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## Psychogenic Diarrhea

We read with great interest recent communication by Bhatia, *et al.*(1). We greatly appreciate the conclusion drawn by the authors that psychogenic sneezing must be kept in mind in children to avoid unnecessary investigations. We were thus tempted to share our experience in a child with psychogenic diarrhea who responded to behavior therapy within one month.

An 8-year-old male child was brought by her anxious mother with complaints of increased frequency of stools from last 6 months especially after each meal. There was no history of any abdominal distension. The stools were semisolid in consistency but were not bulky or foul smelling. There was no blood or mucus. Physical and systemic examination was non-contributory. His anthropometric data were within normal centiles. Stool microscopy and pH were normal. Stool were also negative for reducing sugars. USG abdomen was also normal. A detailed history revealed other behavior problems in the child such as bruxism, tearing books and beating other classmates in school. He also during his OPD visits dismantled all the articles kept in

the consultation chamber. History revealed the birth of his young brother about 15 months back after which all the attention of the mother has shifted away from him, resulting in sibling jealousy and resulting aggressive behavior as an expression of anger towards her mother. By defecating after each meal, he was able to draw the attention of her mother resulting in secondary gain and persistence of symptoms. The performance of the child in the school also deteriorated further aggravating the symptoms. The mother was counseled about the nature of illness, its onset and perpetuation. A meeting was held with teacher of his school who was also counseled with the problem in the child. He was treated with anxiolytic drugs, aversion therapy and reward on symptomatic improvement. His symptoms improved within a week and disappeared by 3rd week. He performed satisfactorily in yearly exams.

Non-organic recurrent abdominal pain (functional) is a common complaint in children(2). Irritable bowel syndrome is also a well-recognized entity in children presenting commonly as alteration of bowel habits(3). However, psychogenic diarrhea is uncommonly reported in children(4). Early anticipation of the condition and identification of the psychogenic stressor prevented us to

evaluate chronic diarrhea beyond first phase investigations and early successful management of the case.

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## Natural Antioxidant Therapy for Patients with Hemolytic Anemia

We read with interest the article by Marwaha, *et al.*(1) on the use of wheat grass juice (WGJ) to reduce transfusion requirements in patients with thalassemia major. We applaud the authors for their efforts in this innovative pilot study, and wish to speculate on possible mechanisms of action that may be considered in the event the authors or others wish to pursue this line of investigation.

First, likely recognizing that all statistically significant results may not be clinically significant, the authors chose a clinical albeit

arbitrary endpoint to evaluate the success of the WGJ therapy to decrease transfusion requirements in the study patients. Using their definition of success (>25% reduction of blood transfused compared to the pre-WGJ period), they reasoned that 50% of the patients responded to the WGJ therapy. Using the data they provided in the table in the paper, we performed relevant statistical analyses on the entire cohort to evaluate the effects of WGJ on the total amount of blood transfused and the mean interval between transfusions. We found that WGJ therapy decreased the total volume of blood transfused and increased the intervals between blood transfusions of the entire study cohort (*Table I*). More importantly, the blood transfusion requirements and intervals between transfusions of the post-WGJ therapy

**TABLE I—Effect of WGJ Therapy on Blood Transfusion Requirements.**

|                                      | Pre-WGJ therapy *        | Post-WGJ therapy *        | p value § |
|--------------------------------------|--------------------------|---------------------------|-----------|
| Interval between transfusions (days) | 22.4 (22.4, 17.5 - 27.5) | 26.35 (28.7, 20.7 - 42.2) | 0.001     |
| Blood Transfusion (g/kg/year)        | 255 (242.6, 156 - 306)   | 188 (187.5, 91 - 291)     | 0.001     |

(N = 16, \* Median, Mean, Minimum - Maximum; § Wilcoxon signed-rank test).