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

<table>
<thead>
<tr>
<th>Pulmonary/Fluids</th>
<th>Cardiac</th>
<th>Neurologic</th>
<th>Hematologic</th>
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<tbody>
<tr>
<td>• Pulmonary edema</td>
<td>• Cardiac pump failure – (DDx) includes peripartum cardiomyopathy, preeclampsia induced – need echo.</td>
<td>• Repeated seizures, unresponsive to initial therapy (DDx includes SAH/intracranial hemorrhage – CT required)</td>
<td>• DIC</td>
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<td>• Fluid overload, leaky membrane, low Colloid Osmotic Pressure</td>
<td>• Arrhythmia (e.g. SVT, atrial fibrillation)</td>
<td>• Altered mental status (DDx – metabolic, toxic, etc.)</td>
<td>• HELLP syndrome (e.g. platelets &lt;50,000)</td>
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<td>• Not responding to one dose of diuretic</td>
<td>• 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</td>
<td>• Acute stroke/neurologic changes (r/o intracranial bleed)</td>
<td>• Coagulopathy, any cause</td>
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<td>• Shortness of breath– DDx includes r/o pulmonary embolism (spiral CT scan preferred)</td>
<td>• Hypoxia, any cause (decreased O2Sat) – (e.g. oxygen saturation &lt; 95% on oxygen). Trauma history (possible pneumothorax – chest tube required)</td>
<td>• Cortical vein thrombosis</td>
<td>• Massive transfusion/OB hemorrhage</td>
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<td></td>
<td>• Intrinsic – cardiac pump failure, leaky membrane, COP low, bronchospasm, Extrinsic – PTX, ETT kink, FB in airway, Swelling/stridor – fluid/preeclampsia progression labor, allergic reaction</td>
<td></td>
<td>• On anticoagulants (e.g., LMWH) – timing dosing, when to hold, when to restart</td>
</tr>
</tbody>
</table>

DDx: Differential Diagnosis; r/o: Rule Out; CT: computed tomography; SVT: Supraventricular Tachycardia; COP: colloid osmotic pressure; PTX: Pneumothorax; ETT: Endotrachial 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 blockaide)
   • 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