her diet, abdominal operation, increased peristalsis caused by diarrhea, and distention caused by distal obstruction. Pregnancy or pelvic tumors or cysts that push the cecum out of the pelvis have been cited as predisposing factors. Cecal volvulus is more common in females. Abdominal radiograph is suggestive in 45% of cases; the point of the "coffee bean" deformity is directed towards the left upper quadrant. Barium enema may be helpful in difficult cases but need not be performed routinely.

Colonoscopic reduction of cecal volvulus is technically difficult; operation is unavoidable in most cases. At laparotomy, gangrenous bowel is reported in 20% of patients. Such bowel must be resected, but when the cecum is viable, procedures available include detorsion, cecectomy, colectomy, colectomy with bowel fixation, and resection. Simple reduction of volvulus without cecal fixation is associated with high recurrence rate. Cecopexy has the advantage of no contamination and usually no recurrence. Todd and Forde advocate cecectomy to accomplish cecectomy and intestinal venting without recurrence. The cecectomy tube can be removed in the second week.

In conclusion, resection of bowel is the method for gangrenous cecum but for viable cecum, cecectomy with or without cecectomy was equally effective and was associated with no recurrence in our series.

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Ciprofloxacin-resistant Salmonella senftenberg in North India

Salmonella senftenberg, a causative agent of diarrhea, sepsisemia, meningitis and urinary tract infection, is being increasingly isolated in hospitals in India. With the emergence of multiresistant salmonellae, ciprofloxacin became the drug of choice for cases requiring antimicrobial therapy. However, ciprofloxacin-resistant strains of S. typhi and S. typhimurium have emerged. We report ciprofloxacin-resistant S. senftenberg from cases with gastroenteritis admitted to a tertiary-care hospital.

A total of 3500 stool specimens from cases with gastroenteritis were received between January 1994 and January 1998. Pathogens were isolated and identified on the basis of conventional biochemical and serological methods. Antimicrobial susceptibility was tested by the modified disc diffusion method of Stokes. The antibiotics used (Hi Media Ltd, Mumbai) and concentrations per disc (mg) were amoxicillin (30), amikacin (10), cefotaxime (25), gentamicin (10), furazolidone (30), nalidixic acid (30), chloramphenicol (10), cotrimoxazole (25) and ciprofloxacin (5). The MICs of ciprofloxacin-resistant strains of S. senftenberg were determined by a macrodilution method using Mueller-Hinton broth (Difco, USA) and a standard inoculum of 10⁶ cfu/mL. For antibiotic sensitivity tests, the standard control strain used was Esch. coli NCTC 10418.

Bacterial pathogens were isolated in 315 cases. Of these, S. senftenberg was positive in 35 (11.1%) cases. Nineteen S. senftenberg strains (54.28%) were resistant to amoxicillin, nalidixic acid, gentamicin, cotrimoxazole, furazolidone, chloramphenicol, cefotaxime and ciprofloxacin (Table). The MIC of ciprofloxacin-resistant strains was >64 mg/mL. All these strains were susceptible to amikacin.

Considering the self-limiting nature of Salmonella enteritis, antimicrobial therapy is usually not recommended, yet it is important to know the sensitivity pattern of S. senftenberg as it may be required for other invasive manifestations of this organism. Further, the appearance of resistance to ciprofloxacin in strains of S. senftenberg should be an alarming signal for physicians in developing countries.

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