

Colostomy

The Colorectal Center at Cincinnati Children's Hospital Medical Center utilizes a [colostomy](#) in certain cases of imperforate anus / [anorectal malformations](#).

Those children who require a colostomy in the newborn period are those without evidence of an anal opening on the perineal skin, those with a recto-urethral fistula and patients with cloacal malformations.

The colostomy is used to divert the fecal stream and thereby allow passage of stool into a stoma bag. It also is important to protect the future reconstructive surgery.

The downstream colon is studied through the mucous fistula prior to the definitive surgery in the radiology department and the precise rectal anatomy can be defined.

A divided descending colostomy is ideal for the management of anorectal malformations.

This completely diverting colostomy provides bowel decompression as well as protection for the final repair of the malformation.

In addition, facilitates the post operative use of colostomy appliances and in general, eliminates the long list of stoma management complications common in these patients.

It is also very helpful in the performance of the [distal colostogram](#), the most accurate diagnostic study to determine details of the defect.

Examples of problematic colostomies.



Figure 1. Ideal Colostomy



Figure 2A. Colostomy placed too distal in the colon which will interfere with the Pull-through.

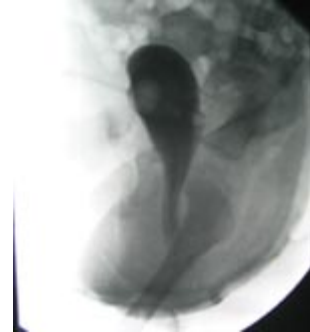


Figure 2B. Short Segment (Colostomy Created Too Distal)

Descending colostomies have definite advantages over a right or transverse colostomies. Very short distal segments of bowel provoke atrophy of the bowel or loss of the distal rectum at the time of the pull-through or the [colostomy closure](#) (Figs. 2A and B).

Distal segments to a very proximal colostomy may become a microcolon (Fig. 3) or a giant megasigmoid if impacted.

Mechanical cleansing of the distal colon prior to the definitive repair is much less difficult when the colostomy is located in the descending portion of the colon.



Figure 3. Defunctionalized Colon

In the case of a large rectourethral fistula, the patient frequently passes urine into the colon. A more distal colostomy allows urine to escape through the distal stoma without significant absorption.

On the other hand, if the patient has a more proximal colostomy (transverse), the urine remains in the colon and is absorbed, increasing the incidence of metabolic acidosis.



Figure 4. Megarectosigmoid Resulting from a Loop Colostomy



Figure 5. X-ray of a Megarectosigmoid Resulting from a Loop Colostomy



Figure 6. Impacted Stool in the Downstream Segment Resulting from a Loop Colostomy

Loop colostomies permit the passage of stool from proximal stoma into the distal bowel, (Figs 4, 5 and 6) which produces urinary tract infection, distal rectal pouch dilation and fecal impaction. Prolonged distention of the rectal pouch may produce irreversible bowel damage, consisting in a significant bowel hypomotility disorder, leading to severe constipation later in life.

Hartman's Pouches (Fig. 7A.) are very inconvenient as they do not allow for a distal colostogram and can lead to urinary tract infection and mucoceles.



Figure 7A.

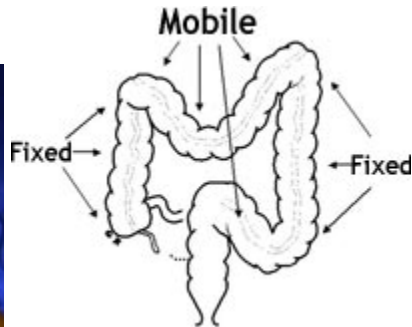


Figure 7B.

Colostomy prolapse is a common complication in loop colostomies as well as in diverting colostomies opened in erroneous locations (Fig. 7B), where the bowel is mobile.

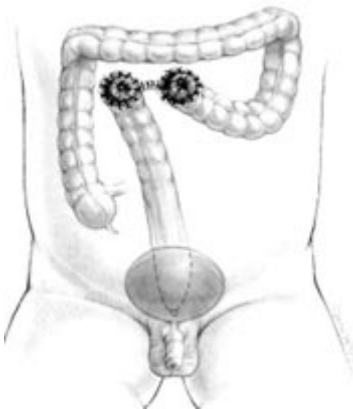


Figure 8.

A colostomy created too distal in the area of rectosigmoid (Fig. 2) or a right transverse sigmoidostomy (Fig. 8), may interfere with the mobilization of the rectum during the pull-through and are some of the most common errors that we have seen.

Another common mistake consists in reversed stomas that misleads and provokes confusion in the management of the patients.

Figures 9 and 10 illustrate the most common findings. On the left, what we suspect the patient has and on the right what in reality we have found.



Figure 9.

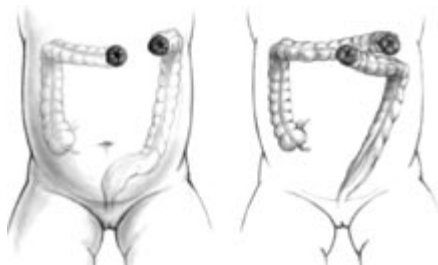


Figure 10.

Contact the Colorectal Center at Cincinnati Children's

For more information or to request an appointment for the Colorectal Center at Cincinnati Children's Hospital Medical Center, please [contact us](#).