Two Cases of Gastrointestinal Delusional Parasitosis Presenting as Folie à Deux

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ABSTRACT

Delusional parasitosis is a psychiatric illness in which patients believe that they are infested by parasites without any evidence to support this belief. Cases typically involve cutaneous manifestations. We present 2 cases of gastrointestinal delusional parasitosis, with one unfortunate fatal outcome. Our main goal is to highlight the importance of early recognition of this disease to facilitate appropriate management. Delusional infestation is considered a somatic delusional disorder, and first-line treatment involves the use of atypical antipsychotics, as recommended by the Diagnostic and Statistical Manual, 5th edition.

INTRODUCTION

Parasitic infections are endemic worldwide. Giardia and Cryptosporidium are the most common etiologies of gastrointestinal parasitic infections and usually present with nondysenteric diarrheal illness in the immunocompetent patient. Diagnosis can be made by obtaining a stool for ova and parasites, and sensitivity can be increased to 92% by examining at least 2 separate stool samples. Ekbom syndrome, also known as delusional parasitosis (DP), is an uncommon psychiatric illness in which patients report being infested by parasites despite medical evidence arguing against it. A study conducted by Bailey et al, estimated that the incidence was 1.9 per 100,000 person-years. In the absence of evidence of ongoing parasitic infection, the diagnosis of DP should be considered. Unfortunately, psychiatric referral is often delayed secondary to patient refusal and poor insight into their disease. Although typically a benign entity, there are reports of suicide secondary to DP, highlighting the potential severity of the delusion and the need for early recognition and psychiatric referral. We present a case of 2 patients suffering from combined “folie à deux” manifesting as DP.

CASE REPORT

Patient 1: A 58-year-old woman with a medical history of “chronic Lyme disease” presented to our clinic reporting 2 years of parasites in every bowel movement. She showed us cell phone pictures of her many stools, describing brown, stringy structures in her stool as “worms.” Before this, she had been seen by multiple healthcare providers in Western Massachusetts and had undergone unrevealing extensive workup including multiple stool analysis, imaging of the abdomen, and endoscopic evaluations. She had been empirically treated with mebendazole, ivermectin, and herbal supplements by local naturopathic physicians. The patient described taking an herbal supplement called Mimosa pudica, which she believed to cause expulsion of the “parasites” from her intestines. During our evaluation, the patient expressed a desire to discuss hospice care for her “terminal” disease. We repeated some of her workup; complete blood count did not show any eosinophilia, and she refused to give a stool sample for repeat ova and parasites. Despite offering support and repetition of her infectious workup, the patient committed suicide 2 days after her clinic visit.

Patient 2: A 49-year-old woman, who was a friend of the first patient, presented for a fourth opinion for several years of passing “rope worms” in her stool. In fact, she presented to our office with a large liquid sample and several stool pictures demonstrating elongated, black or brown, and soft material which had tested negative for ova and parasites in multiple locations over the past several years. Her workup to date has consisted of multiple unrevealing studies including 3 stools for ova and parasites, stool cultures, culture-independent infectious stool analysis, esophagastroduodenoscopy, and colonoscopy. She had also been taking M. pudica,
which she reported increased the parasite content of her expelled stools, leading to “better cleansing.” We ordered stool for ova and parasites, which came back negative, and also sent a prescription for albendazole, which was never filled.

DISCUSSION

DP involving the belief that one is infested with gastrointestinal parasites is much less common than the cutaneous variety. It is most commonly seen in middle-aged women. In a meta-analysis of 1,223 cases of DP reviewed, the mean age was found to be 57 years with a male to female ratio of 1:2.36. It can be primary, in which it arises spontaneously, or secondary, in which it is associated with other medical and psychiatric conditions including, but not limited to, bipolar disorder, depression, and schizophrenia. The 2 patients whom we described were friends, and they both presented around the same time with similar beliefs, which raised our suspicion for “folie á deux,” a delusion shared between close contacts, which has been seen in 5%–15% of cases of DP. Management is challenging and requires a multidisciplinary approach, including primary care physicians, specialists, and psychiatrists.

Treatment of DP involves the use of antipsychotic drugs, and both typical and atypical antipsychotics have been used. In 272 cases reviewed by Trabert, antipsychotics were used in 50%, whereas other therapies, including antidepressants, were only used in 5%–10%. Pimozide is no longer used as a first-line therapy because its use is limited by its side effects and the need for monitoring for QT prolongation. Meehan et al, reported 3 cases of DP that were treated successfully with olanzapine at 5–10 mg/d. It is important to recognize that this condition is associated with serious psychiatric comorbidities and should be considered life-threatening, as seen in our first case. Symptoms such as false beliefs, failure to comply with treatment, and extensive normal investigations should alert a physician to the diagnosis. Both of our patients refused to release information from the outside hospital.

Common gastrointestinal parasitic infections, including Cryptosporidium, Giardia, and Cyclospora, usually present with severe watery diarrhea, which is the DP patient’s more common complaint. However, other infections such as schistosomiasis or amebiasis may present with constitutional symptoms and should still be ruled out. Our patients did not have increased risk of exposure, denied any recent travels, and were immunocompetent. Moreover, these infections had been ruled out with testing before the referral to our clinic. It is interesting that both of our patients were claiming to stop passing “worms” when the supplement was discontinued, insisting that this meant that the “worms” were building up rather than the obvious conclusion that it was the supplement that was causing the “worms” in the first place.

When evaluating a patient in whom chronic infectious diarrhea is considered, a thorough history is of paramount importance because incubation period, travel history, presence of sick contacts, or hospitalizations can help narrow the differential diagnosis. Gastroenterologists should be aware of DP and its gastrointestinal variant, and they should be prepared to bargain with such patients to get them to agree to evaluation and treatment by behavioral health specialists. As our first case demonstrates, this can be a life-threatening illness, and the risk should be taken seriously.

DISCLOSURES

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Informed consent could not be obtained for this case report. All identifying information has been removed.

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