

Right-sided diverticulitis mimicking acute appendicitis in a young female: a case report

Sabrina Berdouk¹, Abdolghader Pakniyat^{2*} 

1. Consultant Emergency Medicine, Head of Emergency Department, Educational Leadership, EM Mastery Academy, Al Zahra Hospital Dubai, Dubai, UAE

2. Board-Certified Emergency Medicine Specialist, POCUS Lead, EM Mastery Academy, Al Zahra Hospital Dubai, Dubai, UAE

Correspondence to: Abdolghader Pakniyat

*Board-Certified Emergency Medicine Specialist, POCUS Lead, EM Mastery Academy, Al Zahra Hospital Dubai, Dubai, UAE.

Email: abdolghader.pakniyat@gmail.com

DOI: 10.24911/SJEMed.72-1740479141



Introduction:

Acute right lower quadrant (RLQ) abdominal pain is commonly associated with appendicitis; however, alternative diagnoses, such as right-sided diverticulitis, should be considered to avoid misdiagnosis and unnecessary surgical interventions. Right-sided diverticulitis, though more prevalent in Asian populations and older adults, can occur in young individuals and mimic acute appendicitis.

Case Presentation:

We report a case of a 33-year-old woman presenting with RLQ pain, loss of appetite, and low-grade fever. Laboratory findings revealed leukocytosis (WBC count of 16,000/ μ l with 87% polymorphonuclear neutrophils) and an elevated C-reactive protein level (85 mg/l). Initial point-of-care ultrasound revealed interloop fluid in the right lower abdomen, suggesting inflammation. This finding, coupled with clinical symptoms, led to the suspicion of acute appendicitis. However, computed tomography (CT) imaging demonstrated right iliac fossa fat stranding, mural thickening of the cecum extending to the terminal ileum, and a calcified fecalith within a diverticulum, confirming right-sided diverticulitis. The appendix appeared normal, measuring 5.7 mm in diameter. The patient was managed conservatively, including intravenous antibiotics and hydration. Symptoms resolved within 3 days, and she was discharged in stable condition. Follow-up visits showed no recurrence or complications.

Discussion:

Right-sided diverticulitis, although rare in young females, should be included in the differential diagnosis of RLQ pain. Unlike left-sided diverticulitis, which is more common in Western populations and affects older adults, right-sided diverticulitis occurs more frequently in younger individuals, particularly in Asian countries. CT imaging plays a critical role in differentiating diverticulitis from appendicitis by identifying fat stranding, mural thickening, and diverticula. Management varies based on severity; uncomplicated cases respond well to conservative treatment with bowel rest and intravenous antibiotics, while complicated cases with abscess formation or perforation may require surgical intervention. This case emphasizes the need for accurate diagnosis and individualized patient management to prevent unnecessary appendectomies.

Conclusion:

Clinicians should maintain a broad differential diagnosis when evaluating RLQ pain to avoid misdiagnosis and unwarranted surgical procedures. Awareness of right-sided diverticulitis in diverse populations is crucial for optimal patient care. Further studies are needed to refine diagnostic and treatment guidelines and explore indications for surgery in right-sided abdominal pain.

Keywords:

Right-sided diverticulitis, appendicitis, right lower quadrant pain, abdominal pain, differential diagnosis.