## **Familial Polyposis**

Familial Adenomatous Polyposis (FAP)

Familial polyposis (FAP which stands for Familial Adenomatous Polyposis) is a problem involving the intestine in which polyps, or bumps, line the colon and can also affect the small bowel. It is a hereditary condition.

The genetic disorder results from a defect in the APC gene – the adenomatous polyposis coli gene which controls cell growth. If the gene is abnormal, the cells divide in a rapid fashion, leading to many polyps (hundreds, sometimes thousands) and eventually to cancerous transformation.

At Cincinnati Children's Hospital, in the Colorectal Center, patients with this condition take advantage of a multi-disciplinary collaborative team of gastroenterologists, pathologists, radiologists, geneticists, and surgeons.

To make this diagnosis requires genetic testing, which can detect FAP well before it leads to cancer. Screening begins at puberty or even earlier with this testing and with endoscopy. Most people with FAP eventually need surgery to remove the colon.

Some patients have symptoms such as diarrhea. Many patients are asymptomatic. The diagnosis is made by a colonoscopy which shows a carpet of polyps in the colon. Biopsy of these polyps reveals them to be adenomas.

To perform this surgery, the colon is removed, and the very end of the small intestine (the ileum) is pulled down to the anus. This involved an operation whereby the colon is mobilized and a pouch of ileum is created. We perform this with laparoscopy, which involves very tiny incisions. A slightly larger incision at the lower abdomen (in the area of a C-section scar) is used to remove the diseased colon. We perform the surgery to remove the end of the colon (the rectum) with very careful preservation of the continence mechanism – the anal canal and the sphincters. We do the new connection between small intestine and anal canal using a hand-sewn technique in nearly all cases. On occasion if a patient is very tall, this connection is done with a specialized circular stapler. Successful surgery is curative.

## 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.