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| **Detail** | **Clinical Significance/Impact** |
| **It is Sunday afternoon and you are working in a busy Emergency Department.** |  |
| **History of present illness:** You are caring for Jaylee Kraft, a 19-year-old African American college student. She was admitted to the ED with a severe headache, pain rating of 10/10, fever of 39.2°C, photophobia, neck pain and altered mental status. She is irritable. Jaylee is accompanied by two friends. |  |
| **Social History** (from Jaylee and friends)**:** Jaylee moved in with the family of some friends a few weeks ago to save money. Her friends say she is great student, always happy and easy going. Jaylee says she is majoring in photography and has a side business taking advertising photos for local businesses to help her pay for college. |  |
| **Medical History:** No significant medical history. |  |

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| **Subjective History** (from friends)**:** Jaylee and her friends were on a weekend camping trip. They shared a tent Friday and Saturday night. Jaylee seemed “fine” on Saturday but on Sunday she was “crabby.” The group was hiking, which is a favorite pastime for Jaylee, but she complained constantly about the bright sunlight, she had trouble using her camera and took very few pictures. She eventually went back to the campsite. When her friends joined her they found her in a great deal of discomfort. Jaylee was sweating and seemed to be running a fever. They decided to bring her to the closest emergency department, which was several hours away. |  |
| **Nursing Assessment: What assessment data is important and why?** |  |

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| **Detail** | **Clinical Significance/Impact** |
| **Objective Data**  **General Appearance:** Lying in bed, crying, complains of headache and stiff neck, two visitors at bedside.  Temp: 40°C (104°F)  BP: 130/74  HR: 90  RR: 24  **RESP:** Lungs CTA, respirations even but slightly labored.  **CARDIAC:** Mucous membranes pale. Capillary refill < 3 seconds. Apical HRR. Peripheral pulses palpable X4 at +2. No edema.  **NEURO:** Alert & oriented to person/place/time/situation, with intermittent confusion. ℅ Pain (headache) rates a 10/10. Irritable. PERRLA  **GI:** Abd soft non-distended. NABS X4.  **GU:** No urine output noted at this time. Denies pain with urination. States last void was about an hour prior to arriving at the Emergency Department.  **Musculoskeletal:** Able to move all extremities, equal grips bilaterally, ℅ stiff neck and unable to turn head.  **Integumentary:** Skin warm and dry to touch. Dry mucous membranes, cracked lips, small petechiae over left upper torso and abdomen. |  |
| **What diagnosis do you suspect and why?** | **Clinical Significance/Impact** |
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| **What tests do you expect the physician to order and why?** | **Clinical Significance/Impact** |
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| **What orders do you expect and why?** | **Clinical Significance/Impact** |
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| **Diagnostic Test Results** | | **Clinical Significance/Impact** |
| LP-Results | Culture pending, CSF was turbid and cloudy. Elevate protein and glucose. |  |
| CBC | WBC: 30,000/mm3  Neutrophils: 25,000/mm3  Lymphocytes: 4,000/mm3  Monocytes: 600/mm3  Eosinophils: 300/mm3  Basophils: 100/mm3  RBC: 4.5 X 1012/L  Hgb: 14 g/dL  HCT: 40%  Platelets: 300,000/mcL |  |
| CT Scan | No lesions noted. |  |
| Chemistry | BUN: 18 mg/dl  Creatinine: 1.2 mg/dl  Na: 135 mmol/L  K: 4.5 mmol/L  Cl: 100 mmol/L  Ca: 9.6 mg/dl  Glucose: 120 mg/dL  Phosphate: 1.0 mmol/L |  |
| PT/PTT | PT: 12.8 Seconds  PTT: 100 seconds  INR: 4 |  |

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| **Family Education** | **Clinical Significance/Impact** |
| **What education is essential to communicate to Jaylee’s friends & family right now?**  **What is important to tell the family about droplet precautions?** |  |
| **Case Study Continued** | **Clinical Significance/Impact** |
| Jaylee is being transferred to the Medical ICU. You prepare to call report to the ICU nurse Ami, RN. You review Jaylee’s most recent labs and presenting symptoms. Jaylee’s LOC has deteriorated since her arrival to the emergency department. She has attempted to pull out her IV several times and attempts to get out of bed. She is in bilateral soft wrist restraints to her upper extremities. She is agitated and increasingly lethargic. She is oriented to person, place. She verbalizes that is sick but insists upon getting out of bed. She has no family at bedside. Her friends have stayed with her. Her parents live several hours away and anticipate they will arrive in about 4 hours. Jaylee received one dose of IV Ampicillin one hour ago. The next dose is scheduled in seven hours. She had one seizure about two hours ago that lasted 45 seconds. She is receiving LR @ 50 ml/hour. |  |

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| **Considering Jaylee’s history, what information is important to include handover?**  **Practice using the SBAR format.** |
| **Situation:**  **Background:**  **Assessment:**  **Recommendation:** |

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| **What medication orders will Ami anticipate?** | **Clinical Significance/Impact** |
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| **Which medications (if ordered) could alter Jaylee’s LOC?** |  |
| **What nursing interventions will Ami implement and why? What interventions could be implemented to help decrease pain and photophobia? How will you keep Jaylee safe?** | |
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| **Test your knowledge!** | |
| **How is viral meningitis different than bacterial meningitis?**   1. Which type is a medical emergency? 2. What are the common causes of viral meningitis? 3. Which type is most likely to have permanent complications? 4. How is the CSF different? 5. Which type has a high mortality rate? |  |
| **Discharge Instructions** | |
| You are preparing Jaylee for discharge. She was in the ICU for 20 days and on the medical surgical unit for 10 days. She continues to have headaches. She is able to ambulate with minimal assistance. She is able to feed herself, but is on a pureed diet. She has a decreased appetite and is easily fatigued. What instructions will be included in her discharge? |  |

**References**

* Lewis, S. L., Dirksen, S. R., Heitkemper, M. M., Bucher, L., & Camera, I. M. (2011). *Medical-surgical nursing: Assessment and management of clinical problems* (8th ed.). St. Louis, MO: Elsevier.
* LeMone, P., Burke, K. M., Bauldoff, G., & Gubrud-Howe, P. M. (2015). *Medical-surgical nursing: clinical reasoning in patient care.* Sixth edition. Boston: Pearson.
* [Pathan N, Faust SN, Levin M (2003, July 1). Pathophysiology of meningococcal meningitis and septicemia.](http://dx.doi.org/10.1136/adc.88.7.601" \t "_new) *[Archives of Disease in Childhood,](http://dx.doi.org/10.1136/adc.88.7.601" \t "_new)*[88, 601-607. doi: 10.1136/adc.88.7.601.](http://dx.doi.org/10.1136/adc.88.7.601" \t "_new)