

Biofeedback for Functional Abdominal Pain

Functional Abdominal Pain (FAP) is one of a group of Functional Gastroenterological Disorders (FGD), which includes Irritable Bowel Syndrome (IBS), and Functional Dyspepsia (FD). FAP has been identified as recurrent episodes of abdominal pain severe enough to interfere with a patient's usual activities but it is not caused by an identifiable organic disease and is unrelated to bowel function (Sanders et al. 1994). Minimal criteria for patient inclusion in studies of FAP consist of at least three bouts of pain severe enough to affect activities during a period of not less than 3 months, with episodes occurring in the year preceding the examination (Clouse et al. 2006). FAP affects approximately 10–15% of the pediatric population (Apley & Naish 1958; Kristjansdottir 1996; Oster 1972; Parcel et al. 1977). It causes disruption of daily activities/missed school days, over-utilization of healthcare (Hyams et al. 1996), unnecessary surgeries, learning difficulties (DiPalma and DiPalma 1997), and anxiety (Jansdottir 1997).

There is good evidence to support using behavioral interventions, such as biofeedback, in reducing or eliminating FAP. Treatment, including temperature and breathing training biofeedback, along with adding fiber to the diet, has been shown to be more effective than adding fiber alone (Humphreys & Gevirtz, 2000).

Investigators have found that after completing 6 sessions of heart rate variability (HRV) biofeedback, a sample of children with FAP were able to significantly reduce their symptoms in relation to significantly increasing their autonomic nervous system balance (Sowder et al. 2010).

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