The role of primary care physician in diagnosis of uncommon conditions like Cyclic Vomiting Syndrome

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Introduction

Cyclic Vomiting Syndrome (CVS) is a diagnosis of exclusion commonly diagnosed 1-4 years after the initial clinical presentation. This condition presents with recurrent, intense periodic episodes of vomiting. Affects 1-2% of the population, mainly 3-7 y/o children with a female predominance[1]. The etiology is not well established[2].

Prophylactic and therapeutic treatment exist, but achievement of disease control is difficult[3]. Nowadays a challenge still exist to improve patient's and parents quality of life, school performance and health-care costs.

Case Presentation

Our case involves a 4 y/o girl that presents to the emergency department (ED) after 6 episodes of vomiting that presents 2 hours after initial vomiting episode. This patient presents over 16 hospital visits at same clinical facility within 2 years due to similar complaints.

A physical examination revealed dry oral mucosa and mild epigastric tenderness. Laboratories demonstrated reactive leukocytosis and elevated BUN. Therefore she was admitted with a diagnosis of Gastritis and appropriately managed; afterwards, 2 days later she was discharged.

Based on multiple ED visits and due to suspected CVS diagnosis the patient was referred to Neurology and Gastroenterologist services. Subsequent EGD, Head CT and Head MRI were unremarkable. After excluding common diseases and based on Rome-IV criteria patient was diagnosed with CVS. Subsequently, she was started on Cyproheptadine 2.5mg PO BID as prophylactic treatment.

This study was approved by the PHSU IRB (Protocol number 2401180191).

Patient History

Birth History: TAGA 39w SVD from mother T3P0A0L3 with adequate prenatal care.

Past Medical History: Denied.

Past Family Medical History: Unremarkable.

Vaccines: Up to date on schedule.

Milestones: Achieved for age (4 y/o).

Weight/Height Percentile: 25 / 10-25 percentile.

Studies and Interventions

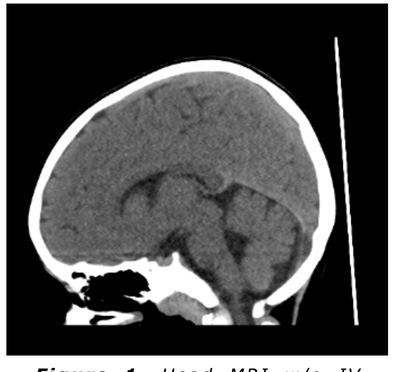

Figure 1. *Head MRI w/o IV contrast showing No structural abnormalities, no areas of acute infarction.*

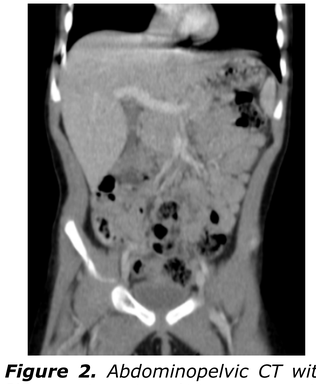

Figure 2. *Abdominopelvic CT with IV contrast with no acute intrabdominal process.*

Rome-IV Diagnostic Criteria

Must have for 3 months prior with symptom onset >6 months ago:
Stereotypical episodes of vomiting regarding onset (acute) and duration (<1 week)
>3 discrete episodes in the prior year and 2 episodes in the past 6 months, occurring >1 week apart
Absence of vomiting between episodes, but other milder symptoms can be present between cycles

Discussion

- Differential diagnoses are challenging. This case was not the exception, specially when follow up with the primary care physician (PCP) was sporadic. Achieving an adequate patient-doctor relationship and adherence play a critical role in these type of cases to maintain an adequate follow up and be able to early detect uncommon diseases.
- Reaching this relationship will also reduce the number of unnecessary ED visits, laboratories and studies; therefore reducing health-care costs.
- Achieving adequate follow up will also give us the opportunity to provide appropriate orientation about uncommon diseases curse and treatment challenges. As a result we will be able to improve patients and parent's quality of life and more importantly in this population, the school performance.

Learning Points

- PCP's had an important role in maintaining patient's adherence to avoid diagnosis delay of rare conditions.
- Patient's parents adequate orientation about disease presentation course and available medications for incurable and difficult to manage conditions will decrease health-care costs.

References

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