

## IM5 (Pediatrics) Critical Thinking Worksheet

Patient Age: 5 weeks (11/2/20) Patient Weight: 4.3 kg

<p><b>1. Disease Process &amp; Brief Pathophysiology (Identify Key Concepts to Your Patient and Include Reference):</b> In this case, sepsis, a bloodstream infection, was caused by group B streptococcus (GBS). The route in which the infant contracted GBS had not been identified at the time of my clinical. Bacterial meningitis often occurs with sepsis (Tesini, 2020). Bacterial meningitis is the inflammation of the meninges, commonly pia matter and arachnoid, caused by a bacterial infection into the subarachnoid space from the blood stream. GBS carries specific adhesive proteins to enable the invasion of the CSF barrier (Hoffman &amp; Weber, 2009).</p>	<p><b>2. Factors for the Development of the Disease/Acute Illness:</b></p> <ul style="list-style-type: none"> <li>• Infection of the placenta or uterus</li> <li>• Scalp lesions</li> <li>• GSB (P)</li> <li>• GBS in breastmilk</li> <li>• Staying in the hospital for an extended period of time</li> <li>• Having a catheter in a blood vessel for a long time</li> </ul>	<p><b>3. Signs and Symptoms:</b></p> <ul style="list-style-type: none"> <li>• Bulging fontanel (P)</li> <li>• Fever (P)</li> <li>• Respiratory distress, grunting (P)</li> <li>• Jaundice (P)</li> <li>• Apnea (P)</li> <li>• Irritability, dislike being handled (P)</li> <li>• Seizures</li> <li>• Vomiting</li> <li>• Nuchal rigidity</li> <li>• Feeds poorly or refuses to eat (P)</li> <li>• Pale, mottled skin (P)</li> </ul>
<p><b>4. Diagnostic Tests Pertinent or Confirming of Diagnosis:</b></p> <ul style="list-style-type: none"> <li>• Lumbar puncture for CSF (P-pending results)</li> <li>• Positive bacterial culture (P)</li> <li>• Polymerase chain reaction testing</li> <li>• Ultrasonography</li> <li>• CT of brain</li> <li>• MRI of brain</li> <li>• CBC and differential (P)</li> <li>• CMP (P)</li> <li>• Arterial blood gas (P)</li> <li>• Respiratory culture (P-pending results)</li> <li>• UA (P- pending results)</li> </ul>	<p><b>5. Lab Values That May Be Affected:</b></p> <ul style="list-style-type: none"> <li>• CSF findings: <ul style="list-style-type: none"> <li>○ Increased pressure</li> <li>○ Elevated WBC &amp; protein</li> <li>○ Low CSF:blood glucose ratio</li> <li>○ Positive bacterial Gram stain</li> </ul> </li> <li>• CBC differential ratio less than 1., left shift</li> <li>• Metabolic panel <ul style="list-style-type: none"> <li>○ Serum glucose</li> <li>○ BUN</li> <li>○ Creatinine</li> </ul> </li> </ul>	<p><b>6. Current Treatment (Include Procedures):</b> My 0600 clinical with this patient got hectic very quickly. The physician discontinued morphine and replaced it with acetaminophen 60mg in 6mL NS Q6HR PRN for pain 1-3. Medications to be continued are: Ampicillin, Vancomycin, Maxipime, Protonix, and Vitamin K. At the beginning of the shift, VS were Q1 with the patient NPO The patient had a PICC and feeding tube placed. Orders weren't available at the end of my clinical to discuss exact treatment for them. X-rays were ordered and confirmed PICC placement but hadn't confirmed feeding tube. The infant was also intubated but orders pertinent to that care had not been available as well. Airborne precautions were implemented</p>

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Unit: PICU

Pt. Initials: E.T.

Date: 12/15/2020

	o Bilirubin, total	due to intubation.
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Citations:

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Hoffman, O., & Weber, R. J. (2009). Pathophysiology and treatment of bacterial meningitis. *Therapeutic advances in neurological disorders*, 2(6), 1-7. <https://doi.org/10.1177/1756285609337975>