A 42-YEAR-OLD man had 45% third degree burns to his chest and back. Three weeks later, while being treated for sepsis, he developed intolerance to tube feedings, persistent acidosis, and massive abdominal distention. The abdominal radiograph is shown in Figure 1. Operative findings demonstrated necrotic bowel that was folded on itself anteriorly, creating a proximal obstruction.

What Is the Diagnosis?

A. Intussception
B. Cecal bascule
C. Sigmoid volvulus
D. Cecal volvulus

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Answer

Cecal Bascule

Although the cecal bascule was first reported by Treves in 1899, it was Mandel Weinstein who characterized it as a type of cecal volvulus. The term bascule is French, meaning seesaw, which describes a type of balanced drawbridge. This analogy is seen in the pathological features of a cecal bascule because the redundant mesentery or hypofixation, in combination with massive distention, allows the cecum to fold onto itself (Figure 2). Subsequently, adhesions form between the anterior wall of the cecum and the ascending colon, resulting in basculation. With the cecum flipped upward on itself, a deep crease across the bowel forms, and as a result, occlusion of the gut lumen with bowel obstruction ensues.

The signs and symptoms of a cecal bascule are similar to those of cecal volvulus. Although abdominal pain and massive distention are common to both entities, the presence of previous abdominal surgery, especially appendectomy, is more often associated with the cecal bascule. Additionally, patients are frequently critically ill, requiring prolonged ventilatory support.

Massive distention of the small bowel and cecum are commonly noted on the plain abdominal radiograph, which is the mainstay of the diagnosis. Neither the typical “coffee-bean sign” associated with cecal volvulus nor the “bird’s beak” of sigmoid volvulus are present because there is no axial torsion of the bowel. In the radiograph of the patient described, the cecum measured 20 cm in diameter, which was consistent with the operative specimen (Figure 3).

The treatment is primarily surgical, and if gangrenous bowel is noted, a right hemicolectomy should be performed.

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REFERENCES