

Heart-shaped pelvic abscess in a patient undergoing peritoneal dialysis: a Valentine's Day surprise



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An 87-year-old woman with kidney failure due to diabetic nephropathy on continuous ambulatory peritoneal dialysis (PD) for 5 months was admitted with fever, abdominal pain, and cloudy dialysate. A dialysate analysis revealed elevated white blood cells (14,000 cells/ μ l; 90% neutrophils), and cultures grew polymicrobial and fungal organisms, including *Escherichia coli*, *Klebsiella oxytoca*, *Proteus mirabilis*, *Lactobacillus rhamnosus*, *Enterococcus gallinarum*, *Bacteroides vulgatus*, *Candida glabrata*, and *Candida krusei*.

Despite broad-spectrum antimicrobial therapy and removal of the PD catheter on day 3, inflammatory markers worsened. Computed tomography and positron emission tomography–computed tomography incidentally performed on Valentine's Day revealed 3 abdominopelvic collections, the most striking being a 4.5 $\times$ 4 cm right parasigmoid abscess with intense fluoro-2-deoxyglucose uptake (standardized uptake value maximum 11.1) and a heart-shaped appearance on the transverse section (Figure 1).

The clinical picture was consistent with abdominal abscess, likely triggered by small bowel diverticulitis. No evidence of perforation was found on imaging. PD was permanently discontinued, and hemodialysis was initiated.

The heart-shaped abscess could not be drained because of its deep pelvic location and proximity to bowel loops, leading to conservative management with amoxicillin/clavulanate and voriconazole, with rapid clinical improvement.

This case illustrates the visually striking radiologic finding of a heart-shaped abscess in a patient with polymicrobial peritonitis undergoing PD. Beyond the symbolic coincidence with Valentine's Day, it emphasizes the diagnostic and

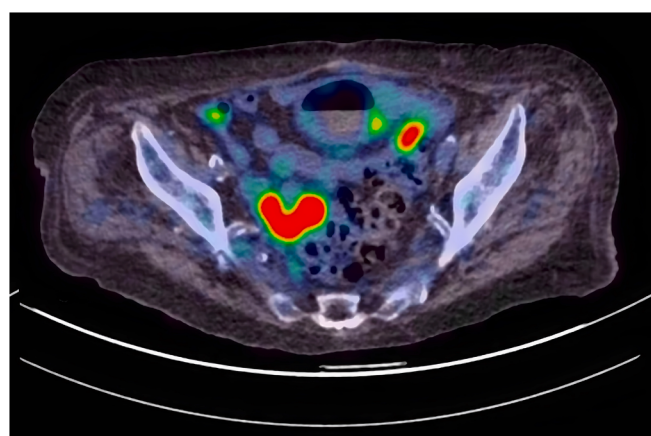


Figure 1 | Axial positron emission tomography–computed tomography image showing a right parasigmoid pelvic abscess with intense fluoro-2-deoxyglucose uptake (standardized uptake value maximum 11.1) and a heart-shaped morphology. Colors indicate fluoro-2-deoxyglucose uptake intensity. Warmer colors indicate higher metabolic activity, and cooler colors indicate lower activity.

therapeutic challenges of intra-abdominal infections in patients undergoing PD, especially when deep-seated collections complicate decision making. Positron emission tomography–computed tomography can be pivotal in evaluating persistent inflammation when standard imaging and clinical signs are inconclusive.

DISCLOSURE

All the authors declared no competing interests.