

CONSULTATION TRIGGERS IN SEVERE PREECLAMPSIA FOR ALL OBSTETRIC UNITS

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BACKGROUND

Patients with preeclampsia are at risk for numerous adverse outcomes. The Labor and Delivery team of obstetricians, nurses and anesthesiologists are the first responders, but require consultation with other specialties in a number of clinical circumstances. The following are guidelines for engaging additional practitioners in providing added clinical depth for patient care.

Table 1: Trigger Criteria for Consultations

Pulmonary/Fluids	Cardiac	Neurologic	Hematologic
<ul style="list-style-type: none"> • Pulmonary edema • Fluid overload, leaky membrane, low Colloid Oncotic Pressure • Not responding to one dose of diuretic • Shortness of breath– DDx includes r/o pulmonary embolism (spiral CT scan preferred) 	<ul style="list-style-type: none"> • Cardiac pump failure –(DDx) includes peripartum cardiomyopathy, preeclampsia induced – need echo. • Arrhythmia (e.g. SVT, atrial fibrillation) • Difficulty breathing, (might need intubation: DDx: pulmonary edema, stridor from swelling fluids/allergic, asthmatic not responsive to initial medications, magnesium toxicity, occult Mitral Stenosis for new onset asthma in labor • Hypoxia, any cause (decreased O2Sat) – (e.g. oxygen saturation < 95% on oxygen). Trauma history (possible pneumothorax – chest tube required) • Intrinsic – cardiac pump failure, leaky membrane, COP low, bronchospasm, Extrinsic – PTX, ETT kink, FB in airway, Swelling/stridor – fluid/preeclampsia progression labor, allergic reaction 	<ul style="list-style-type: none"> • Repeated seizures, unresponsive to initial therapy (DDx includes SAH/intracranial hemorrhage – CT required) • Altered mental status (DDx – metabolic, toxic, etc.) • Acute stroke/neurologic changes (r/o intracranial bleed) • Cortical vein thrombosis 	<ul style="list-style-type: none"> • DIC • HELLP syndrome (e.g. platelets <50,000) • Coagulopathy, any cause • Massive transfusion/OB hemorrhage • On anticoagulants (e.g., LMWH) – timing dosing, when to hold, when to restart

DDx: Differential Diagnosis; r/o: Rule Out; CT: computed tomography; SVT: Supraventricular Tachycardia; COP: colloid osmotic pressure; PTX: Pneumothorax; ETT: Endotracheal tube kink; FB: foreign body; SAH: subarachnoid hemorrhage; DIC: Disseminated Intravascular Coagulopathy; HELLP: Hemolysis, Elevated Liver Enzymes, Low Platelet; LMWH: low molecular weight heparin

RECOMMENDATIONS FOR QUALITY IMPROVEMENT:

1. Consultation of maternal fetal medicine, anesthesia, cardiology, hematology, and/or neurology or any other sub-specialties should be strongly considered if the staff feel uncomfortable with the medical situation or if any hematologic, cardiac, pulmonary, or persistent neurologic symptoms are present.
2. Request consultations when the patient needs a higher level of care than usually provided by regular L and D staff, or the staff feel uncomfortable with the medical situation. Often the first consults are with the MFM and/or Anesthesiologist covering OB.^{1,2}
3. Consultations should also be considered in the following situations:
 - There is clinical disagreement among team members about the severity of the woman's condition
 - Hypertension is resistant to standard treatment (e.g., SBP > 160 mm Hg, DBP > 105-110 mm Hg), need 3rd line drug (i.e., after labetalol, hydralazine per CMQCC/ACOG protocols)
 - Persistent low BP (e.g., SBP < 90 mm Hg) unresponsive to fluid bolus(es) of 500 ml
 - Crystalloid and/or short acting vasopressors (e.g. ephedrine due to neuroaxis blockade)
 - Persistent oliguria (e.g., < 30 cc per hr) after fluid challenge (See Fluid Management section, pg. 71)
 - Suspected amniotic fluid or pulmonary embolism, or
 - Hemorrhage with disseminated intravascular coagulation (DIC)

EVIDENCE GRADING

Level of Evidence: C

REFERENCES

1. Kodali B, Chandrasekhar S, Bulich L, Topulos G, Datta S. Airway changes during labor and delivery. *Anesthesiology*. 2008;108:357-362.
2. Isono S. Mallampati classification, an estimate of upper airway anatomical balance, can change rapidly during labor. *Anesthesiology*. 2008;108:347-349.