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Case Report

Psychogenic Vomiting: A Clinical Diagnosis Merits Special Attention in Pediatrics

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Abstract:

A two years and 9 months old boy attended to a gastroenterology clinic of pediatric hospital for investigation of recurrent and intractable vomiting. He had post prandial, non-projectile, non-bilious emesis since past 2 years. Since the onset of illness, he was carried to many doctors and underwent extensive laboratory investigations.
Because all of the science lab and imaging work up for etiology of emesis was normal and there wasn't any clinical response to medical treatment, psychological consultation with suspicion of psychogenic vomiting was done. After psychological consultation and treatment, including teaching the feeding techniques for mother, there was a dramatic recovery and the vomiting stopped. A diagnosis of psychogenic vomiting was made. He was discharged with the advice to attend regular supportive psychotherapy sessions.

Key words: Intractable, Pediatrics, Psychogenic, Psychotherapy, Vomiting.

Introduction

Differential diagnosis of vomiting in the pediatric age group receives a really broad scope, including gastrointestinal (obstructive, inflammatory, dysmotility) etiologies, central nervous system (CNS) disease, pulmonary problems, renal disease, endocrine/metabolic disorders, drugs (either as side effects or in overdosages), psychiatric disorders, streptococcal pharyngitis, stress. In that respect are three unique types of psychogenic vomiting: (1) Chronic vomiting; anorexia nervosa, bulimia; (2) Rumination; and (3) Migraine. In infancy and younger children the etiology of vomiting often is organic and psychogenic vomiting is uncommon.

Case Presentation

A two years and 9 months old boy attended to a gastroenterology clinic of pediatric hospital for investigation of recurrent and intractable vomiting. On examination, he was just mildly dehydrated. His weight was 9.5kg, which was under third percentile. He had post prandial, non-projectile, non-bilious vomiting since past 2 years. He did not have any other complaints. His history and physical exam did not suggest any neurological problem. In the past, he was treated with a number of drugs, including

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proton-pump inhibitors, and prokinetics for optimal periods without any relief. He was admitted in pediatric gastroenterology ward.

The laboratory evaluation included glucose, electrolyte, calcium, magnesium, blood urea nitrogen (BUN) and creatinine, liver function test, amylase and lipase were normal. Abdominal ultrasonography was normal. Upper gastrointestinal (GI) Series ruled out any obstruction.

Tissue transglutaminase (tTG) immuno-globuline A (IgA) antibody and sweat chloride test were negative. Serum and urine amino acids and sugar chromatography were normal. Upper gastrointestinal endoscopy showed mild erythema in esophagus and stomach and the pathology result has been just in favor of esophagitis. The patient had history of empirical treatment for eradication of Helicobacter pylori and during hospitalization, he was treated with intravenous pantoprazole, oral domperidone, and vitamin B6, but there wasn't any clinical response to treatment and he experienced multiple episodes of postprandial vomiting. Brain magnetic resonance imaging (MRI) was normal. Because all of the science lab and imaging work up for organic causes of emesis were normal and there wasn't any clinical response to medical treatment, psychological consultation with suspicion of psychogenic vomiting was done. After psychological consultation and treatment, including teaching the feeding techniques for mother, there was a dramatic recovery and the vomiting stopped. A diagnosis of psychogenic vomiting was made. He was discharged with the advice to attend regular supportive psychotherapy sessions. At follow up visits after one year the patient is completely well and there is not an episode of vomiting.

Discussion

Renate Hoosmann Rosenthal (1) and et al. evaluated twenty-four patients who had been diagnosed by a gastroenterologist as psychogenic vomits. The vomiting seemed to be chronic and non-debilitating, with exacerbations in times of tension. The authors conclude that most psychogenic vomits can be handled effectively by an empathetic primary care physician. The vomiting in our patient was also chronic and he did not cause serious psychiatric disturbances and after the psychological interview there was a dramatic recovery and the vomiting stopped.

Joseph Gonzalez-Heydrich (2) and et al. treated four patients with chronic vomiting during childhood in whom a provisional diagnosis of psychogenic vomiting was made after an extended evaluation. In three cases, these notices did not correspond with a diagnosis of psychogenic vomiting. This led to a redirect examination of the organic evaluation and the discovery of an undiagnosed organic contribution to the emesis. In the fourth patient, gastric emptying studies confirmed that there was a strong psychological contribution to the emesis. Household and individual psychotherapy and treatment were aided by the greater clarity in diagnosis.

Because our patient had undergone extensive laboratory investigations and most all of them were normal and during the course of treatment, observations fit those expected the diagnosis of psychogenic vomiting was correct.

C. Sherman Hoyt (3) and et al. reviewed 44 patients less than 15 years of age seen at the Mayo Clinic from 1945 to May, 1957, who had the syndrome of recurrent vomiting. Of the 38 patients who answered to follow up plan request, 30 had no cyclic vomiting at the time of follow-up. Of the remaining 8 patients, there was less than a 5-year follow-up in 7. Our patient had no vomiting at the time of follow-up too.

The reason of recurrent vomiting syndrome, while possibly psychogenic, is not recognized by all odds. It usually winds up before puberty. There may be

some relationship to migraine which also may be a syndrome and not a definite disease entity.

Robert Pazulinec (4) and et al. verified that vomiting is a usual physiological malady which may have several reasons. One etiological factor which is gathering increasing attention in the literature is the possible psychogenic basis for vomiting.

Efforts have been established to discover three unique types of psychogenic vomiting: (1) Chronic vomiting; (2) Rumination; and (3) Cyclic vomiting. Each is considered to represent a different clinical picture and different etiology.

Paul C. Laybourne (5) and et al. showed that kids can be hospitalized in a pediatric ward and psychotherapeutic work can then be guaranteed to relieve some of the more serious symptomatology before long-term work in some other setting is led off. This is especially true of such disorders as psychogenic vomiting, ulcerative colitis and severe bronchial asthma.

Our patient was hospitalized for two days; after psychological consultation of his mother and teaching the feeding techniques for mother, because there was a dramatic response and emesis was completely stopped, he was discharged.

Holvoet (6) in a review article demonstrated chronic emesis, without discernible physical illness, is a problem sometimes experienced in individuals labeled as mentally retarded or mentally sick. This behavior often becomes life-threatening, especially when it happens in young children.

Chow and Goldman (7) demonstrated that psychogenic vomiting can lead to surgical fundoplication or hospitalization for psychiatric causes. One way for managing cyclic vomiting syndrome is avoiding precipitating events. Triggers of cyclic vomiting syndrome can be identified by patients in 68% of cases; these are often infections (41%) and psychological stress (34%). Acute tension management techniques or benzodiazepines can sometimes prevent expected attacks in patients who psychological stress initiates an episode.

Sokel (8) and et al. reported a 9 year old male child with intractable postprandial reflex emesis a in whom self-hypnotherapy technique led to complete improvement within four weeks.

O'connor (9) and et al. described a well-nourished teen-age girl with psychogenic vomiting showed clinical and radiographic findings of superior mesenteric artery syndrome (SMAS). Her upper gastrointestinal radiographic studies were normal a few weeks before and three years after the study radiographic findings were in favor of SMAS.

They concluded psychological etiologies should be in mind in SMAS when there is no condition of immobility, abdominal compression, or abdominal disturbance. Rho (10) mentioned that Significant attention has been paid to the behavioral symptoms seen in patients with cyclic vomiting syndrome, especially by early investigators.

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