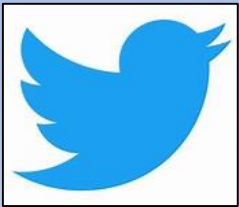


Nausea and Vomiting in Pregnancy

For the reluctant obstetrician...



@Obcast



Nausea and Vomiting in Pregnancy (NVP)

- Common
 - 80% of women will experience some degree of NVP
 - Can have big impact on quality of life
 - Can recur in subsequent pregnancies
- Hyperemesis Gravidarum
 - <1% pregnancies
 - Varied definitions, but essentially severe NVP PLUS:
 - Continued NVP despite oral/sublingual antiemetics
 - >5% weight loss
 - Ketonuria
 - Electrolyte disturbance

PUQE Score

- Pregnancy-Unique Quantification of Emesis (PUQE) Score

Total score is sum of replies to each of the three questions. PUQE-24 score: Mild ≤ 6 ; Moderate = 7–12; Severe = 13–15.

Motherisk PUQE-24 scoring system

In the last 24 hours, for how long have you felt nauseated or sick to your stomach?	Not at all (1)	1 hour or less (2)	2–3 hours (3)	4–6 hours (4)	More than 6 hours (5)
In the last 24 hours have you vomited or thrown up?	7 or more times (5)	5–6 times (4)	3–4 times (3)	1–2 times (2)	I did not throw up (1)
In the last 24 hours how many times have you had retching or dry heaves without bringing anything up?	No time (1)	1–2 times (2)	3–4 times (3)	5–6 times (4)	7 or more times (5)

PUQE-24 score: Mild ≤ 6 ; Moderate = 7–12; Severe = 13–15.


How many hours have you slept out of 24 hours? _____ Why? _____

On a scale of 0 to 10, how would you rate your wellbeing? _____
0 (worst possible) → 10 (the best you felt before pregnancy)

Can you tell me what causes you to feel that way? _____

DDx of NVP

- Pregnancy: Multiple Gestation, Gestational trophoblastic disease
- UTI
- GI causes: Gastroenteritis, Dyspepsia, Cholecystitis, Hepatitis, Pancreatitis
- Neurological causes
- Drug-induced



Clinical Assessment, BSL +/-
Urine Dipstick sufficient in
most cases

Management Principles

****Goal is improved quality of life, at home****

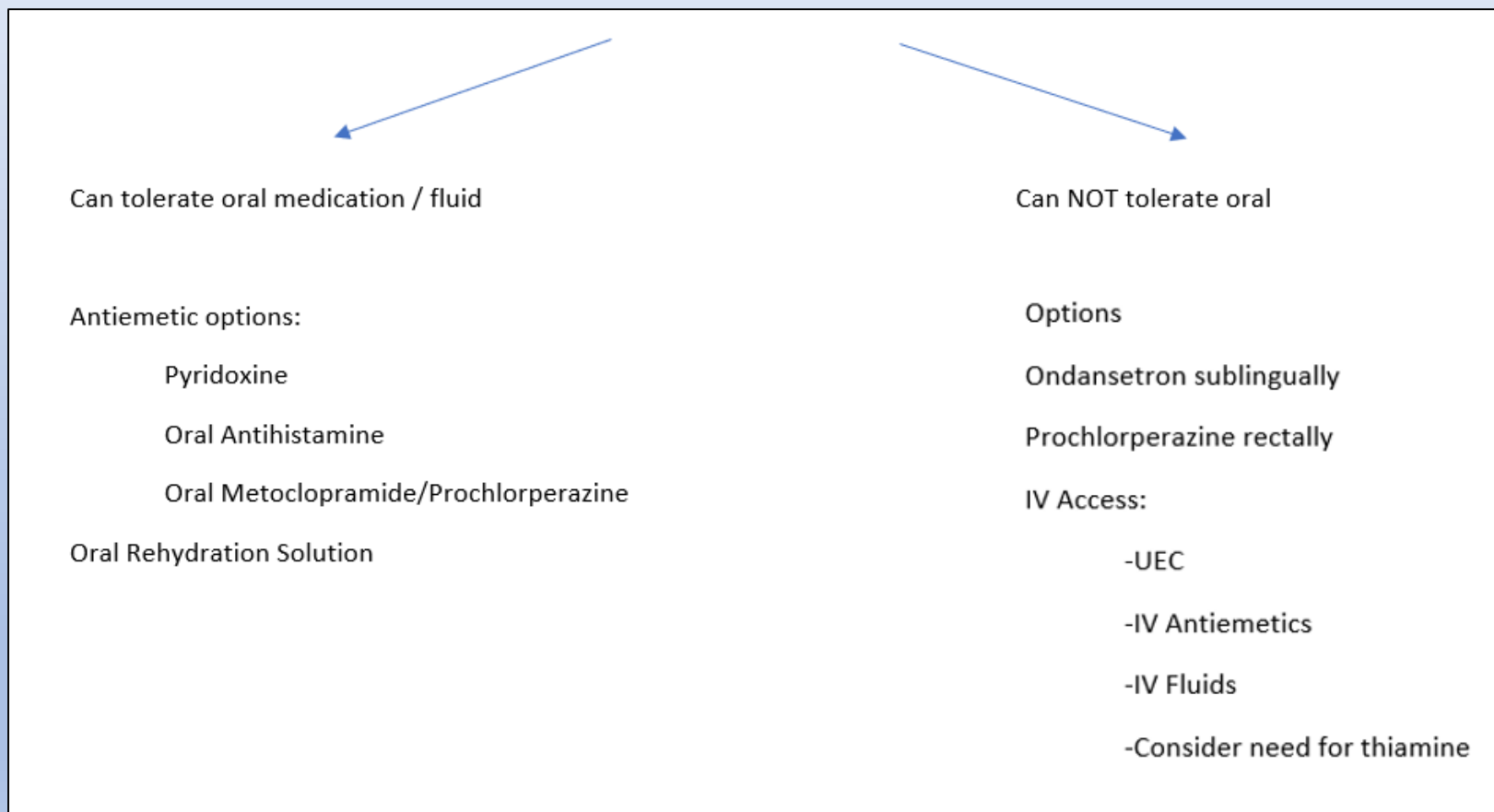
Diet-modification

- Empty stomach may exacerbate: Eat less, more often, before or as soon as hungry
- High Carb, Low fat
- Salty, bland, dry
- Fluids / Antiemetics
- PO, SL, IV and PR options across multiple classes

Fluid Rehydration

- PO if possible: cold, clear & carbonated – small amounts more frequently
- IV as rescue option in severe cases

NVP Antiemetic / Fluid Algorithm



Other

VTE Prophylaxis

If admitted, generally dehydrated

OR ~2 for VTE

PPI or H2 antagonist if significant dyspepsia is a contributor

Ginger

- Small studies suggesting efficacy
- Worth considering / suggesting
- Some women like a more natural option as a starting point
 - Many are far beyond this by the time they are in the ED or GP clinic!

Vitamin B6 - Pyridoxine

- Vitamin B6
 - 25mg PO q8H
- Conflicting data regarding efficacy
- Safe

Antihistamines

- Doxylamine
 - 25mg PO at night
- Promethazine
 - 25mg PO at night +/- morning
 - Main problem is sedation

Dopamine Antagonists

- Metoclopramide
 - 10-20mg PO q8H
 - Can be PO, IM or IV
 - Common/important adverse effects:
 - Akathisia
 - Acute dystonia
- Prochlorperazine
 - 5-10mg PO / IM / IV
 - 25mg rectal suppositories available

Ondansetron

- 5-HT₃ receptor antagonist
- Given sublingually or IV: 4-8mg q6-8hrly
- Some historic concern over safety - ? Increased fetal cardiac abnormalities and clefts
 - Women know about these concerns
- Now multiple studies, vast majority support safety
- Most recent: 1.8 million women with live birth, 90k exposed to ondansetron
 - OR cardiac abnormality 0.99 (95% CI: 0.93-1.06)
 - OR cleft 1.24 (95% CI: 1.03-1.48)
 - 3 extra in every 10,000 women exposed
- Generally used as second line

Original Investigation

December 18, 2018

Association of Maternal First-Trimester Ondansetron Use With Cardiac Malformations and Oral Clefts in Offspring

Krista F. Huybrechts, MS, PhD¹; Sonia Hernández-Díaz, MD, DrPH²; Loreen Straub, MD, MS¹; [et al](#)

» [Author Affiliations](#)

JAMA. 2018;320(23):2429-2437. doi:10.1001/jama.2018.18307

Corticosteroids

- Not commonly used
- Refractory cases
- Case report data and small RCT data on efficacy
- Increased risk of cleft palate
- Other adverse effects of corticosteroids to be considered
- Options:
 - Hydrocortisone 100mg IV BD, then
 - Prednisolone 50mg PO daily, tapered to lowest effective dose

Indications for Admission

- Severe dehydration / AKI / electrolyte disturbance
 - If hypokalaemic – check ECG
 - QTc prolongation can be exacerbated by many antiemetic medications
- Severe NVP with ongoing inability to maintain oral hydration despite treatment
- Co-morbid cause requiring inpatient therapy
- Establish NG / NJ nutrition or TPN

Thiamine

- These women at risk of B1 deficiency and resultant Wernicke-Korsakoff
- Rare complication
- Most risk if pre-pregnancy malnutrition, or prolonged severe NVP
 - > 3 weeks

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