Functional Abdominal Pain in Children

Functional Abdominal Pain
Recurrent abdominal pain is one of the most common complaints in childhood and adolescence, reported to occur in 10-15% of all children. The vast majority of children and adolescents with recurrent abdominal pain have “functional” or “non-organic” pain, meaning that the pain is not being caused by any abnormalities of the organs in the abdomen. The two main subtypes are:

- **Functional abdominal pain or functional abdominal pain syndrome:** These children have abdominal pain without other symptoms.
- **Irritable Bowel Syndrome (IBS):** These children have abdominal pain and abnormal bowel movements (diarrhea, constipation, or both). Often, having a bowel movement makes the abdominal pain go away.

Many patients and their parents feel as if doctors think that the pain that they are experiencing is not real or “all in their head”. This is not the case. Functional abdominal pain is true pain and, in fact, functional pain can be quite severe. That is the bad news about functional abdominal pain. The good news is that there are treatments for functional abdominal pain, and functional abdominal pain causes no long-term health problems.

Differentiating Functional Pain from Organic Pain
Functional abdominal pain can often be differentiated from more serious causes of abdominal pain by a thorough evaluation from your doctor. Sometimes your doctor may be able to make the diagnosis by simply talking to you and performing a physical exam. Other times, further tests are needed.

**Children with functional abdominal pain usually present with pain that is located at or around the belly button and have no other “warning signals” to suggest a more serious cause.**

Some warning signals in children with recurrent abdominal pain that usually require additional testing include:

- Weight loss
- Vomiting
- Waking up at night because of pain or to have a bowel movement
- Multiple episodes of diarrhea per day
- Blood in the stool
- Recurrent fevers (higher than 100˚)

The above symptoms are sometimes, but not always, associated with more serious GI problems and therefore require additional testing. The absence of these symptoms is very reassuring that the pain is indeed functional in nature.
Some characteristics that are commonly seen in children with functional abdominal pain are:

- They are often a straight-A student or described as a “perfectionist”
- They may be described as “sensitive” or get their feelings hurt easily
- They may have high expectations placed on them
- There may be stressors at home or at school which make the pain worse

**What Causes the Pain?**

There are different theories as to what causes functional abdominal pain. Most experts believe that the pain is caused by abnormal contractions in the intestines and overly sensitive nerves in the GI tract. Patients with functional abdominal pain may feel pain from normal processes in the GI tract such as contractions to move food along or gas bubbles. They may also be sensitive to mild irritants to the GI tract such as certain foods or spices. The perception of pain is thought to involve both input from the nerves in the GI tract and the processing of these signals in the brain. As a result, psychological stress, anxiety, or depression may provoke pain episodes or affect the interpretation of pain signals by the brain.

Interestingly, studies have been done that show patients with functional abdominal pain have increased sensation of pain in the GI tract but decreased sensation of pain on the skin. This is interesting because many children with functional abdominal pain are described by their parents as having a “high pain tolerance”. Many parents are worried because their child who never complains of pain is having abdominal pain, and they fear that their child has a serious medical problem. The difference in pain sensation helps explain why this occurs.

**Treatment of Functional Abdominal Pain or IBS**

Treatment of patients with functional abdominal pain and IBS is similar:

- **Reassurance and education:** Simply explaining to the child why they are having pain and that most likely the pain is not being caused by a serious medical problem often results in improvement of pain. This probably occurs because the child is also worried that a serious medical problem is causing the pain.

- **Dietary modifications:** It is important to get adequate fiber in the diet and to avoid certain foods which can be mild GI irritants (see treatment plan).

- **Stress reduction:** Stressors at home or at school must be addressed because failure to do so often results in treatment failure. Often parents are unaware of stressors at school or are unaware that stressors at home may contribute to pain.

- **Medical therapy:** There are medications that can help to decrease the abnormal contractions in the GI tract. These medications are called “anti-spasmodics” and can be taken either to prevent episodes of pain or to relieve pain once it has occurred. Your doctor will discuss which medication, if any, is best for your child.

The specific treatment plan for your child will be given to you.
Treatment Plan for

**Dietary Modifications**

Avoid the following foods: caffeine, colas, chocolate, greasy foods, and spicy foods such as Mexican food or Italian foods with “red” sauce.

Eat plenty of fruits and vegetables in order to get adequate dietary fiber.
Goal fiber intake: _____grams of fiber per day.

___ Other:

**Stress reduction**

Make every effort to identify and, if present, reduce stressors in the home
Talk with your child to determine if there are stressors at school

___ Other:

**Medical Therapy***

___ Bentyl (dicyclomine): give 1 tab _____ times per day
___ Bentyl (dicyclomine): give ____ teaspoon(s) ____ times per day
___ Hyoscyamine (0.125 mg): give 1 tab ____ time per day as needed for pain
___ Hyoscyamine (0.125 mg/5 ml): give ____ teaspoon ____ times per day as needed
___ Hyoscyamine extended release (0.375 mg): give 1 tab twice per day

___ Other:

*Do not stop or adjust the medication unless instructed by your doctor

**Reasons to call**

Symptoms are not any better with the above treatment plan
Symptoms are getting worse or symptoms change
Any other questions

The goal of therapy are improvement of symptoms and a return to “normal activities” such as attending school and extracurricular activities. It is common for abdominal pain to come and go especially during times of stress.