Severe colitis induced by soap enemas

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Soap enemas causing severe colitis with stricture and complications have rarely been reported. We report three patients in whom soapsud enema caused severe colitis and complications like stricture requiring surgery. [Indian J Gastroenterol 2006;25:99-100]

Soap enemas causing severe colitis with stricture and complications have rarely been reported.1 Administration of soap and water enema for bowel cleaning is still a routine practice in many hospitals. We report three patients who developed severe colitis soon after administration of soap and water enema. These cases were seen over a period of ten years from 1995.

Case 1: A 26-year-old woman was referred from a local hospital after delivery with bleeding per rectum. The symptoms began immediately after application of soap and water enema for constipation in the postpartum period. Following this she developed severe pain in the anal area, increased bowel frequency and bleeding per rectum. On examination vital signs were stable. Systemic and abdominal examination was normal. Digital rectal examination showed liquid stools with blood.

Investigations: hemoglobin 9.2 g/dL, total WBC count 9,300/mm³. Stool examination showed plenty of red cells; no parasite or cysts were seen and culture was negative. On sigmoidoscopy, the mucosa of the rectum and distal sigmoid colon showed severe erythema, friability and multiple ulcerations (Fig). The lumen contained bloody liquid material. Biopsy specimens revealed severe inflammation with granulation tissue.

The patient was treated empirically with ciprofloxacin and metronidazole for a week. As she showed little improvement steroid enema was added. The rectal bleeding and pain resolved after three weeks. A month later, repeat sigmoidoscopy revealed mild patchy rectal erythema. The rectosigmoid junction was narrowed, and required endoscopic dilatation. The patient was put on stool softeners and is asymptomatic six months later.

Case 2: A 52-year-old man was admitted in the urology ward for elective transurethral resection of prostate for symptoms of benign prostatic hypertrophy. He developed bleeding from the rectum on the second postoperative day, which increased with each bowel movement. He also had severe abdominal pain and profuse loose stools mixed with blood and mucus. On enquiry he had received soapsud enemas for bowel evacuation prior to surgery; he developed severe rectal pain and bloody diarrhea in the immediate postoperative period. Following which he developed pain in the rectum. Colonoscopy revealed diffuse areas of hemorrhage and exudates in the rectum and sigmoid colon. Biopsy was suggestive of acute colitis. Stool examination was negative for pathogens. The patient was treated empirically with ciprofloxacin, metronidazole and intravenous fluids; after one week steroid enema were started as improvement was unsatisfactory. The symptoms resolved gradually over four weeks. Follow up at 6 months and one year showed no abnormality.

Case 3: A 45-year-old lady was admitted for hysterectomy for dysfunctional uterine bleeding. She had received soapsud enema prior to surgery; she developed severe rectal pain and bloody diarrhea in the immediate postoperative period. Stool examination did not reveal any parasites and culture was negative. She was treated with antibiotics, with which her symptoms improved over four weeks. Two months later she was readmitted with constipation, severe abdominal pain and distension. X-ray showed dilated colon and small intestine with multiple air-fluid levels. Sigmoidoscopy revealed patchy ulcerations and near complete obstruction of mid-sigmoid colon. Emergency laparotomy confirmed presence of narrowing of the mid sigmoid colon with fixity to the pelvic

References

wall. Colostomy was performed and she was discharged 14 days later. Resection of the narrow segment with closure of colostomy was done 3 months later. Since then she is asymptomatic.

Acute colitis due to detergent enema is rare, with only 7 cases reported in English literature;\(^2,3,4\) rectal stricture formation as a complication of soap colitis is very rare.\(^1\) The clinical symptoms and endoscopic picture of our patients were quite similar to those reported for other types of chemical colitis.

Soap colitis usually develops within hours after the administration of a “cleansing” soapsud enema. Soaps contain a number of substances including alkali, potash, phenol and sodium and potassium salts of long-chain fatty acids that produce liquefaction necrosis and saponification of the colonic wall. The severity of the symptoms depends upon the type and concentration of the caustic agent, the contact time with the mucosa, and the presence or absence of underlying colonic disease. Acute chemical injury to the colon most commonly presents as hematochezia, bloody diarrhea and abdominal pain. Endoscopic findings range from loss of normal vascular pattern to mucosal sloughing and ulceration.\(^5\) However the clinical and endoscopic findings are indistinguishable from those of acute colitis due to other causes.

Treatment usually is supportive and may include empiric administration of broad-spectrum antibiotics. Most patients recover completely by 4 to 6 weeks.\(^5\) Rarely the injury may progress to stricture formation or transmural necrosis that may even lead to perforation. We administered steroid enemas empirically; the results were quite satisfactory, at least in relieving the acute symptoms promptly.

Soapsud enemas are still widely practised\(^6\) especially in rural hospitals and health centers. Because of the potential for severe complications, the use of such enemas should be strongly discouraged.

**References**


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