explain the reported symptoms. The impact of clinical comorbidities (and perhaps the mortality rate itself) among these patients might decrease if psychiatrists and general clinicians alike became more attentive to the physical health of patients with mental disorders, combining efforts to prevent, promptly diagnose and treat their somatic diseases, in addition to their mental disorders. Written informed consent was obtained from the patient for publication of this case report.

SUPPLEMENTARY MATERIAL

Supplementary material is available at *Oxford Medical Case Reports* online.

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