# Medinformer - Reuterina Junior Functional Abdominal Pain

#### Introduction

Functional abdominal pain (FAP) in children is a common disorder (1) causing constipation, diarrhea, or both (2), and is estimated to affect 10% to 20% of all school-aged children, with a slight increase in females after 9 years of age (1). Studies have found that supplementation with a probiotic can reduce symptoms of FAP (1)

#### **Contents**

#### • Overview.

Functional abdominal pain (FAP) also known as intractable abdominal pain, is persistent stomach pain that does not resolve with usual therapeutic treatment. The pain may be constant or may come and go (2). FAP was originally defined as a pain syndrome composed of at least three episodes of abdominal pain over a period of more than 3 months, which can be severe enough to affect daily activity. (1)

#### • Causes and risk factors.

FAP has no known or specific cause. A variety of conditions could cause FAP, such as a food allergy, infection, or a disease such as Crohn's disease (which would require long term care and management). Sometime, FAP can be caused by anxiety or depression in children, or even a trauma could make a child susceptible to FAP (2).

## • Signs and symptoms. (2)

Children with FAP can experience diarrhea, constipation, or both. The child usually feels pain around the belly button, and it can also be painful in other areas of the stomach. The pain may come on suddenly or it may get more severe over time.

Other symptoms of FAP can include:

- indigestion
- abdominal pain with bowel movements
- feeling full after eating a small amount of food
- nausea
- vomiting

#### Diagnosis (2).

FAP can be tricky to diagnose, as the pain, and not any other underlying condition, is the condition. Diagnosis is therefore a process of ruling out any possible underlying cause and trying to determine the cause of the pain. Some tests may be done to confirm there are no underlying concerns, these could include:

- blood, urine, and stool tests
- abdominal x-ray
- abdominal ultrasound
- endoscopy/colonoscopy
- CT scan

### • Impact on quality of life. (3)

Children suffering from FAP may result in frequent doctor visits and a distinct interruption in school attendance (1). Parents with children suffering from FAP reported the following:

- Their child's disability brought the parents together to help their child.
- The siblings received less attention and complained about too much fuss during pain.
- They would have liked a definitive diagnosis that could be treated efficiently.
- Parents felt anxious that an undetected condition triggered pain.
- Some parents knew that social factors could inflict pain and were concerned that their child was unable to distinguish sensations like anxiety and 'butterfly' tensions from physical pain.

### • Treatment. (2)

If doctors diagnose an underlying cause, treatment will involve managing the specific condition, however, in most cases there is no specific cause for FAP. Doctors will therefore focus on support and education to help the child to have the best possible quality of life.

Treatment for FAP may address pain triggers and how to control them. If the child is suffering from multiple overlapping problems, like heightened sensitivity to light, insomnia, and anxiety, clinicians may take an interdisciplinary approach to alleviating the symptoms.

Multiple studies have found that probiotics, specifically Reuterina Junior significantly lower pain intensity in children with FAP (1b), and that children suffering from FAP have more pain free days when they are taking Reuterina Junior. (4) In addition, L. reuteri DSM 17938 – the probiotic strain found in Reuterina Junior is:

- The only probiotic strain with proven effect in FAP- not otherwise specified (5)
- Recommended by the World Gastroenterology Organisation (WGO) to alleviate symptoms and improve the quality of life in patients with FAP- not otherwise specified (6)

### Prevention and lifestyle changes. (2)

The treatment plan may include one or several of the following:

- pain control
- physical therapy
- nutrition advice and dietary changes
- identification and treatment of specific pain triggers
- cognitive behavioral treatments
- treatment of associated symptoms and problems
- reintegration into school and other activities
- introduction of a daily probiotic

#### **USPs**:

Reuterina Junior maintains gut health throughout childhood. (7a,b) Choose Reuterina®. Trusted to perform. Proven to work. (6a-c, 8a,b)

#### References

- 1. Romano C, Ferrau V, Cavataio F, et al. Lactobacillus reuteri in children with functional abdominal pain (FAP). J Paediatric Child Health 2014;50(10):E68-E71.
- 2. Functional Abdominal Pain in children. Boston Children's Hospital. Available from: <a href="https://www.childrenshospital.org/conditions/functional-abdominal-pain#:~:text=What%20are%20the%20symptoms%20of,get%20more%20severe%20over%20time">https://www.childrenshospital.org/conditions/functional-abdominal-pain#:~:text=What%20are%20the%20symptoms%20of,get%20more%20severe%20over%20time</a>. Accessed Sept 2022
- 3. Brodwall A, Glavin K, Lagerlov P. Parents' experience when their child has chronic abdominal pain: a qualitative study in Norway. BMJ Open. 2018; 8(5): e021066. Published online 2018 May 10. doi: 10.1136/bmjopen-2017-021066. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5950638/. Accessed Sept 2022
- 4. Jadrešin O, et al. J Pediatr Gastroenterol Nutr. 2017 (in FAP Jan 2021)
- 5. Trivic et al. Eur. J Pediatr. 2020 (from FAP 2021 Biogaia doc)
- 6. Guarner F, Sanders ME, Eliakim, et al. World Gastroenterology Organisation (WGO) Global Guidelines. Probiotics and prebiotics, February 2017.
- 7. Joint FAO/WHO Expert Consultation on Evaluation of Health and Nutritional Properties of Probiotics in Food Including Powder Milk with Live Lactic Acid Bacteria, October 2001. <a href="http://www.who.int/foodsafety/publications fs">http://www.who.int/foodsafety/publications fs</a> management/en/probiotics.pdf.
- Data on File.
   153 ZA Reut 092022