TITLE: Headache in Pregnancy

Subtitle: Acute treatment of primary or secondary headache

SUMMARY: Despite the prevalence of the disorder, the treatment of acute headache (HA) in pregnancy has not been adequately studied in randomized trials to make evidence based recommendations. Most medication safety data is indirectly obtained through use for a different medical condition and national society recommendations are based on expert opinion.

Rationale: Some patients ultimately diagnosed with primary HA of onset in pregnancy, will present acutely as will those with secondary HA. Additionally, some with primary HA will suffer breakthrough HA despite prevention strategies including medications. Acute treatment for HA can be tailored to home or hospital use, particular to the suspected HA etiology, severity and associated symptoms.

Eligible patients: Pregnant patients presenting with acute HA in the absence of prior HA history or h/o primary HA refractory to preventative interventions.

Contraindications: See HA: Evaluation document for additional information. The following require emergent evaluation as results may direct appropriate treatment options:

1. Rapid onset or change from baseline
2. Severe pain or “thunderclap” HA
3. Elevated BP
4. Fever
5. Third trimester gestational age
6. Focal neurologic deficits
7. Altered level of consciousness
8. Laboratory abnormalities (low or high plt cnt, elevated LFTs, elevated creatinine)

Technique- Primary HA:

1. Options for home treatment-limit to 2 days per week or less to avoid development of medication overuse chronic HA
   1. Acetaminophen 1000mg orally, no more than 3-4 gm in 24 hours
   2. Acetaminophen plus caffeine (500/65), no more than 3-4 g acetaminophen and 200 mg caffeine in 24 hrs
   3. NSAIDs- second trimester only, single dose preferred, no more than 48 hours consecutively
2. Options for hospital treatment
   1. Metoclopramide 10 mg IV or PO PLUS diphenhydramine 25 mg IV or PO
   2. Sumatriptan may be used cautiously-oral, SQ, or intranasal-SQ preferred in emergency situation and may be repeated once within 24 hrs if not effective (after 1 hr for SQ and minimum of 2 hrs for oral or intranasal) -increased childhood emotionality and hyperactivity at age 3 in one study. Other triptans not recommended.
   3. Consider noninvasive neuromodulator devices (eg external trigeminal nerve stimulator)- no supporting data on efficacy in pregnancy but harm unlikely
   4. Magnesium infusion 1-2 gm over 15-20 minutes- esp refractory migraine with aura
   5. Oral glucocorticoids
      1. Prednisone 20 mg po daily q 4 hrs for 2 days
      2. Methylprednisolone 4 mgs po, 21 pill dose pack over 6 days
      3. Dexamethasone 10-24 mg IV or IM, may be more effective than other PO glucocorticoids but crosses placenta

Special Considerations:

The following medications are not recommended for HA treatment in pregnancy:

1. Ergot alkaloids
2. Opioid narcotics alone or in combination products
3. Butalbital- alone or in combination products

Preeclampsia with persistent HA as the severe feature warrants magnesium neuroprophylaxis, blood pressure control, and delivery.

Less common etiologies of secondary HA during pregnancy and postpartum include:

1. Postdural puncture HA: conservative treatment with analgesics and caffeine, epidural blood patch, emerging data (currently limited to case reports) on sphenopalatine ganglion or occipital nerve block
2. Idiopathic intracranial hypertension: treat with acetazolamide or serial lumbar puncture
3. Central venous thrombosis: treat with adjusted-dose low molecular weight heparin. Antiphospholipid antibody testing and inherited thrombophilia panel recommended.
4. Pituitary apoplexy: treat with minimally invasive endoscopic endonasal transsphenoidal resection

Reference: ACOG Clinical Practice Guideline No. 3: Headache in Pregnancy and Postpartum. Obstet Gynecol 139 (5): 944-972. May 2022.

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