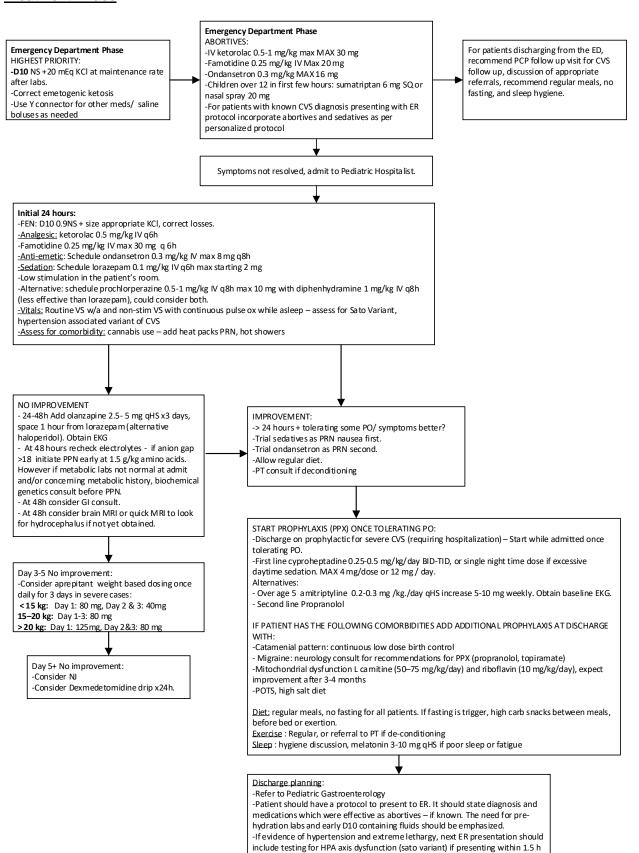


Clinical Pathways Program

Guideline: PEDIATRIC CYCLIC VOMITING SYNDROME, INPATIENT AND EMERGENCY DEPARTMENT

Updated: August 26, 2022 Inclusion Criteria: -At least 4 vomits an hour for 1 hour -Intense attacks last 1 hour to 10 days and are at least a week apart **Clinical algorithm:** -5 attacks total or 3 in 6 months -Attacks are stereotypical for that individual Do not delay IVF and abortives administration. **Evaluation Phase** -CMP, phosphorous, magnesium, POC glucose PRIOR TO HYDRATION -Urine pregnancy test for all pubertal females -EKG if not previously obtained or known history of cardiac disease Review records and if not previously done: -Upper GI series to evaluate for malrotation -Abdominal US to evaluate for hydronephrosis / UPJ obstruction All attacks precipitated by: Abnormal neurologic exam: Attack with presence of: No findings · Bilious emesis Severe alteration of mental status suggestive of intercurrent illness Abnormal eye movements Severe abdominal pain or another disorder high protein meal Papillede ma* Hematemesis Motor asymmetry Gait abnormality (*May not need metabolic evaluation) Consider brain MRI Consider at any time: or quick MRI to look Obtained at the beginning of attack Ultrasound of the Brain MRI, EEG for hydrocephalus before IV fluid: abdomen & pelvis - Lipase electrolytes for anion gap - CT Abd/ Pelvis urine ketones esophagogastrolactate duodenoscopy ammonia serum amino acids Consider <u>during an attack</u>: urine organic acids - ALT/GGT consider plasma carnitine & lipase +/- amylase acylca mitine · Beta-OH-butyrate Result of testing Probable Cyclic Vomiting explains vomiting. Syndrome. Treat or refer Refer to Treatment accordingly. Phase Algorithm.

Treatment Phase



of symptom onset including ACTH, cortisol, ADH.

Clinical guideline summary

CLINICAL GUIDELINE NAME: Pediatric Cyclic Vomiting Syndrome

PATIENT POPULATION AND DIAGNOSIS: Pediatric patients 3 years to 18 years who present to the emergency department or inpatient with recurrent episodes of nausea and emesis.

APPLICABLE TO: Helen DeVos Children's Hospital

BRIEF DESCRIPTION: This practice pathway covers the diagnosis, workup, and acute management of pediatric cyclic vomiting syndrome.

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OWNING EXPERT IMPROVEMENT TEAM (EIT): Pediatric Hospitalist

MANAGING CLINICAL PRACTICE COUNCIL (CPC): Children's Health

CPC APPROVAL DATE: August 2022

OTHER TEAM(S) IMPACTED: Nursing, Pharmacy, Physical Therapy

IMPLEMENTATION DATE: August 2022

LAST REVISED: August 2022

FOR MORE INFORMATION, CONTACT: Allison Long

References:

Raucci et al Cyclic Vomiting in Children Frontiers in Neurology Nov 2020 (11) 583425.

Gui et al Acute Management of Pediatric Cyclic Vomiting Syndrome a Systematic Review J Peds 2019 (214):158-64.

Li B. Managing Cyclic vomiting syndrome in children: beyond the guidelines European J of Peds 2018 (177)1435-1442.

NASPHAGN consensus statement on the diagnosis and management of Cyclic Vomiting syndrome. J of Pediatric Gastroenterology and Nutrition 2008 (47) 379-393.