Case Report

A 14-Year-Old Girl with Recurrent Vulvar Abscess

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A B S T R A C T

Background: Inflammatory bowel disease is a relatively common condition that may present in a myriad of fashions, from the more frequently seen symptoms of diarrhea and abdominal pain to the less likely presentations with fistulas and abscesses.
Case: A 14-year-old female with a presumed diagnosis of a Bartholin's gland cyst was treated for over 1 year with both medical and surgical interventions without her symptoms ever completely resolving. It was later found that these recurring vulvar abscesses were a manifestation of Crohn's disease.
Conclusion: While the patient's history and physical are both very important in determining cause for pathology, we must also realize the importance of re-examining and broadening our differential diagnosis when faced with a patient who has failed multiple avenues of care.
Key Words: Inflammatory bowel disease, Crohn's disease, Vulvar abscess

Introduction

Vulvar abscesses are well-described gynecologic conditions typically associated with simple infections that develop most commonly within Bartholin or Skene glands. They have also been described originating from skin and hair follicles, or wounds in the vulvar region. However, in rare situations, the abscess may be an initial presenting symptom of inflammatory bowel disease (IBD). Ulcerative colitis (UC) and Crohn's disease are the two forms of IBD. Key features of UC includes diffuse mucosal inflammation that extends proximally from the rectum and is restricted to the colon while Crohn's disease is characterized by chronic, relapsing inflammation frequently associated with perianal abcesses and fistulas. This case report describes an adolescent patient with recurring vulvar abscesses treated surgically and with prolonged courses of antibiotics. These abscesses persisted for over 1 year without resolution, at which time further evaluation ultimately demonstrated inflammatory bowel disease.

Case

A 14-year-old virginal female was referred from an outside facility with a 16-month history of a recurring vulvar abscess. These symptoms began at age 12. Of note, her medical history was also significant for difficulty with feeding as an infant requiring G-tube feeds for a few months, as well as a history of chronic diarrhea for several years. The diarrhea was attributed to lactose intolerance, although it improved minimally on a lactose-free diet and no further work-up was pursued. Otherwise there was no significant past medical or surgical history; menarche at 9 with normal monthly menses was reported.

The vulvar abscess was evaluated initially in the emergency room in February 2011 for what was believed to be a Bartholin's cyst. The cyst was drained in the emergency department, however over the following months, it continued to enlarge and cause the patient discomfort. Pain was severe such that she was unable to sit down comfortably at school. She was subsequently taken to the operating room twice to have the cyst drained and surgically resected, first in May 2011 and again in July 2011 after reaccumulation. A culture from a sample obtained at her second surgery grew Acinetobacter iwoffii. Consequently, she was placed on trimethoprim/sulfamethoxazole (TMP/SMX). She remained on antibiotics for ten months, without ever having full remission of the abscess. The patient reported periodic improvement, but her pain and vulvar swelling completely resolved. During this period, the cyst reaccumulated and spontaneously drained several times, which caused significant distress for the patient. After failure of both surgical and medical treatment, she was referred to our tertiary care facility for further evaluation.

Upon presenting to our tertiary care facility, a limited physical examination demonstrated right labial swelling with induration extending across the length of the labia majora. There was no discrete mass palpated. Additionally, vesicular inflamed lesions were noted below the labial swelling and on the left lower labia across from the right

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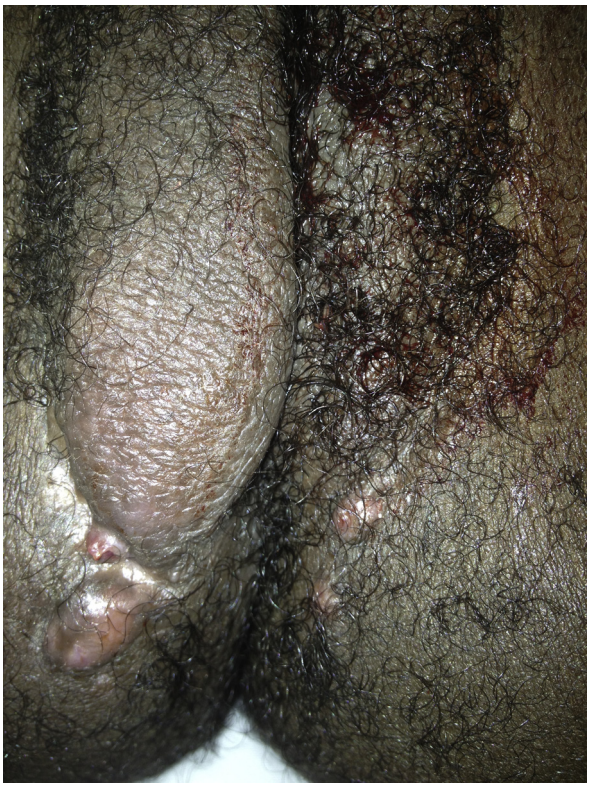

Fig. 1. On presentation to our facility, prior to infliximab initiation. Note lesions inferior to right (*R*) and left (*L*) labiae.

sided lesion (Fig. 1). Given the patient's age, discomfort in the region, and virginal status, the physical evaluation was limited. There was no open lesion for culturing at that time. A magnetic resonance imaging (MRI) of the pelvis with and without contrast was obtained to further delineate the abscess. The MRI displayed a rim enhancing fluid collection within the right posterior perineum/buttock region consistent with an abscess, measured 2.2 cm × 9 mm × 4 cm, and was associated with multiple linear perianal fistula tracts (Fig. 2). An additional smaller abscess was noted posteriorly in the right labia majora (Fig. 3). There were no definite inflammatory changes of bowel and her uterus and adnexae were normal.

The fistula tracts seen on MRI raised suspicion for IBD, and the pediatric gastroenterology team was consulted on an outpatient basis. While awaiting the gastroenterology consult, it was decided by the primary team to discontinue TMP/SMX and initiate ciprofloxacin and metronidazole in order to broaden antibiotic coverage, which significantly improved her symptoms. However the patient continued to complain of a foul smelling vaginal discharge. She was admitted for further evaluation, at which time, serological evaluation was significant for mild iron deficiency anemia, while serum chemistries, ESR, CRP were all within normal limits. The Prometheus IBD sgi Diagnostic test (San Diego, CA), a panel that combines serologic, genetic and inflammatory markers, was performed in August 2012. The findings of increased antibodies for both anti-*Saccharomyces cerevisiae* antibody (ASCA) and outer membrane porin C (OmpC) were suggestive of a diagnosis of Crohn's Disease. She further underwent upper endoscopy and colonoscopy with biopsies, which were normal except for mild inactive gastritis. A diagnosis of Crohn's disease was made as a result of the colonoscopy based on multiple perianal fistula tracts, perineal abcesses and positive serologies. The antibiotics were discontinued and she began induction therapy with infliximab. Within two treatments during the induction phase, her fistulae stopped draining, there was remarkable improvement in her diarrhea and abdominal pain (Fig. 4) and she began gaining weight. She has had no recurrences since the initiating infliximab therapy.

Comment

Here we present a case of a young girl with persistent vulvar symptoms for over one year, despite treatment, who was later determined to have an underlying inflammatory bowel disease as the etiology for her symptoms. Inflammatory bowel disease is a chronic inflammatory condition,

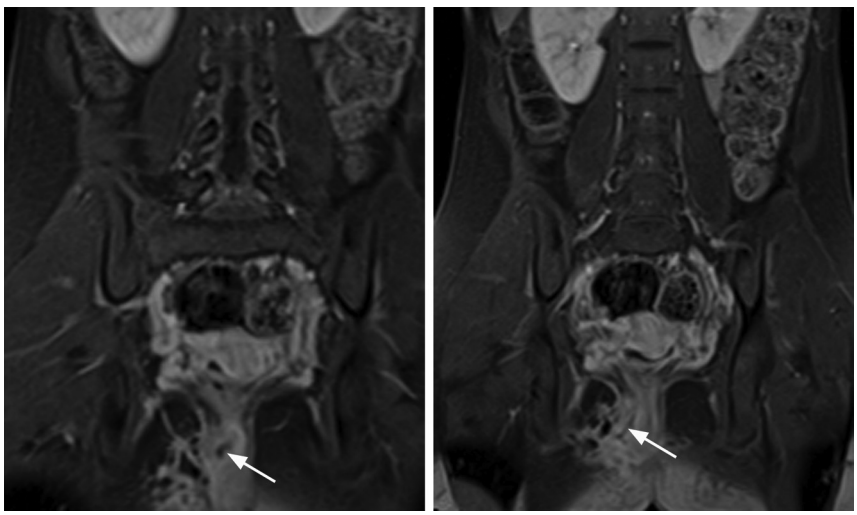

Fig. 2. Coronal T1 post contrast images. *Arrows* highlight the perianal fistulous tract leading to the right. Intense phlegmonous enhancement of the surrounding soft tissue in the right buttock.