BNURS506 Quiz Answering

Term: Spring 2025
Module 4: Musculoskeletal & Neurologic Systems
Name: Student T

#:	Your Answer	Feedback from Grader	Score
1	References: Feedback:		/ 10
2	This client is exhibiting problems with posture and possibly right sided movement, as well as having low tone in his lower extremities. I would consider cerebral palsy as it describes a group of disorders resulting in difficultly with movement, tone, or posture. However, cerebral palsy typically exhibits some spasticity, dystonia, ataxia, or dyskinetic activity, which have not been described (Hallman-Cooper & Rocha Cabrero, 2024). He does have muscle tone abnormalities, though. Nonetheless, his developmental milestones are delayed for a 19 month old (inability to sit/stand) and his preference for his left side may indicate a sort of hemiplegia. Prematurity and low birth weight are significant risk factors for CP, and he was born prematurely. Aside from movement, development and tone issues, infants and toddlers with cerebral palsy have many associated comorbidities such as epilepsy, intellectual disability, **feeding difficulties**, visual, **hearing** and **communication** difficulties, some of which his history suggest (in bold) (Hallman-Cooper & Rocha Cabrero, 2024). A full clinical history, physical exam to clarify his type of movements and if he has coordination issues, and brain MRI is indicated to further assess him for cerebral palsy. Additionally, a standardized developmental assessment should be used such as the Hammersmith Infant	Great job answering the question. I thought you did a great job including the different types of cerebral palsy movements. Thanks for bolding parts of your answer to help find the answer better. I took 0.25 off since your apa citation is off. Thanks for your feedback. I will try to explain certain terms in more detail.	9.75 / 10

	Neurological Exam (HINE) as it is indicated for kiddos 2-24 months old (Hallman-Cooper & Rocha Cabrero, 2024). References: Hallman-Cooper, J.L., & Rocha Cabrero, F. (2024, February 24). *Cerebral Palsy.* StatPearls. Retrieved May 13, 2025 from https://www.ncbi.nlm.nih.gov/books/NBK538147/ Feedback: This was an interesting question but also a bit difficult for me to phrase. I wasn't quite sure what low tone meant, and if it fits with the spasticity or dystonia seen in cerebral palsy, so I hope I explained myself enough. Though it was multi-parted I was able to use one source.		
3	References: Feedback:		/ 10
4	Toby appears to have Guillain-Barre syndrome, a progressive ascending neuromuscular disorder characterized by loss of sensory and motor function peripherally, causing tingling, numbness, and weakness that can progress to paralysis. It is commonly acquired following viral infections and is an immune-mediated neuropathy causing destruction of nerves in the peripheral nervous system. I would tell him, "We think you have Guillain-Barre Syndrome, which explains your paralysis and numbness. While rare, it is often caused by your immune system's overactive response to an infection, and we think that infection was Covid-19. Most patients do well with treatment, up to 85% of patients return to	1. You correctly identified that the patient has Guillain-Barre Syndrome! You provided a thorough explanation that included pathophysiology and prognosis that was easy for the patient to understand. My key answer also included explaining that the patient may need	9.5 / 10

	independent walking with recovery, though around 20% of patients have some morbidity. We will get started on treatment right away." Toby will be started on either intravenous immunoglobulin (IVIG) or plasma exchange (Nguyen & Taylor, 2023). Stronger effects of the treatments are seen if started within two weeks, so early treatment is advantageous. Additionally, we want to reverse the neuropathy before it ascends to his cranial nerves causing bulbar palsies (CNIX, X, or XI dysfunction, involved in swallowing) or affects the nerves and muscles of respiration, needing intubation (Nguyen & Taylor, 2023). As noted above, the most feared complication is respiratory compromise due to neck flexion weakness, and bulbar palsies causing aspiration and dysarthria. Monitoring for respiratory compromise would be noting accessory muscle use, tachypnea, orthopnea, low oxygen saturations, and whether Toby reports or exhibits exhaustion or difficulty breathing. References: Nguyen, T.P., & Taylor, R.S. (2023, February 7). *Guillain-Barre Syndrome*. StatPearls. Retrieved May 13, 2025 from https://www.ncbi.nlm.nih.gov/books/NBK532254/ Feedback: You set up this question quite nicely and I was able to answer it based on my experience as a nurse! I liked it a lot and learned about the treatment options. Providing patient education was a chance for me to apply my knowledge of the disease. Notably, there were seven question asked, and while Id typically request fewer parts, the questions logically flowed and weren't too burdensome, just something to be aware of.	physical therapy after discharge depending on the severity of their symptoms. (2.5/3 pts) 2. IVIG or PLEX are both first line treatments for GBS! It is essential for prompt treatment for shorter recovery time but also to prevent respiratory compromise, which you included. Excellent! (3/3 pts) 3. Respiratory compromise is one of the major complications of GBS. You correctly included monitoring respiratory status by assessing breathing ability and oxygen saturations. It's awesome that you included subjective information such as reports of SOB or exhaustion by the patient! (3/3 pts) +1 citation Thank you for your feedback! I included the second part of the question to avoid people giving one word answers (i.e GBS, IVIG, respiratory compromise, etc). My intent was for people to give short, concise answers but it may not have been communicated clearly. You did an awesome job though!	
5			/ 10

	References: Feedback:		
6	I suspect Rufino has Guillain-Barre Syndrome (GBS), but with a regional variant called “pharyngeal-cervical-brachial” variant that affects the pharyngeal, neck and upper extremity muscles (Nguyen & Taylor, 2023). I suspect the variant because GBS typically involves ascending weakness, and Rufino’s symptoms are descending, starting with his facial muscles and progressing down his arms and to his legs. GBS is an immune-mediated neuropathy following infection, which he had, and the pilgrimage caused prolonged physical exertion making him at risk. His diminished deep tendon reflexes and other cranial nerve palsies also support GBS. Immediately I am concerned about his airway protection since he has bilateral facial droop and weak gag. His increased RR, SOB, and moderate oxygen sats also concern me for respiratory compromise. I will have suction at the bedside for his weak gag, keep him strictly NPO, and have an NPO, OPA and BVM nearby. I will elevate his HOB to >30 degrees to reduce aspiration risk and likely administer supplemental oxygen to prevent exhaustion. I will also have intubation supplies at the bedside and a rapid series intubation kit (paralytic and sedatives) for intubation if his airway or respiratory efforts collapse. I would anticipate early treatment with intravenous immunoglobulin (IVIG) or plasma exchange (Nguyen & Taylor, 2023). I will monitor his vital signs and neurological status to check for strength, tone and his cranial nerves for improvement or progression. References: Nguyen, T.P., & Taylor, R.S. (2023, February 7). *Guillain-Barre Syndrome.* StatPearls. Retrieved May 13, 2025 from https://www.ncbi.nlm.nih.gov/books/NBK532254/ Feedback: This was an interesting question with a twist – while it seemed like Guillain-Barre I wasn’t so sure about the descending pattern, so I hope I got that it was a variant –	Great job, identifying GBS, along with the variant type. Your priority concern is spot on, being ready for intubation is critical. IVIG is the first line for management. The rest of intervention and assessments listed were what I was looking for.	10/ 10

	everything else fit! Although you asked several questions in one, I was able to source them all from one cite. Nice work.		
7	References: Feedback:		/ 10
8	The goals of trauma informed care are to invite and welcome the patient in care, invite them to actively engage in their care and disclose all their concerns. Mrs. James has expressed her concerns and prefers active engagement, so the staff can harness these strengths to provide trauma informed care. When giving care such as ADLs, physical assessments, or medication administration, the nurse should check for readiness by observing her, let her know what care they'll be performing and ask if she has concerns and how she can be more comfortable. Since she has limited use of her arms and uses a wheelchair, she may need help dressing and undressing, bathing, and moving about the facility. Staff should provide modesty, give privacy when helping her dress and undress by closing the door, having a gown or sheets for covering. During care, the nurse should ask permission, stay within eyesight, explain why, and respect her personal space. It is also recommended to use clinical, nonpersonalizing language, like "is it ok to assess the abdomen now?" UpToDate recommends being efficient, expressing thanks, and discussing next steps with the patient. These methods can be applied to all residents at the SNF via universal trauma precautions. References: Weil, A. (2025). Trauma-informed care in adults. *UpToDate*. Retrieved May 14, 2025, from https://www.uptodate.com/contents/trauma-informed-care-in-adults	Great job focusing on trauma informed care for this patient. I was looking for a more detailed explanation of how this therapeutic relationship for the nurse uses patience, empathy, being calm ,and consistent etc. between nurse and patient. I recognize the question I asked was very broad so I am grading this question based on detailed explanations as opposed to the correct answer. You got most of the content right so I only deducted half a point because I wanted a bit more specific detail.	9.5/ 10

	Feedback: After finding the trauma-informed care article on UpToDate, I felt prepared to answer this question. I liked that it pushed me to think about this framework of nursing, and refreshed me on how to give trauma-informed care.		
9	References: Feedback:		/ 10
10	1. The anesthesiologist should be consulted for medications administered during surgery, especially local anesthetics or medications intended to for regional blocks! 2. Marcaine 0.5% is bupivacaine, a long-acting local anesthetic agent. It is unclear if the surgeon would like to give it locally at the site or as additional regional block, like a lumbar epidural block, in which case this volume is appropriate, but on the higher end. II would be concerned however for a condition called LAST – local anesthetic systemic toxicity (Neal et al., 2017). 3. Two potential symptoms observable in the OR would be seizure, then signs of cardiac toxicity such as hypertension, tachycardia or ventricular arrhythmias (Neal et al., 2017). 4. Low muscle mass (patient's relatively low 61.2kg mass) and older age are risk factors), as well as being female (Neal et al., 2017).	1. Correct, 2 points 2. Correct, 1 point 3. Correct, 2 points 4. Correct, 2 points - especially nice work identifying this specific patient's risk factors! 5. Correct, 1 point References & citations - 1 point BONUS - exactly correct! 1 point Thank you for the feedback. Others also advised it was too long so I appreciate that. I will consider the length of my next question.	10 / 10

	5. Bupivacaine is the most toxic local anesthetic and most difficult to resuscitate. However, the treatment is lipid emulsion as an off-label FDA use, to be used at the first sign of arrythmia or seizure, in a dose of 12ml/kg. Bonus: Epinephrine when added to local anesthetic prolongs the anesthetic effect by vasoconstricting nearby blood vessels and slowing uptake into the bloodstream. . References: Neal, J. M., Barrington, M. J., Fettiplace, M. R., Gitman, M., Memtsoudis, S. G., Mörwald, E. E., Rubin, D. S., & Weinberg, G. (2018). The Third American Society of Regional Anesthesia and Pain Medicine Practice Advisory on Local Anesthetic Systemic Toxicity: Executive Summary 2017. *Regional Anesthesia and Pain Medicine*, *43*(2), 113–123. https://doi.org/10.1097/AAP.0000000000000720 Feedback: Whew! This was complex and narrowly focused but luckily once I found a toxicity after a google search I could pull the answers from one good source. The question was set up well and wasn't unnecessarily tricky, though five parts was extensive.		
11	References: Feedback:		/ 10

12	Based on Jason's exam, my clinical impression is that he may have adolescent idiopathic scoliosis (AIS), a condition of abnormal sideways curvature of the thoracic and lumbar spine. AIS is common in people ages 10 to 18, and implies an unknown etiology not related to a specific syndrome, congenital or neuromuscular disorder (Menger & Sin, 2023). Since he denies pain, weakness or recent injuries, and no past medical history is described, I'd lean towards idiopathic. Formal evaluation after this screening includes x-ray imaging, including standing coronal, sagittal x-rays and bending left and right x-rays. For diagnosis, the curve must be at least 10 degrees in the coronal plane (Menger & Sin, 2023). A pulmonary function test is part of the evaluation as well. Depending on his curvature, if it is between 10 and 25 degrees, he should be monitored for surveillance with serial x-rays at 3,6, and 12 month intervals. If it is between 25 and 45 degrees, he is a candidate for bracing. And if it is over 45 degrees, he would be a candidate for operation, as he is skeletally immature (Menger & Sin, 2023). Operative treatment is surgical fusion, but there are new non-fusion techniques such as tethering (Menger & Sin, 2023). References: Menger, R.P., & Sin, A.H. (2023, April 3). *Adolescent Idiopathic Scoliosis.* StatPearls. Retrieved May 15, 2025 from https://www.ncbi.nlm.nih.gov/books/NBK499908/ Feedback: This was an interesting and straightforward question, and all answers could be cited in one source, which I appreciated. The image was very helpful, as that position is the classic scoliosis screen!	Great answer- you clearly identified AIS, and tied Jason's skeletal immaturity to the risk for curve progression. Your explanation of imaging, Cobb angle thresholds, and treatment planning were well supported. Nice job!	10/ 10
13	References:		/ 10

	Feedback:		
14	These are the bedside assessments for meningitis. For both assessments the patient is supine. For Kernig, the leg is flexed at the knee and hip, then you straighten the patients leg. A positive sign is when the patient resists straightening because of pain in the lower back, indicating meningeal irritation (Ball et al., 2023, Chapter 23). A positive Brudzinski sign is when involuntary flexion of the hips and knees occurs when flexing the neck, also indicating possible meningeal irritation (Ball et al., 2023, Chapter 23). After you hang up the phone Samantha begins to seize at 12:03. You note that she has whole-body contractions, and she has lost consciousness which you recognize as a tonic-clonic seizure. What are your three immediate priorities for Samantha? Provide a **very brief** rationale for your answers. 1. Airway. Flatten the bed, turn her on her side, and have suction near her mouth for secretions. Have BVM and an OPA bedside in case she stops breathing for rescue breaths. 2. Safety. Stay near and protect her from falling off the bed or injuring her head or extremities against the bed rails. Bring seizure pads immediately. 3. Stopping seizure. Establish IV access if possible, but someone should be pulling Ativan and drawing it up to give IM if no IV access. Dr. Emergency comes into the room and asks you what happened. Provide a short (1-2 sentences) SBAR in your own words. SBAR: Samantha is 27F who started seizing at 12:03. She has no past medical history, came to us aox1, 9/10 headache, 39.8 fever, with nuchal rigidity and positive Kernig and Brudzinski signs, worse the last few hours. She is still breathing and we have suction and oxygen here. We are working on IV access. I need orders for Ativan and the RSI kit for probable intubation. It is now 12:09, and Samantha is still seizing despite multiple doses of IV Lorazepam. Dr. Emergency gives the following orders. In what order would you do these interventions? 4 (airway), 2 (circulation), 6 (sedate and propofol can help stop seizures – (Rossetti et al., 2023), 1 (stop seizure), 5 (fluid resuscitate), 3 (diagnostics), 7 (diagnostics and monitoring). Samantha has now stabilized, and you call the ICU charge nurse to arrange transfer. You see Charlotte crying the corner and she asks you “What’s wrong with her? Is she going to be okay?”. In 2-4 sentences, how would you explain Samantha’s diagnosis to Charlotte? I would approach her, offering a touch on the shoulder, and tissues if she needs them and say, “Oh you must be so worried. You just saw a lot of commotion and that must have been so scary. You did the right thing bringing her to us. Samantha is safe now and is being transferred to the ICU for close nursing and medical care. As you saw, she had a tube put in her throat to help her breathe, and we were able to stop the seizures with medications. We think this is all from an infection in her spinal fluid,		/ 10

	which irritated her brain and has made her very sick. She is getting all the treatment she needs and will be watched closely and be well taken care of. Let's get hers and your things packed up and you can follow us to the ICU. Who can I call to come be with you and her?" References: Ball, J., Dains, J. E., Flynn, J. A., Solomon, B. S., & Stewart, R. W. (2023). *Seidel's guide to physical examination: An interprofessional approach* (10th ed.). Elsevier. Rossetti, A.O., Claassen, J., & Gaspard, N. (2024). Status epilepticus in the ICU. *Intensive Care Med*. doi: 10.1007/s00134-023-07263-w Feedback: I liked this question because it was emergency nursing, priorities, and seizure-related. You carefully established the clinical situation which was interesting and thoughtful. You even provided variety, asking for nursing priorities, an SBAR, and therapeutic communication. Each question was high quality, BUT, this was four major questions in one, and any of the four sections alone would have sufficed for this assignment.		
15	References: Feedback:		/ 10
16	Based on his assessment of pain in the metatarsophalangeal joint of the great toe, swelling, and heat, as well as his risk factors of being an older male (older than 40)	Great job connecting this patient's symptoms to the diagnosis, describing the pathophysiology of gout, and	9/ 10

	htn, DM2 and EtOH use, I would suspect gout (Ball et al., 2023, Chapter 22 and Fenando et al., 2024). 2. Gout is a form of arthritis resulting from elevated serum uric acid or hyperuricemia, though not everyone with hyperuricemia develops gout. The pathophysiology of gout involves monosodium urate crystal deposition in joints and surrounding tissues, causing acute inflammatory reactions (Ball et al., 2023, Chapter 22). 3. In terms of treatment, during the acute phase we will alleviate inflammation and painful symptoms with ice, rest, NSAIDs, colchicine and systemic glucocorticoids. Long term, the goal is to reduce serum urate levels to suppress flare ups, so low-dose colchicine therapy is the first choice (Fenando et al., 2024). The recommended dose is 0.6mg once or twice daily. For the dietary component, weight loss and dietary adjustments can lower serum uric acid. Reducing intake of foods high in purines like organ meats, shellfish and beer, and soft drinks containing high-fructose corn syrup will help. The DASH diet (dietary approaches to stop hypertension) also may help to reduce flares. References: Ball, J., Dains, J. E., Flynn, J. A., Solomon, B. S., & Stewart, R. W. (2023). *Seidel's guide to physical examination: An interprofessional approach* (10th ed.). Elsevier. Fenando, A., Rednam, M., Gujarathi, R., & Widrich, J. (2024, February 12). *Gout*. StatPearls. Retrieved May 15, 2025 from https://www.ncbi.nlm.nih.gov/books/NBK546606/ Feedback: This was an interesting and reasonable question. All answers could be sourced from the same cite, which I appreciated! The photo was also helpful, as was his medical history and subjective and objective assessment.	discussing dietary changes that can help reduce flare-ups. You correctly identified medications that would be used in the acute phase of gout, and although I didn't ask for these medications, kudos for including them in your answer. For long-term gout treatment, you correctly discuss how the goal is to reduce serum urate levels, and typically, patients would be on uric acid-lowering medications such as allopurinol, which is the answer I was looking for. Colchicine can be used with allopurinol, but it doesn't decrease serum urate levels; instead, the medication works to decrease inflammation caused by uric acid crystal deposits in the joints. Overall, good work!	
17			/ 10

	References: Feedback:		
18	This patient is at risk for several complications, particularly compartment syndrome, deep vein thrombosis (DVT), and infection after this fracture, dislocation and surgical repair. Compartment syndrome occurs after acute trauma when tissue pressure within a given compartment exceeds the perfusion pressure of the arterial blood supply, resulting in ischemia of the muscles and nerves (Kiel & Kaiser, 2023). Postoperatively, compartment syndrome may be caused by dressings, splints, or casts that are too tight, or from bleeding, muscle edema or tight closure of the fascial layers. Diagnosis involves measurement of intracompartmental pressure using a needle manometer whereby an absolute pressure above 30mmHg is supportive. Definitive treatment is subcutaneous fasciotomy (Kiel & Kaiser, 2023). The patient might also acquire a DVT, which is a blood clot within the deep vein, likely within the operative leg as mechanical injury to the leg from trauma and/or surgery is a risk factor. Anticoagulation is needed for treatment either with low molecular weight heparin or factor Xa inhibitor (Waheed et al., 2023). And as always after surgery, the patient is at risk for a post-op infection. This would be apparent by continued swelling, redness, purulent discharge at the site, elevated WBCs and fever. Drawing blood cultures and then administering IV antibiotics, antipyretics, and ensuring adequate hydration would be treatments for an infection. The surgery team should be assessing the site daily to determine if the site needs surgical debridement and how the wound is healing. According to UpToDate, athletes with complex fractures such as his who require surgery require four or more months for adequate healing. While he is not a soccer player, baseball players are subjected to similarly high torsional stresses. Soccer players in one study returned to the field 18 weeks after injury (Fields, 2025). References:	Appreciate the feedback. I did my best to create easy questions. it was more difficult to come up with a scenario than the questions. You recognized the post op complications and their interventions accurately. Great Job!!!	10/ 10

	Kiel, J. & Kaiser, K. (2023, May 29). *Tibial Anterior Compartment Syndrome.* StatPearls. Retrieved May 15, 2025 from https://www.ncbi.nlm.nih.gov/books/NBK518970/ Fields, K.B. (2023, Octobert 19). Fibula Fractures. *UpToDate.* Retrieved May 15, 2025 from https://www.uptodate.com/contents/fibula-fractures Waheed, S.M., Kudaravalli, P., & Hotwagner, D.T. (2023, January 19). *Deep vein thrombosis*. StatPearls. Retrieved May 5, 2025 from https://www.ncbi.nlm.nih.gov/books/NBK507708/ Feedback: This was an interesting question, but did require extensive research and citation gathering because it asked for three possible complications and interventions for each. While this was a great way to test application of knowledge, I would recommend pulling back and asking for only one complication and intervention.		
19	References: Feedback:		/ 10
20	1. Assessments upon admission from the PACU for this R total hip would include a full set of vital signs, including temperature and cardiac rhythm. I would perform a respiratory system assessment and listen to his lungs since he was possibly intubated. I'd be sure to ask about any nausea or vomiting, and definitely continue to	1.3/3 Great, you nail them all!!! 2.3/3 Awesome, you pointed out all the good topics of management.	10/ 10

	assess his pain (Wainright et al., 2020). Then I would assess the circulation, motor, and sensation in his right leg and foot. I would be sure to assess his surgical site and the dressing for its integrity, and to monitor for post-op bleeding. 2. I would address any concerns or abnormalities (for example PRN meds for n/v or pain, or giving supplemental oxygen for low sats). I would like to raise his temperature a bit to normothermia, getting him closer to 97/98F (Wainright et al., 2020). I'd provide warm blankets and cover his head. I'd need to address his muscle spasms and tightness, so I'd encourage early ambulation, and assist him out of bed to walk the hall with the walker and me beside him. Early ambulation will help him discharge sooner and aid in preventing DVTs and pneumonia (Wainright et al., 2020). I would of course be making sure his blood pressure was adequate, and possibly ask for a fluid bolus before getting out of bed. I would be monitoring his voiding status and encouraging him to attempt to void. If he is ambulating and tolerating PO fluids, and his bladder volume continues to increase, a message to the provider and an order for an in-and-out catheterization would be warranted. 3. If he discharges soon, education would include post-anesthesia precautions like avoiding operating machinery, driving a car, drinking alcohol and making important decisions. Post-op nausea and vomiting would also be addressed, like advancing your diet slowly and taking antiemetics as prescribed. All TKA patients will receive pain management, wound care, and mobility instructions, as well. To manage pain, he would be recommended to take NSAIDs if appropriate and Tylenol around the clock, with an opioid for breakthrough pain (Wainright et al, 2020). He'd be encouraged to ice the surgical site for 20 minutes of each hour. We'd recommend keeping the incision dressed with the original dressing, and keeping it clean, dry, and intact and avoid submerging. After several days he might be allowed to remove the original dressing. Do not apply creams. For mobility, he'll be advised to weight bare as tolerated, use a walker, and perform exercises as directed by physical therapy, who will see him while inpatient. Depending on the surgical approach, he might be advised to avoid crossing his legs or bending too low (Erens & Crowley, 2025). Use of the incentive spirometer and frequent calf raises help prevent pneumonia and DVTs, respectively.	3.4/4 you got some good points. However, I don't think patients are able to be driving soon after surgery, and it's also important to educate the safety instruction on assistive devices and narcotic pain management and monitor the wound infection.	

	References: Erens, G.A., & Crowley, M. (2025, May 13). Total hip arthroplasty. *UpToDate*. Retrieved May 15, 2025 from https://www.uptodate.com/contents/total-hip-arthroplasty Wainwright, T. W., Gill, M., McDonald, D. A., Middleton, R. G., Reed, M., Sahota, O., Yates, P., & Ljungqvist, O. (2020). Consensus statement for perioperative care in total hip replacement and total knee replacement surgery: Enhanced Recovery After Surgery (ERAS®) Society recommendations. *Acta orthopaedica*, *91*(1), 3–19. https://doi-org.edu/10.1080/17453674.2019.1683790 Feedback: I enjoyed this question because I recover, care for, and discharge TKA patients at my per diem job. There were so many possible answers for these questions, and I discovered that it is not easy to find reputable nursing care standards for post-op nursing care in general to cite my clinical knowledge. I would just consider asking only 1 or 2 of your questions, as a 3 part-3 answer question ended up being long!		