

# Answer

## Pseudomembranous Enterocolitis

**Figure 1.** Computed tomographic scan of the abdomen shows diffusely edematous bowel, hyperemic mucosa, and ascites.

**Figure 2.** Computed tomographic scan of the abdomen shows portal venous air.

**C**lostridium difficile is a gram-positive obligate anaerobe that produces 2 toxins: an enterotoxin (toxin A) and a cytotoxin (toxin B). Animal studies<sup>1</sup> demonstrate that both toxins are necessary for the clinical picture of antibiotic-associated colitis.

The presentation varies from an asymptomatic person who is a carrier to the patient with fulminate colitis. Clostridium difficile exists in an asymptomatic carrier state in approximately 3% of adults without evidence of toxin production.<sup>2</sup>

The possible causes for C difficile colitis include antibiotic therapy, human immunodeficiency virus infection, candidiasis, malignancy, chemotherapy, malnutrition, intestinal obstruction, decubitus ulcer, renal failure, and interventional procedures.<sup>3</sup> The stool assay for cytotoxin is the most accurate method of diagnosis and has a sensitivity of 67% to 100% and a specificity of more than 85%.<sup>4</sup> Because the assay results are not known for a few days, some authors suggest that endoscopy is more rapid and effective in establishing the diagnosis by its ability to demonstrate thick exudative plaques known as pseudomembranes.<sup>5</sup> Findings on the computed tomographic scan include bowel wall thickening (>4 mm) and the presence of wall nodularity, fat stranding, or unexplained ascites. These findings have been reported to have a positive predictive value of 88%.<sup>6</sup>

The unique feature of our case was the distinctive pattern of portal venous gas identified on computed to-

mography of the abdomen, and a colectomy with ileostomy was performed.

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### REFERENCES

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4. Marts BC, Longo WE, Venava AM, Kennedy DJ, Daniel GL, Jones I. Patterns and prognosis of *Clostridium difficile* colitis. *Dis Colon Rectum*. 1994;37:837-845.
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### Submissions

Due to the overwhelmingly positive response to the "Image of the Month," the *Archives of Surgery* has temporarily discontinued accepting submissions for this feature. It is anticipated that requests for submissions will resume in mid 2004. Thank you.