Pseudomembranous Colitis

We have read with interest the recent article by Deshpande *et al.*(1). While the authors deserve credit for describing a rare manifestation of pseudomembranous colitis (PMC), their diagnostic approach is fraught with omissions. It is obvious from their report that but for the fortuitous passage of the cast, the diagnosis would have been missed.

Three simple investigations, *i.e.*, stool microscopy, stool culture and proctosigmoidoscopy should be performed in every hospitalized child with a setting of antibiotic associated diarrhea. Proctosigmoidoscopy allows direct examination of rectosigmoid region to see for any evidence of colitis, pseudomembrane and obtaining biopsy as well as intraluminal material for laboratory diagnosis. Omission of these investigations may result in misdiagnosis or delayed diagnosis. A flat examination of the abdomen is mandatory in patients of infective diarrhea having abdominal distension (with normal serum K^+ levels) to exclude complication of toxic megacolon. To our dismay all these simple, cheap and easily available tests were not done in this patient. Proctosigmoidoscopy in this case would have shown the characteristic discrete plaques or confluent membrane that would have led to withdrawal rather than the institution of broad spectrum antibiotics. However, it appears that the diagnosis of PMC was not entertained by the authors until the passage of the cast. We would like to know as to what culture media was used in this case for growing *C. difficile.*

The common misconception seems to be that PMC cannot be diagnosed in the absence of a toxin assay by tissue culture method. Though tissue culture assay remains the gold standard for the diagnosis of *C. difficile* associated PMC, several currently new rapid and easily accessible tests are commercially available in the West. The latex agglutination test has a sensitivity of 88% and specificity of 99%(2). ELISA assay and counter immunoelectrophoresis can also be used but are less specific than the latex agglutination test(3). Most of these new tests are not available in India. It is time that a sincere effort is made to make these tests available indigenously.

Even a century after the original description of the disease, only very few cases have been described from India (1,4). Must this drought continue despite frequent use of antibiotics among pediatric population in our country. The reasons for the paucity of cases of PMC is a lack of awareness of the disease and a reluctance to perform proctosigmoidoscopy in children with such settings. We must continue to repose our faith in this simple metallic tube for correct diagnostic approach of PMC until better and easily accessible tests become available in our country. Even when that happens, will the application of proctosigmoidoscopy in this disease ever become redundant?

M. Kumar,
A.S. Puri,
S.K. Yachha,
Division of Pediatric Gastroenterology,
Department of Gastroenterology,
Sanjay Gandhi Postgraduate Institute of Medical Sciences,
Post Post No. 375, Lucknow.

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Reply

This child presented to us for the first time in a state of shock with diarrhea. Since she was on treatment at a welfare centre earlier, it was only after the cast was shed, that the history of amoxycillin ingestion was forthcoming, on direct questioning, of the parents. With features of septic shock and absence of history of antibiotic usage, a diagnosis of PMC was not entertained initially.

All cases of acute diarrhea hospitalized with us undergo routine stool microscopy and culture which in this case were done but were non contributory. Likewise, for abdominal distension, a flat plate *X*-ray abdomen was done which did not reveal toxic megacolon. However, a proctosigmoidoscopy which would have been very valuable, could not be done for want of a Pediatric Sigmoidoscope.

Most cases of diarrhea seen in our OPD, despite educating Doctors in various welfare centres, have already been treated with antibiotics. Since the clinical spectrum of pseudomembranous colitis is wide, it may not be justifiable in carrying out Proctosigmoidoscopy in all cases coming to us with diarrhea especially when history of antibiotic usage is not easily forthcoming. The point made by Kumar *et al.* however, has been well taken for future reference.

The culture medium being used in our laboratory for *Clostridium difficile* is a selective Agar medium containing egg yolk, cycloserine, cefoxitin and fructose.

N.D. Deshpande,
K.S. Rao,
INHS Asvini, Colaba,
Bombay 400 005.