

## **Inflammatory Bowel Disease (IBD)**

Inflammatory Bowel Disease (IBD) is a chronic inflammatory disorder of the intestines that does not have an identifiable cause (such as infection). Pediatric IBD causes the immune system to become inappropriately active, causing injury to the intestines.

Inflammatory Bowel Disease

There are two primary types of Inflammatory Bowel Disease or IBD:

**Ulcerative colitis** affects only the lining of the large intestine (the colon).

**Crohn's disease** can affect any part of the gastrointestinal (GI) tract. Most often Crohn's disease affects the small or large intestines. It can cause inflammation in the lining and deeper layers of the intestines.

### **Symptoms and Diagnosis**

Does My Child have IBD?

Symptoms of IBD can appear at any age. The two most common forms of IBD are Ulcerative colitis and Crohn's disease. The symptoms of these two diseases can be very similar. If your child has IBD symptoms, contact your pediatrician for an examination.

#### **Pediatric IBD symptoms checklist:**

- Diarrhea, sometimes with blood and mucus
- Stomach aches
- Loss of appetite
- Weight loss
- Unexplained fever and tiredness
- Delayed growth or maturation

#### **Diagnosing Pediatric IBD:**

If your physician suspects your child has pediatric IBD, he or she will likely run several diagnostic tests, including:

- Blood tests
- Stool tests
- X-rays and other radiology tests
- Endoscopy of the upper and lower gastrointestinal tract

#### **Treatment & Management of IBS in children**

Crohn's disease and ulcerative colitis treatment involves a number of different approaches, including:

#### **Drug Treatment for IBD**

There are many different approaches for treating pediatric IBD. For most patients, the primary initial treatment involves medications. There are two primary methods for using medication. Induction therapy is used to alleviate the symptoms of an IBD flare up. Maintenance therapy is used for long term management of the disease

Similar medications are used to treat both ulcerative colitis and Crohn's disease. They include: **Corticosteroids (Prednisone, Prednisolone, Methylprednisolone)**, these medications are induction therapies for moderate to severe IBD, and have been used for over 50 years. They are usually used short term (a few weeks to a few months) to get moderate to severe Crohn's Disease or ulcerative colitis under control.

### **Aminosalicylates Sulfasalazine, Olsalazine, Mesalamine, Balsalazide**

These are among the safest medications used to treat IBD, but are generally effective only in milder cases. They are most effective as maintenance therapies in mild to moderate ulcerative colitis.

### **Antibiotics – Metronidazole, Ciprofloxacin–Cipro®**

Antibiotics are often used to treat infectious complications of inflammatory bowel disease, such as abscesses in the abdomen or around the anus (perianal). They also may be used to treat mildly active Crohn's Disease and are sometimes utilized to treat mild flares of ulcerative colitis.

### **Azathioprine AZA and 6-mercaptopurine (6MP)**

These two medications are primarily used as maintenance treatment in Crohn's disease, and have been used for over 25 years. They are also used in patients with ulcerative colitis whose symptoms persist despite the use of aminosalicylates (see above). These medications typically take 36 months to be effective.

### **Methotrexate**

Methotrexate is another immunomodulatory medication used as a maintenance therapy for Crohn's disease. This medicine typically takes 4 weeks before it may be effective.

### **Infliximab (Remicade®)**

Infliximab is usually used in patients with Crohn's disease who have not responded to corticosteroids and immunomodulators. It also may be utilized in patients with ulcerative colitis who have not responded to these medications.

### **Cyclosporine (Gengraf ®, Neoral ®, Restasis ®, and Sandimmune ®) and Tacrolimus (Prograf ®)**

Cyclosporine and tacrolimus are medications that may be used short term to induce a remission in Crohn's or ulcerative colitis patients with severe symptoms and persistently active disease despite conventional treatments.

### **Treating IBD with Diet and Nutrition**

Good nutrition plays an important role in managing and overcoming IBD. Ulcerative colitis and Crohn's disease can pose nutritional challenges for children, such as the following:

- A child's appetite may decrease during a "flare," and he or she may not eat enough to sustain normal activity and growth.
- During times of inflammation, the digestive tract may not absorb nutrients as well as it should, or the body may not use the nutrients appropriately.
- The body may need more calories to repair itself during and after a "flare."
- Some IBD medications may affect appetite and nutrition.

### **Maintaining a Good Diet with IBD**

You may worry that something in your child's diet caused him or her to have IBD, but there is no evidence to suggest that this is so. In addition, there is no "colitis diet" or "Crohn's diet" that will prevent flare ups or cure the disease. Usually, there are no major restrictions on the diet of a child with IBD. However, you should monitor your child's diet and watch for any sensitivities to certain foods. A food journal is a great tool to help you in this effort.

Some situations may necessitate a change to your child's diet. Common sensitivities include:

#### **Dietary Fiber**

This may cause pain and block the intestine if it is narrowed by inflammation. A lowfiber diet can be helpful when inflammation of the intestines has made the passageway narrow.

#### **Salt**

Salt intake should be monitored while taking corticosteroids, since salt increases fluid retention (swelling), a side effect of steroids.

#### **Dairy Products**

Some children may have difficulty with milk and other dairy products. However, this is often only a temporary problem. Dairy products should only be restricted from the diet if they cause problems, as they are an excellent source of protein and calcium, and are high in nutritional value.

If you feel your child is not tolerating certain foods, be sure to speak with his or her healthcare team about your concerns.

### **Surgery**

Most people think of surgery as a “last resort.” However, surgery can be an important part of treating both Crohn’s disease and ulcerative colitis. In fact, a large proportion of IBD patients will require surgery at some point during their illness.

Occasionally, a patient will need surgery on an urgent or emergency basis to remove the bowel or correct other problems related to IBD.

In most cases, however, an operation is used to supplement the medical treatments that are available. Surgery is best used in conjunction with medical therapy, and in selected cases, surgery may best be used early in the course of the disease.

### **IBD Surgical Goals**

The goals for IBD surgery include:

- Reducing or resolving symptoms
- Improving general health
- Improving nutritional status, growth and sexual development
- Preserving as much bowel as possible

If IBD surgery is recommended for your child, you should discuss this decision with the entire health team, which usually consists of multiple specialists that may include a pediatric gastroenterologist, pediatric surgeon, nurse practitioner, nutritionist, and psychologist.