

# letters

## The role of endoscopy in childhood chronic abdominal pain

**To the Editor:** Chronic abdominal pain (CAP) is a common complaint of children presenting to pediatricians and gastroenterologists. It is believed to account for 2% to 4% of general pediatric office visits.<sup>1</sup> Although much is published in the world literature, information about CAP in our community is scarce. Therefore, we report our experience on the value of endoscopy in the investigation of this condition. Between 1993 to 2002, 192 Saudi children were consecutively referred for endoscopy as part of the investigation of CAP. The male-to-female ratio was 0.36:1 and the age range was between 2.5 to 18 years. Although the chief complaint of the children was CAP, associated symptoms included vomiting, weight loss, diarrhea, and constipation in decreasing frequency. The pattern of identified conditions is depicted in the table, indicating a diagnosis of organic disease in 97/192 (50.5%) of the children. These included peptic esophagitis, gastritis, gastroduodenitis, peptic ulcer disease, and inflammatory bowel diseases. The final diagnosis in the remaining 95 children (49.5%) was functional CAP. *H. pylori* status was available in 75 histopathology reports, and was positive in 35 (46.7%). Specific therapy was prescribed to patients with organic disease and 60/97 (62%) improved during a follow-up period ranging from 10 days to 10 years with a median of 6 months.

The terminology of abdominal pain has evolved over the last several decades. At present, it is generally agreed that the original definition of Apley in 1958 is a description rather than a diagnosis; therefore, the Rome II criteria for abdominal

pain were developed to help clinicians in the diagnosis.<sup>2</sup> Even Rome II criteria have not achieved worldwide acceptance, and some clinicians consider abdominal pain to be chronic with shorter duration.<sup>3</sup> At the primary care level, CAP is usually functional, but in selected children referred to gastroenterologists, the proportion of organic causes is higher. Although the present study is retrospective and therefore has drawbacks, it does document the yield of endoscopy and the pattern of conditions causing CAP in children attending our institution. Despite the fact that only children with significant endoscopic findings were included and therefore cases with erythema of questionable clinical significance were excluded, the finding of 50.5% esophagogastrointestinal (EGI) diseases is lower than in a study from a semi-private hospital in the Kingdom,<sup>4</sup> which reported endoscopic findings in 69% of the children. However, they included all findings, even mild erythema.<sup>4</sup> However, our results are slightly lower than in a study from Finland reporting pathology in 58.5% in a group of 82 children complaining of recurrent abdominal pain and associated symptoms for at least 3 months,<sup>5</sup> but much higher than results in a report from the USA, indicating about 30% organic causes in a group of 356 children referred

to gastroenterologists.<sup>6</sup> In the present report, *H. pylori* was detected in the antrum of 46.7% of the children, a figure comparable to results reported by others in smaller groups of children.<sup>7</sup> The variation in the yield of endoscopy in those studies is most probably related to differences in patient population and in the degree of selection of patients for endoscopy.

In conclusion, our data support the important contribution of endoscopy in the diagnosis of CAP in children in our community. Provided the children are carefully selected, a higher number of potentially treatable causes can be identified and properly treated.

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**Table 1.** Causes of chronic abdominal pain in 97 children.

Causes	Number	M/F ratio	Average age (yrs)
Esophagitis	19	1: 0.58	12.5
Gastritis	30	0.28: 1	14.5
Gastroduodenitis	30	0.42: 1	13.7
Peptic ulcer disease*	9	1: 0.78	16
Inflammatory bowel disease**	9	0.2: 1	14.6

\* 8 duodenal and one gastric ulcer.

\*\* 8 Crohn disease and one ulcerative colitis.

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