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Cystic Fibrosis Research News

Title:

Diagnosing constipation in patients with cystic fibrosis applying ESPGHAN criteria

Lay Title:

Defining constipation in patients with Cystic Fibrosis following criteria delineated by the European Society for Paediatric Gastroenterology Hepatology and Nutrition

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What was your research question?

The goal of this study was to determine the prevalence of constipation and the frequency of symptom that defines constipation in children with Cystic fibrosis (CF), according to the criteria delineated by the European Society for Paediatric Gastroenterology Hepatology and Nutrition.

Why is this important?

The definition of constipation in children with CF follows criteria that are specific to this condition: [1] abdominal pain or distension or both, [2a] a decrease in the frequency of bowel movements or [2b] an increase in stools consistency in the last few weeks to months, whereas [3] the symptoms are relieved by the use of laxatives.

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These criteria were elaborated by a CF Working Group back in 2010. Since then, a few studies have assessed the prevalence of constipation in CF, but these studies were not uniform in the methodology including the above-mentioned criteria.

What did you do?

We interviewed caregivers and patients with CF followed at a Brazilian university-affiliated tertiary hospital regarding symptoms of constipation. Patients were eligible for our study if they were older than 6 but younger than 18 years of age and had confirmed CF diagnosis (with sweat test and/or genetic test). We excluded patients that were not following appropriate medical treatment for pancreatic insufficiency, because that may interfere with bowel movements/ stool consistency. We asked questions about abdominal pain or distension, reduced frequency of bowel movements, and/or increased stool consistency in the last few weeks or months, and we reviewed charts on relevant medical data.

What did you find?

Our main findings were that:
1) The prevalence of constipation among children with cystic fibrosis (CF) was 41%.
2) Hard stools were the most commonly reported symptom (77%)
3) The perception of abdominal distention was frequent among children with CF and equally reported by patients with or without constipation
4) Pain or discomfort while passing stools is another potential marker of constipation in CF – and this symptom is not part of the criteria for diagnosis of constipation established in 2010 by the CF Working Group of European Society for Paediatric Gastroenterology Hepatology and Nutrition.

What does this mean and reasons for caution?

It means that constipation is frequent among children with CF (in our study 4 out of 10 children were constipated) and that it most often presents with stools that are hard to pass. On the other hand, the perception of abdominal distention does not seem to be a good criterion or marker for constipation. Physicians and patients should also be attentive to pain or discomfort passing the stools as symptom of constipation in children with CF.
A word of caution for our findings would be that abdominal distention was self-reported or reported by caregivers rather than assessed by a physician.

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What's next?

An important next step would be validation of our findings by in different regions of the globe - as this study took place exclusively in Brazil. If our findings are replicated, we should consider reviewing the diagnostic criteria for constipation in children with CF, perhaps including pain or discomfort during the passage of stool.

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