



No Butts About It: Approaching Anorectal Abscesses in the Urgent Care Center

Urgent message: Given the high rate of systemic involvement in patients with anorectal abscess, it is essential for urgent care providers to identify patients with risk factors and, when indicated, ensure those patients receive incision and drainage and appropriate follow-up care.

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Abstract

A 60-year-old male presented to urgent care with a 2-day history of buttock and rectal pain. He was noted to have several risk factors for anorectal abscess with a concern for systemic involvement. He was escalated to the emergency department where an anorectal abscess was discovered on CT. He later developed a fistula, despite receiving an incision and drainage (I&D) by general surgery in the OR.

There is a high complication rate of systemic involvement and fistula development, even with appropriate treatment and follow-up. It is important for urgent care providers to readily recognize an anorectal abscess and ensure patients receive I&D and appropriate follow-up care due to these complications. This often requires escalation of care to the ED to facilitate timely general surgery consultation and treatment.

Introduction

Much of providing care in an urgent care setting involves



determining a safe and appropriate disposition for the patient. Many patients are safe to be treated and sent home with appropriate follow-up parameters. However, there will be some instances that require escalation of care to the emergency department. Anorectal abscesses or suspicion thereof are one clinical instance that should

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prompt the clinician to strongly consider escalation of care.

The goal of this case report is to help clinicians identify potential anorectal abscesses in patients and discuss the reasoning as to why escalation to the ED may be prudent. This case will cover topics such as common presentations and symptoms, risk factors, complications, and treatment of anorectal abscesses, and highlight the rationale for escalation of care.

The Case

History of Present Illness

A 60-year-old male presents to urgent care with a chief complaint of right buttock pain for 2 days. He does note pain and discomfort continuously and mentions he thinks there is a “boil” there. He denies any drainage from the area, prior history of methicillin-resistant *Staphylococcus aureus* or abscess, testicular pain, or swelling. He does have associated malaise and chills but does not report any subjective or objective fever. His pertinent past medical history includes insulin-dependent type 2 diabetes mellitus, coronary artery disease, and a current daily cigarette smoker of one pack per day. No known history of inflammatory bowel disease. Of note, his most recent A1C was 10.2 but this was last checked 12 months prior. He also reports a positive test for COVID-19 2 weeks prior and that he had episodes of diarrhea for approximately 7 days leading up to this visit. He is sexually active, in a monogamous heterosexual relationship, and denies anal penetration.

Physical Exam

BP: 139/67

Pulse: 128

Temperature: 97.6°F (36.4°C)

Respirations: 18

Height: 1.803 m (5' 11")

Weight: 91.6 kg (202 lb)

BMI: 28.17 kg/m²

SpO₂: 97%

Constitutional: He is not in acute distress. He is not diaphoretic.

Genitourinary: Erythema approximately 8 cm to the right gluteal cleft tracking to the anus. There is induration present measuring approximately 2 cm without appreciable fluctuance. It is significantly tender to palpation. Cardiac, pulmonary, gastrointestinal, neurologic, and psychiatric exams were all within normal limits.

Clinical Course

The patient was transferred to the ED for further evaluation given uncontrolled diabetes, tachycardia, diarrhea, and concern for anorectal involvement. This is supported by erythema tracking to the anus and no appreciable fluctuance on exam. Diabetes, smoking, and male gender are supporting risk factors for anorectal involvement.

As addressed throughout this writing, this patient exhibits several risk factors and a clinical presentation consistent with anorectal involvement. The presence of tachycardia, constitutional symptoms, and poorly controlled diabetes triggered concern for potential systemic involvement.

Additionally, anorectal abscesses have a high instance of complications, and a general surgery consult was deemed necessary. This is best facilitated through the emergency department given the noted additional findings.

If the clinician does not suspect systemic involvement, there are fewer risk factors present, and the patient is a well-controlled diabetic, outpatient referral to general surgery could be considered if available within 24-48 hours. This will be a very select group of patients that requires the ability and resources for close follow-up.

The clinician should not start antibiotic therapy alone without a plan for I&D.

If the abscess has already spontaneously drained, the clinician could also consider close outpatient follow-up if the patient is reliable to follow-up.

If there are exam findings suspicious of an anorectal abscess, regardless of spontaneous drainage, the patient should be evaluated by general surgery due to high fistula occurrence rates.

Initial ED Evaluation

Pertinent labs in the ED include negative blood cultures, WBC 20.7, absolute neutrophils elevated at 16.6, absolute monocytes elevated at 1.7, glucose 570, A1C 13.6, lactic acid 2.5, CRP 4.49, sedimentation rate 39, ferritin 438.7. A CT of the pelvis with contrast showed a moderate-sized cellulitis and a possible small area of fluid collection. General surgery consultation was placed and noted it was unamenable to I&D. The patient was admitted for 2 days and received IV clindamycin and transitioned to oral clindamycin at discharge. No I&D was performed due to clinical improvement. A COVID-19 rapid antigen test was completed and was positive. He did not receive any specific therapy for COVID as part of his course.

Return to ED

The patient re-presented to the ED 4 days after discharge with persistent pain and erythema. Pertinent labs include negative blood cultures, lactic acid 3.0, glucose 384, WBC 19.5 up from 18.3 compared with 5 days prior, absolute neutrophils elevated at 16.0, absolute monocytes elevated at 1.7.

At discharge 5 days prior, his absolute neutrophils were 12.9 and absolute monocytes were 1.6.

General surgery consultation was placed, the patient was admitted, and I&D in the OR was performed. He was empirically treated with cefepime, vancomycin, and metronidazole. His culture results showed two strains of *Lactobacillus* and were negative for *Neisseria gonorrhoeae*. Infectious disease was consulted and his antibiotics were narrowed to amoxicillin-clavulanic acid and doxycycline. The patient was discharged home a few days later with home health in stable condition.

Home care and complications

At his follow-up with general surgery, there was concern for an anal fistula given poor healing progress. An MRI of the pelvis with and without contrast showed a patent fistula tract from the anal verge to the skin opening, as well as a tract to the base of the scrotum with a small abscess.

The patient was referred to colorectal surgery and was scheduled for a rectal exam under anesthesia, anal placement of seton, and anal fistulotomy. However, he was followed by wound care who achieved successful wound closure while awaiting surgery. His surgery was subsequently canceled, and he obtained full healing.

The Clinical Entity

Abscesses and cellulitis are common presentations in

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the urgent care setting, and many can be treated without the need of escalation of care. However, any concern for an anorectal abscess should warrant the clinician to pursue escalation of care to the emergency department.

The most common presentation of an anorectal abscess is pain in the perianal region, erythema, fluctuance, and swelling.¹ Not all of these may be present. Systemic signs such as high fever, chills, tachycardia, or leukocytosis should warrant a high suspicion for more significant involvement.

There are associated complications with anorectal abscesses that often require extensive follow-up and resources that would be outside the bounds of urgent care. Many of the risk factors discussed in this writing also contribute to the complicated clinical course that often accompanies an anorectal abscess. One study showed fistula development in 45% of participants treated with I&D.² Additionally, up to 30% of patients with Crohn’s disease will spontaneously develop a pelvic or abdominal abscess at some point in their illness.³

Etiology and Epidemiology

Anorectal abscesses occur because of infection of the anal crypt.¹ The anatomic makeup of the anal crypt makes it a susceptible area for obstruction and subsequent infection.

Additionally, the proximity to the internal and external sphincters is another important factor when considering the prevalence of fistula development.⁴

Men have a higher risk than women (2.4:1) and patients with Crohn’s disease, diabetes, and obesity also have a higher incidence.⁵

Approximately 68,000 to 96,000 cases of anorectal abscesses occur in the United States per year.⁶ The actual occurrence is likely higher given likelihood of underreporting, attributing symptoms to alternative diagnoses,

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and spontaneous resolution.

Risk Factors

The most common risk factors for developing an anorectal abscess are diabetes, inflammatory bowel disease, pregnancy, sexually transmitted infection, medications such as chemotherapy, immunosuppression, foreign objects in the rectum, male gender assigned at birth, smoking, and obesity. Males are more likely to develop diabetes and more likely to smoke tobacco than females and thus more likely to have multifactorial risk components. Anal penetration is another important factor to consider.

Complications

There are several potential complications of an anorectal abscess. One third of patients will develop a fistula.³ Some studies have shown the prevalence of fistula to be as high as 50%.⁴ Many patients may already have an underlying fistula at initial presentation; it may or may not be evident on the clinical exam.

Fistula occurrence is high, even with optimal I&D technique and appropriate antibiotic therapy. The management of a fistula often requires surgical intervention and extensive follow-up with the potential for recurrence.

Sepsis is another potentially serious complication that should be considered in these patients. Many of the risk factors for developing an anorectal abscess can also contribute to the development of sepsis in the clinical course. Systemic involvement warrants a low threshold for escalation of care and can help differentiate between a simple buttock abscess and an anorectal abscess.⁴

Pain is also very common with anorectal abscesses and can be difficult to manage.

Lastly, recurrence of an anorectal abscess and/or fistula is a potential complication that should be considered by the clinician and can be elucidated through a thorough review of the patient’s history. In the case of recurrent anorectal abscesses, the clinician should consider an underlying cause such as inflammatory bowel disease.⁷

Differential Diagnosis

There are many differential diagnoses to consider. The clinical presentation may support a simple buttock abscess without anorectal involvement. Cellulitis of the buttock may develop without abscess development. A more localized cellulitis not extending to the anus and no induration would support a simple buttock abscess but does not definitively rule out anorectal involvement.

Depending on the region and season, a tick bite should also be considered with careful evaluation for erythema migrans. A recent history of being outdoors may support this.

Hemorrhoids are another common presentation and may mimic many symptoms of an anorectal abscesses, including anorectal pain. A prior history of hemorrhoids, bleeding with defecation, and clinical findings of hemorrhoids on exam help distinguish a thrombosed hemorrhoid from anorectal abscess. This highlights the importance of a rectal exam. Hemorrhoids are also not accompanied by systemic signs of infection and typically do not have purulent drainage.

Proctitis and sexually transmitted infections should also be considered. A good sexual history as well as appropriate STI testing when indicated is useful. Other considerations for proctitis include food-borne illnesses, anal penetration, and inflammatory bowel disease history that can be obtained via a thorough history.

Many of these differential diagnoses can be appropriately treated in the urgent care setting. This creates a challenge in deciding when escalation of care is appropriate. It is important to do a thorough clinical exam and have a low threshold for escalation of care with any concern for anorectal or systemic involvement.

Treatment

Treatment of an anorectal abscess will require an I&D with or without antibiotic therapy. Antibiotic therapy without I&D is not an effective treatment.⁸ There is no standardized antibiotic regimen for treatment and studies widely vary in antibiotic selection and duration.

The American Society of Colon and Rectal Surgeons recommends antibiotic therapy only in patients who have associated cellulitis, evidence of systemic involvement, or immunosuppression.⁹ However, this rec-

ommendation is given a 2B grade based on moderate-quality evidence. Additionally, most patients presenting for care will likely have one of these clinical criteria.

If antibiotics are deemed necessary, treatment should include broad-spectrum coverage with anaerobic and gram-negative coverage.

Intravenous antibiotics may be warranted if systemic symptoms are present. An intravenous regimen utilizing ampicillin/sulbactam or second-generation cephalosporin in combination with metronidazole or ciprofloxacin or clindamycin would provide appropriate coverage.

If an oral regimen is appropriate, amoxicillin-clavulanic acid or ciprofloxacin in combination with metronidazole are good options.⁴

A duration of 5 to 10 days of therapy has been shown to decrease fistula occurrence in otherwise healthy patients, although based on weaker heterogeneous evidence.¹⁰

Wound cultures are not routinely recommended but can be helpful in cases of recurrence or delayed healing.⁹

There are several I&D techniques proposed to try and minimize fistula development, but a fistula often develops or is already present regardless. This is a supporting reason for escalation of care to allow for imaging, a potential consult with general surgery, and a consult to colorectal surgery if warranted. An anorectal exam under anesthesia may also be needed if a fistula is suspected.

Conclusion

This case is an example of how a common complaint in the urgent care setting can lead to some clinicians overlooking the possibility of a more serious entity and potentially performing an I&D that would best be reserved for general surgery. Additionally, this case was not deemed necessary for I&D at initial presentation and was treated with antibiotic therapy alone. The patient re-presented for care and an I&D was done at that point. This highlights the importance of I&D in the care of these patients and the lack of efficacy of antibiotic therapy alone.

1. The focus of this writing is to help clinicians identify anorectal abscesses and recognize the high likelihood of complications in this population. Complications are common and often require extensive treatment, follow-up, and multidisciplinary resources.
2. Clinicians should have a high index of suspicion in patients with risk factors and look for these in patients presenting with a gluteal abscess or cellulitis. Systemic involvement warrants a low thresh-

hold for escalation of care and can help differentiate between a simple buttock abscess and an anorectal abscess. Clinicians should consider escalation of care to the ED when an anorectal abscess is suspected. These patients often require evaluation, treatment, and follow-up beyond the urgent care scope.

3. It can be worse than what it appears. There is not always an obvious abscess adjacent to the anus. Physical exam showed cellulitis with induration but no fluctuance and tachycardia in the case patient. The patient was afebrile both in the urgent care and the ED.
4. If this is a recurrent issue, consider underlying etiology such as undiagnosed Crohn's or ulcerative colitis.
5. Was COVID-19 a contributor? This patient reported diarrhea as his predominant symptom. Additional research would be required to fully evaluate this. ■

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