



Colocutaneous fistula: a rare complication of acute sigmoid diverticulitis

Brennan Bowker MHS, PA-C, CPAAPA^{1,2} Alyssa Tuozzoli MPAS, PA-C,¹ Lindsey Brown MHS,¹ PA-C, Katie Rogers PA-S,² Aliana Castro PA-S,² Marianna Papageorge MD,^{1,3} Andrew Esposito MD,^{1,3} Tyler J. Jones MD^{1,3}

¹Yale New Haven Hospital, Department of Surgery, New Haven, CT
²Quinnipiac University, Department of Physician Assistant Studies, Hamden, CT
³Yale School of Medicine, Department of Surgery, New Haven, CT

Introduction

- Diverticulosis is very prevalent in the Western world and diverticulitis develops when these diverticula become inflamed or infected¹
- Risk factors include: advancing age, low fiber diet, smoking, alcohol, sedentary lifestyle^{1,2}
- Diverticulitis rates have increase by greater than 25% since the early 2000s³
- Complicated diverticulitis occurs in 3-12% of cases and includes bleeding, obstruction, formation of abscess, phlegmon, or fistula⁴
- Types of fistula include colovaginal, colovesicular, coloenteric, and colocutaneous
- Colocutaneous fistulas are rare accounting for just 1-4% of diverticular fistulae⁵
- Colocutaneous fistula are rare and are noted most often to occur after percutaneous drainage of diverticular abscesses⁶⁻⁹
- It is even more rare for spontaneous formation of a colocutaneous fistula to occur, however few cases have been described in the literature¹⁰

Case Description

History of Present Illness

71-year-old male presented with fever, weakness, lethargy, and decreased oral intake.

PMH: Perforated diverticulitis (managed with percutaneous drainage), atrial fibrillation, endocarditis s/p AVR, CAD, IDDM, CKD, ischemic cardiomyopathy, HTN, hyperlipidemia.

Medications:

- Amiodarone 200 mg PO daily
- Atorvastatin 40 mg PO daily
- Bumetanide 10 mg PO BID
- Losartan 12.5 mg PO daily
- Metoprolol succinate XL 50 mg PO daily
- Mexiletine 150 mg PO bid
- Warfarin 2.5 mg PO daily
- Calcitriol 0.25 mcg PO daily
- Insulin aspart sliding scale before meals
- Insulin glargine 22 units daily

Physical Examination

Vital signs: **T101.1°F**, HR 69 bpm, BP 101/66 mmHg

Examination:

- General:** alert, no acute distress
- Abdomen:** softly distended, some mild anterior abdominal wall erythema in the left lower quadrant with minimal fluctuance and no tenderness

Laboratory Analysis:

10.3	10.7	161	135	98	63	141
	33.6		3.4	25	2.7	

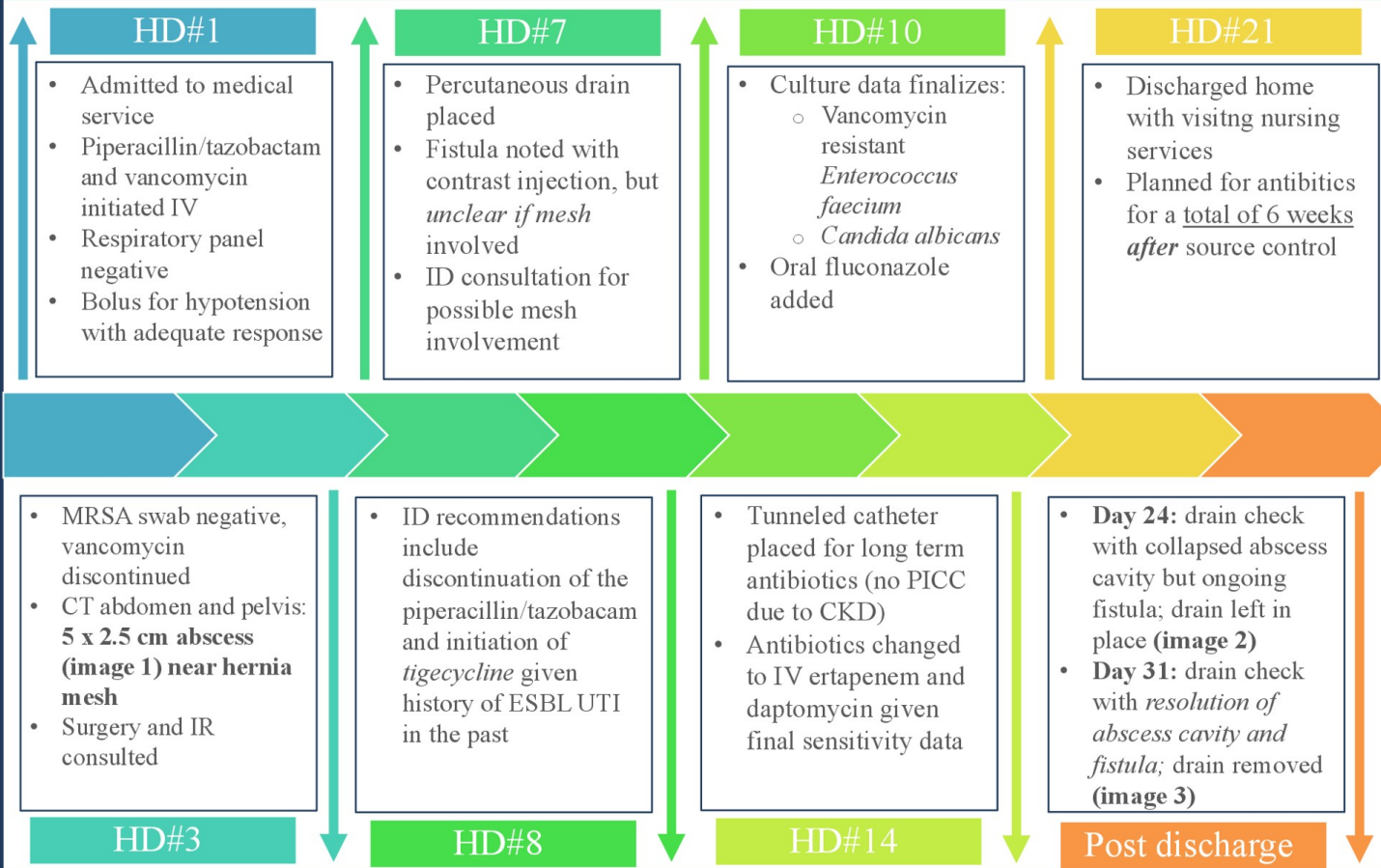
Computed Tomography:

- In the previously seen region of diverticulitis of the descending colon, there is an approximately 5 x 2.5 cm abscess involving the anterior abdominal wall. This appears connected to the colon. Anterior abdominal wall mesh is present

Discussion

- The American Society of Colon and Rectal Surgeons previously recommended elective surgery after two episodes of diverticulitis; current guidelines support intervention after a single episode but emphasize the importance of shared decision-making¹¹
- Diverticulitis complicated by abscess can be managed in several ways; in Hinchey I and II disease, percutaneous drainage is often performed.¹²
- Percutaneous abscess drainage can be employed as a temporizing measure prior to interval colectomy or, in select high-risk surgical candidates, as a definitive nonoperative management strategy^{12,13}
- Given the rarity of this condition, there is no consensus on management
- Our patient had prohibitive operative risk and therefore we attempted non-operative management

Hospital Course and Patient Outcome



Radiographic Findings

Image 1: CT Abdomen/Pelvis

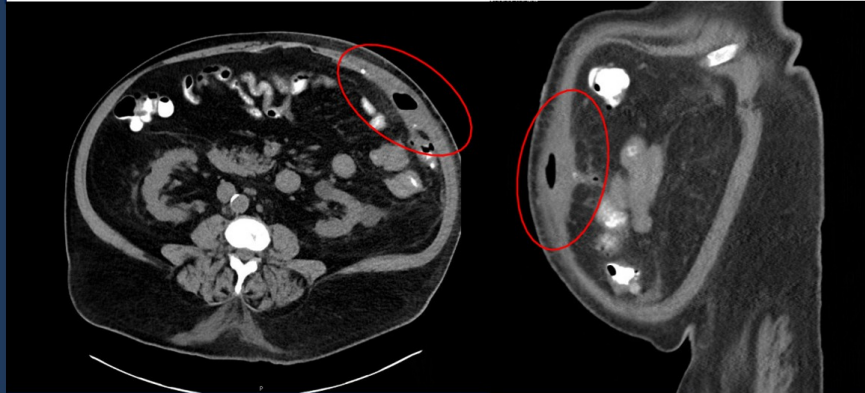


Image 2: Drain Check

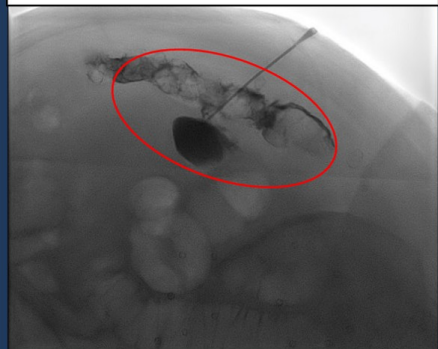
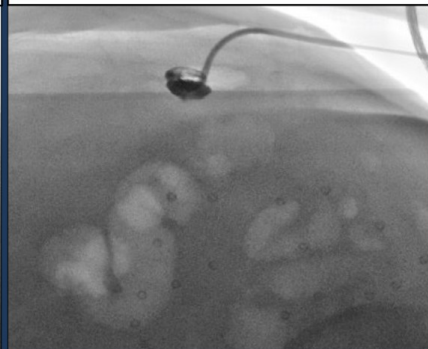


Image 3: Resolution



Conclusion

- Colocutaneous fistulas are a rare complication of diverticular disease
- This case underscores the importance of a multidisciplinary approach incorporating percutaneous drainage for effective source control in a patient whose past medical history prohibited colectomy
- Minimally invasive management may serve as a bridge to elective surgical resection or, in select cases, a definitive treatment strategy
- Early recognition and individualized care planning are essential to optimize outcomes

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