

1

15

가 , -S

가 , 24

14 (93%) 가

15 10 (67%)

가 , 4 -S . 2 ,  
11 (3 , 7 , 1 )

가

-S , , 24

(cow 's milk allergy) 2 -3% 62 (barium enema)  
20% 15

(1, 2).

9 , 6 17 250  
74 . 8

(1). 가 ,  
(allergic colitis)

, 11 , 4  
(abdominal distension)

가 가 12 ,  
(necrotizing enterocolitis), 가 3 . 15  
(Hirschsprung 's disease), (infectious colitis)

(3 - 7).

1 . 15

가

13

(barium reduction) (skin prick

2002 3 2005 6 test) 5

15

2006 1 8

2006 4 20

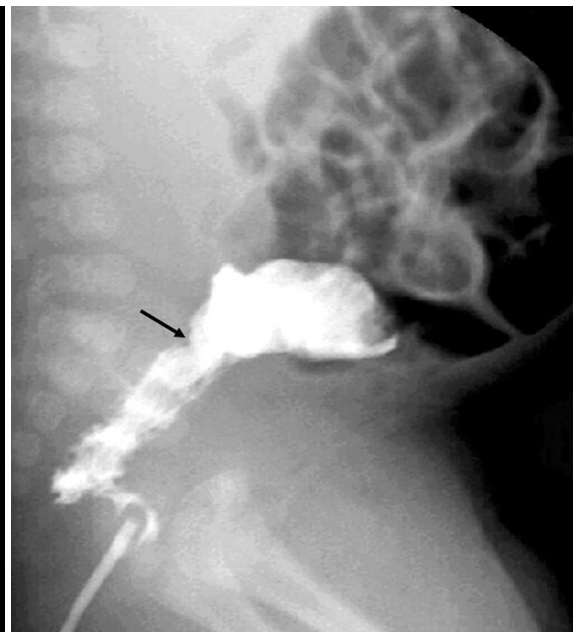
가 (rectal gas)

(paralytic ileus),  
 (mechanical obstruction)  
 (spasm), -S  
 (reversed rectosigmoid index)  
 (mucosal irregularity), (transitional zone)  
 가 , 24 (barium  
 retention)

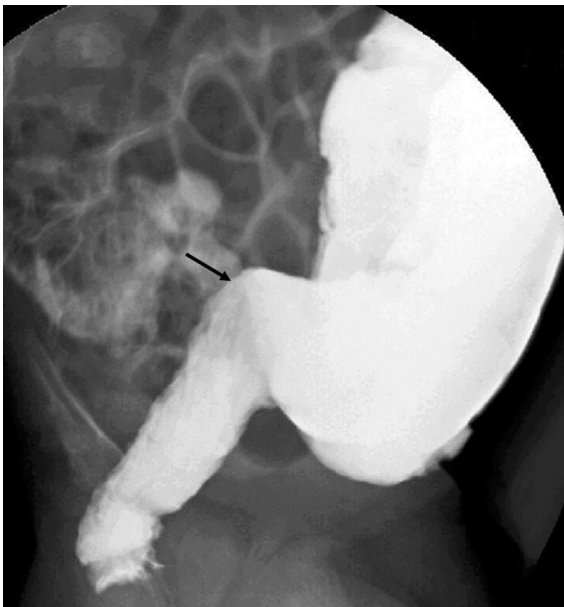
:  
 2 (Fig. 1),  
 가 9 .  
 10 (Fig. 1-3) 가  
 2 (Fig. 2),  
 -S 4 (Fig. 1, 3), 1  
 (Fig. 1). 24  
 11 , 3 , 7  
 , 1  
 1  
 (acetylcholine esterase  
 activity)



A

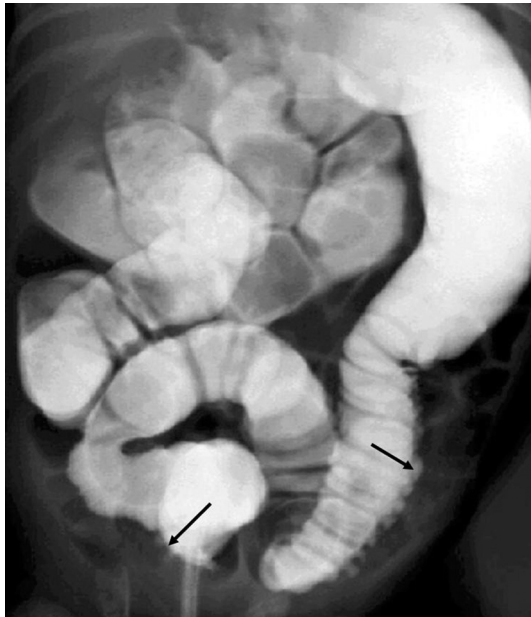


B

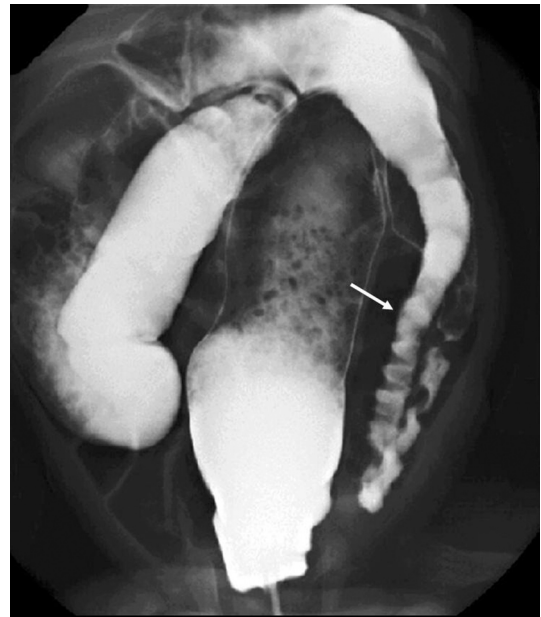


C

Fig. 1. A 47-day-old boy with chronic constipation and abdominal distension.  
 A. Erect view of the abdomen represents diffuse gaseous distension of the bowel with multiple air-fluid levels representing mechanical obstruction.  
 B, C. Lateral views of the barium enema reveal a transitional zone (arrows) in the distal sigmoid colon, reversed rectosigmoid index, and spasm of the rectum mimicking Hirschsprung's disease.



**Fig. 2.** A 17-day-old boy with abdominal distension. Frontal view of barium enema shows mucosal irregularity of the distal sigmoid and descending colon (arrows).



**Fig. 3.** A 44-day-old girl with constipation. Frontal view of the barium enema illustrates persistent spasm of the sigmoid and distal descending colon (arrow) with reversed rectosigmoid index. The spasm of those sites was first noted on the barium enema two weeks ago.

-S 4 ,  
 (short segment) 가 ,  
 가 , IgE  
 가 ,  
 가 ,  
 (1, 6, 10). ,  
 2-3% (1). (8) , 가 60 ,  
 32.2% 가 2 가 (12). 15  
 (9) , 1  
 , Mcilhenny (10)  
 (local intestinal anaphylaxis) .  
 가 (10, (14 )  
 (5). 4 , 13). 가 (9 ) 가  
 , 50-60% .  
 (1, 9). , 가  
 8 (80%)  
 (20%)가 27 21  
 (chronic idiopathic constipation) (11). Swischuk (3)  
 (78%) -S , 가  
 (6). (14).

가 , S ,  
 ,  
 . 24  
 2  
 (3, 5, 6, 13).  
 가  
 ,  
 (aganglionic segment)  
 ,  
 -S  
 . Bloom  
 (6)  
 ,  
 .  
 4 ,  
 -S 가  
 가  
 ,  
 가  
 (4, 7). , 가  
 (15).  
 가  
 (67%).

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## Barium Enema Findings of Milk Allergy in Infants<sup>1</sup>

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**Purpose:** We wanted to evaluate the barium enema findings of milk allergy in infants.

**Materials and Methods:** Retrospective evaluation of the plain abdominal radiography and barium enema findings was performed in fifteen young infants suffering with milk allergy. The presence of gaseous distension, rectal gas, paralytic ileus and mechanical obstruction was evaluated on the plain radiography. The presence of spasm, a transitional zone, a reversed rectosigmoid index and mucosal irregularity was analyzed on the barium enema; the presence of barium retention was also evaluated on 24-hour-delayed plain radiography.

**Results:** Paralytic ileus was the most common finding on the plain radiography (93%). On the barium enema, continuous spasm of the colon, ranging from the rectum to the descending colon, was revealed in ten infants (67%). A transitional zone was observed in one infant and a reversed rectosigmoid index was revealed in four. Mucosal irregularity was observed in two infants. Barium retention was demonstrated in 11 of fifteen cases: throughout the entire colon ( $n = 3$ ), from the rectum to the descending colon ( $n = 7$ ), and up to the transverse colon ( $n = 1$ ).

**Conclusion:** The most common barium enema finding of milk allergy in infants was spasm of the distal colon. The other findings were a transitional zone, a reversed rectosigmoid index, mucosal irregularity and barium retention.

**Index words :** Anaphylaxis and allergy  
Barium enema examination  
Infants, gastrointestinal tract  
Colitis  
Milk

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