

Recurrent Abdominal Pain in Children

Is your child missing school, activities, or constantly in the nurses office due to his/her mysterious stomach aches? Is his/her concentration or performance being affected? We may be able to help your child, and even provide a note for school.

1. What is Recurrent Abdominal Pain (RAP)?

Recurrent Abdominal Pain (RAP) is known by several different names such as functional chronic recurrent abdominal pain (FCRAP), functional abdominal pain syndrome (FAPS), functional abdominal pain (FAP), irritable bowel syndrome (IBS), pediatric abdominal migraine, and pediatric chronic abdominal pain. Doctors call physical disorders that are real but not caused by tissue damage “functional” disorders. Recurrent abdominal pain is commonly referred to by children and parents as a stomach ache, tummy ache, cramping, bloating, belly pain, stomach pain, gut pain, and abdomen pain.

Abdominal pain as a symptom is highly prevalent in the pediatric population. Up to 20% of children in middle and high school will report abdominal pain at some time; 50% of children with abdominal pain miss school and the societal cost is estimated at \$25 billion dollars a year in both direct and indirect costs. In adults, these patients are bundled under the term irritable bowel syndrome (IBS). IBS has a worldwide prevalence between 4%-30% and accounts for 28% of visits to an adult GI specialist.

In an effort to better tailor therapeutic interventions, a group of GI specialists met to create a diagnostic classification for non-organic abdominal pain syndromes. Their efforts led to the “Rome criteria,” now in its fourth incarnation. The Rome III diagnostic criteria for functional abdominal pain syndrome are as follows: (Diagnostic criteria must include all of the following)

Continuous or nearly continuous abdominal pain

No or only occasional relationship of pain with physiological events (e.g., eating, defecation, or menses)

Some loss of daily functioning

The pain is not feigned (e.g., malingering)

Insufficient symptoms to meet criteria for another functional gastrointestinal disorder that would explain the pain

Criteria fulfilled for the last 3 months with symptom onset at least 6 months prior to diagnosis.

2. How does biofeedback treat recurrent abdominal pain?

The autonomic nervous system (ANS) imbalance exacerbates abdominal dysfunction. Biofeedback feedback with the autonomic nervous system (i.e. heart rate, respiration, skin conductance) educates patients about effects of stress on their symptoms. That is, the patient becomes more aware of all these functions in their own body.

3. What is biofeedback?

Electronic biofeedback instruments are connected to sensors, and these sensors are placed on the body. Real-time physiological information (feedback) is displayed to the patient on a computer monitor using audio and video signals. Biofeedback video games are also used to make learning fun and interesting (and children like this kind of feedback). A certified biofeedback professional provides instruction and interpretation during the session.

How does biofeedback work? Biofeedback works by instructing the patient that the problem is neither purely biological nor psychological but psychophysiological. The therapist guides the patient through techniques to balance the ANS. Home practice assignments reinforce techniques for better results.

Why use biofeedback treatment? Biofeedback treatment is a painless/non-invasive technique. It is an engaging and fun treatment modality for children. Research shows biofeedback is a successful treatment for functional abdominal conditions. Humphreys and Gevirtz (2000) reported a study of recurrent abdominal pain in 64 children and teenagers that used thermal biofeedback alone or in combination with cognitive-behavioral treatment. Results for pain relief were significantly above an inactive treatment (fiber-only) control group. Bassotti and Whitehead (1994) reviewed applications of biofeedback techniques that have had the most success in various GI disorders. They concluded that approaches using biofeedback have resulted in improvement of symptom severity of 50-60% in patients with irritable bowel syndrome. Research has also shown biofeedback to be effective in the treatment of pediatric migraines as well as other disorders.

For more information on biofeedback, [click here](#).

4. Is a neuropsychological assessment needed for biofeedback?

A neuropsychological assessment is not needed, but it could give us valuable information about your child. A child neuropsychological assessment is different from a psycho-educational assessment performed by the school. School assessments are usually performed to determine if a child qualifies for supplemental services, with a focus on academic success. They typically do not diagnose learning or behavior disorders caused by impaired brain functioning or developmental problems; instead, this is the focus of a neuropsychological assessment.

5. How can we help you?

If your child is suffering from stomach aches or recurrent abdominal pain, please [contact us](#) to find out how we can help you and your child. For information about fees and insurance questions, go to our [fees and insurance page](#).

References:

Bassotti, G & Whitehead, WE (1994). Biofeedback as a treatment approach to gastro intestinal tract disorders. The American Journal of Gastroenterology, 89, 158-164.

Humphreys, PA, & Gevirtz, R (2000). Treatment of recurrent abdominal pain: Components analysis of four treatment protocols. Journal of Pediatric Gastroenterological Nutrition, 31(1), 47-51.

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