# BNURS506 Quiz Answering

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

| #: | Your Answer | Feedback from Grader | Score |
|---|---|---|---|
| 1 | I would tell the parent, "The doctor is testing the reflexes of your child with a test called the Babinski reflex test (Kotagal & Morse, 2024). This reflex is present in infants because the baby's nervous system is immature, but as your child matures and develops, her central nervous system will develop, and this reflex will go away. This stage of growth and development can happen as early as 6 months and as late as 2 years of age (Kotagal & Morse, 2024). So the doctor is simply assessing your child's nervous system development with this reflex test. In anyone over the age of 2 though, the presence of this reflex would indicate a problem with the nervous system (Acharya et al., 2023). That's why (thankfully!) your toes don't do this when stimulated this way. If they did, your doctor would want to immediately do further testing to find out what is happening with your nervous system!"<br><br>References:<br><br>Acharya, A.B., Jamil, R.T., & Dewey, J.J. (2023). *Babinski reflex*. StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK519009/<br><br>Kotagal, S., & Morse, A.M. (2024, May 30). Neurologic examination of the newborn. *UpToDate*. Retrieved May 13, 2025, from https://www-uptodate-com/contents/neurologic-examination-of-the-newborn<br><br>Feedback:<br>Fun question! I was familiar with the reflex test and that it is done on all newborns but I didn't know why or what it meant specifically, so thanks for the learning. I always love questions that ask us to apply our knowledge | Grading Criteria:<br>Identify Babinski test positive in infancy vs adulthood (6 pts)<br>Explanation to parent easy to understand (2 pts)<br>Mention maturation/myelination of nervous system (1 pt)<br>Implication of positive test in adults (*)<br>Proper APA formatting (1 pt)<br><br>Perfect job! You nailed it with your answer. You did a good job calling out the difference in an adult exam vs an infant exam and in describing the etiology of the difference - the maturation of the nervous system. Your explanation was easy to understand for a non-medical professional. You also did a great job calling out that a positive sign in adults is indicative of an underlying issue. I was hoping that would be part of the answer, but I didn't specifically call it out. Great work!<br><br>Good APA formatting as well. Thanks for your feedback! | 10/ 10 |

| | | | |
|---|---|---|---|
| | but make it understandable to patients in a teaching moment – that is very real for us and truly a skill. Nice job! | | |
| 3 | B) Tardive dyskinesia. I chose this because Jane is presenting with several common symptoms of tardive dyskinesia including: protruding/twisting her tongue, smacking her lips, twisting and spreading her hands like she's playing the piano, and reports difficulty eating and speaking (Deik, 2024). I also chose this because Jane has risk factors associated with tardive dyskinesia including being female, the presence of EPS as a side effect of antipsychotic medication, being on a first-generation anti-psychotic medication, and preexisting psychotic or mood disorder (Deik, 2024).<br><br>The nurse should expect the patient to be slowly tapered off the haldol to prevent abrupt withdrawal as this could exacerbate the tardive dyskinesia (Liang, 2023). The nurse should also expect the patient to be switched to a second-generation anti-psychotic medication with a lower risk for tardive dyskinesia such as risperidone (Liang, 2023).<br><br>Changing Jane's medications cannot wait because, without immediate intervention, tardive dyskinesia can be irreversible and lifelong with debilitating symptoms (Deik, 2024).<br><br>References:<br><br>Deik, A. (2024, May 17). Tardive dyskinesia: Etiology, risk factors, clinical features and diagnosis. *UpToDate*. Retrieved May 13, 2025, from https://www-uptodate-com/contents/tardive-dyskinesia-etiology-risk-factors-clinical-features-and-diagnosis<br><br>Liang, T.W. (2023, June 12). Tardive dyskinesia: Prevention, treatment, and prognosis. *UpToDate*. Retrieved May 13, 2025, from https://www-uptodate-com/contents/tardive-dyskinesia-prevention-treatment-and-prognosis<br><br>Feedback: | Multiple Choice & Rationale: 4/4<br>Treatment & Rationale: 3/3<br>Long-term effects: 2/2<br>APA Format: 1/1<br><br>You did a fantastic job with your answer & your APA format! While we generally like it for our patients receiving involuntary treatment to be on board with their medication regimen, they technically don't have to be. There is a form that can be filled out by 2 MDs that makes it such that hospital staff have to compel the patient's antipsychotic if they are not willing to take it by mouth. Outside of that, though, with Jane in particular, I would probably start by addressing that she is experiencing side effects that can severely impact her quality of life permanently if we don't change her medications, given the comment about the side effects "not causing her any real problems". | 10 / 10 |

| | | | |
|---|---|---|---|
| | Really interesting question. It's been so long since I've had to think about this class of drugs, but I remember being fascinated during nursing school. This was a very well-balanced question – not too hard (I was able to research pretty easily and identify the problem), a good mix of identification but also application, and specific to nursing care. One thing I found myself wondering about – given Jane's attachment to the haldol and that she may be unaware of the TD symptoms, how would the doctor and nurse convince her they needed to switch her meds? How does one get buy-in for that situation with the patient? I actually don't know how I would approach that exactly, but it would be interesting to ponder for a nursing student. | | |
| 5 | Based on the muscle wasting at the base of the thumb and the patient's report of pain, numbness, tingling, and weakness, I would suspect the patient to be suffering from carpal tunnel syndrome (Kothari, 2024).<br><br>Associated risk factors for carpal tunnel syndrome include:<br>● Medical conditions like diabetes mellitus types 1 and 2, arthritis, obesity, thyroid disease, or trauma<br>● Medication regimen of aromatase inhibitors like anastrozole<br>● Environmental factors such as repetitive use, work with vibrating tools, sustained wrist or palm pressures, or using hands in cold temperatures (Kothari, 2024).<br><br>A clinical exam or assessment that could be performed would be the Phalen maneuver. See image below – the patient would be asked to place her hands in this position and, if symptoms are reproduced, carpal tunnel may be suspected (Kothari, 2024). | I like how you specifically used an image referencing the Phalen maneuver. There are several methods used to diagnose Carpal Tunnel Syndrome including review of medical history, physical examinations and the two specific tests I was looking for are · Tinel's sign which is tapping on the median nerve to see if it causes tingling in the fingers and the Phalen's maneuver which is holding the wrists in a flexed position to see if it causes symptoms. I still gave you full points since I asked for at least one test for evaluation. Great job overall! | 10/ 10 |



(Kothari, 2024)

References:

Kothari, M.J. (2024, July 25). Carpal tunnel syndrome: Clinical manifestations and diagnosis. *UpToDate*. Retrieved May 14, 2025, from https://www-uptodate-com/contents/carpal-tunnel-syndrome-clinical-manifestations-and-diagnosis

Kothari, M.J. (2024, July 25). Carpal tunnel syndrome: Pathophysiology and risk factors. *UpToDate*. Retrieved May 14, 2025, from https://www-uptodate-com/contents/carpal-tunnel-syndrome-pathophysiology-and-risk-factors

Feedback:

Interesting question. I've been on the surgical end of this syndrome but didn't have insight into the patient presentation and experience in another clinical setting. Given her profession I imagine this could be discouraging

| | | | |
|---|---|---|---|
| | news. You could consider asking the nurse to think about this patient's prognosis, what the options are for her, and how to provide emotional support. | | |
| 7 | The most likely cause of this patient's complaint is C) lumbar disc herniation with sciatic nerve involvement. My answer is based on the patient's report of the symptoms starting after lifting a heavy box and description of the pain starting in the lower back and radiating down the leg (Wheeler et al., 2025).<br><br>If the patient also presents with bowel or bladder dysfunction, specifically urinary retention, this patient will require immediate evaluation as the herniation may be compressing critical nerve roots (Levin et al., 2025). Urinary retention in the presence of lower back and sciatic pain is suggestive of cauda equina syndrome and, if so, the patient will need immediate surgical decompression (within 12-24 hours) to relieve the pressure on the nerve roots (Levin et al., 2025).<br><br>References:<br><br>Levin, K., S'Hsu, P., & Armon, C. (2025, February 25). Acute lumbosacral radiculopathy: Treatment and prognosis. *UpToDate*. Retrieved May 14, 2025, from https://www-uptodate-com/contents/acute-lumbosacral-radiculopathy-treatment-and-prognosis<br><br>Wheeler, S.G., Jarvik, J.G., & Chou, R. (2025, May 6). Evaluation of low back pain in adults. *UpToDate*. Retrieved May 14, 2025, from https://www-uptodate-com/contents/evaluation-of-low-back-pain-in-adults<br><br>Feedback:<br>Great question – straightforward but with critical thinking. You did an interesting mix of multiple choice and free response, I liked that a lot – it helped me narrow in and not go on a wild goose chase trying to figure out what you were after. I also appreciated the breakdown in points, I think that's helpful. | I really like the way you answered the questions. You mentioned everything I was looking for. Congrats! I also appreciate your feedback. | 10/ 10 |

| | | | |
|---|---|---|---|
| 9 | 1. Based on these symptoms and observations I would expect the neurologist to diagnose Parkinson disease. Diagnosis is based on the distinctive clinical features of the disease and the results of a neurological examination (Chou, 2024, September 6).<br>2. Initial pharmacological treatment is dopaminergic therapy such as levodopa (Spindler, 2025). Notably, a good response to dopaminergic therapy, especially a dramatic response, is supportive of the Parkinson disease diagnosis as the medication will otherwise be ineffective in treating symptoms (Chou, 2024, March 14). Other therapies that help treat motor fluctuations and dyskinesia, particularly when medical therapies fail, are device-based therapies including deep brain stimulators that deliver high-frequency electrical stimulation to the brain via electrodes (Liang, 2025).<br><br>References:<br><br>Chou, K. (2024, March 14). Clinical manifestations of Parkinson disease. *UpToDate*. Retrieved May 14, 2025, from https://www-uptodate-com/contents/clinical-manifestations-of-parkinson-disease<br><br>Chou, K. (2024, September 6). Diagnosis and differential diagnosis of Parkinson disease. *UpToDate*. Retrieved May 14, 2025, from https://www-uptodate-com/contents/diagnosis-and-differential-diagnosis-of-parkinson-disease<br><br>Liang, T.W. (2025, April 15). Medical management of motor fluctuations and dyskinesia in Parkinson disease. *UpToDate*. Retrieved May 14, 2025, from https://www-uptodate-com/contents/medical-management-of-motor-fluctuations-and-dyskinesia-in-parkinson-disease<br><br>Spindler, M.A. (2025, January 21). Initial pharmacological treatment of Parkinson disease. *UpToDate*. Retrieved May 14, 2025, from https://www-uptodate-com/contents/initial-pharmacologic-treatment-of-parkinson-disease | Great work on these answers! You included that Parkinson's is diagnosed mostly based on clinical features, and I appreciate that you included in the second question that response to medications like carbidopa/levodopa is supportive of the diagnosis as well. Well done! | 10/ 10 |

<table>
<tr><td></td><td>Feedback:<br><br>Great question with application and critical thinking; the image was also good and helpful. For nursing students, you might consider application of this knowledge to nursing practice more specifically – what this diagnosis means for this man in terms of his daily living and activities and implication for anything else he is managing, psychosocially, emotionally or physically.</td><td></td><td></td></tr>
<tr><td>11</td><td>LAST is a test used to quickly assess the patient for symptoms of stroke (Goldstein, 2025). The letters stand for Face Arms Speech Test and the medic is assessing the patient for facial weakness, arm weakness, or speech impairment; if one of these weaknesses or impairments is present, the test is considered positive (Goldstein, 2025). The LAMS score refers to the Los Angeles Motor Scale which assesses facial droop, arm drift, and grip strength; see scale below to understand how points are assigned based on assessment (Goldstein, 2025).<br><br>The Los Angeles Motor Scale (LAMS)<br><br><table><tr><td>Facial droop</td><td></td></tr><tr><td>Absent</td><td>0</td></tr><tr><td>Present</td><td>1</td></tr><tr><td>Arm drift</td><td></td></tr><tr><td>Absent</td><td>0</td></tr><tr><td>Drifts down</td><td>1</td></tr><tr><td>Falls rapidly</td><td>2</td></tr><tr><td>Grip strength</td><td></td></tr><tr><td>Normal</td><td>0</td></tr><tr><td>Weak grip</td><td>1</td></tr><tr><td>No grip</td><td>2</td></tr></table><br>From: Nazliel B, Starkman S, Liebeskind DS, et al. A brief prehospital stroke severity scale identifies ischemic stroke patients harboring persisting large arterial occlusions. Stroke 2008; 39:2264. DOI: 10.1161/STROKEAHA.107.508127. Copyright © 2008 American Heart Association. Reproduced with permission from Wolters Kluwer Health. Unauthorized reproduction of this material is prohibited.<br><br>(Goldstein, 2025)<br><br>When considered together, these scales both provide pertinent information to ED team about the likelihood the patient is experiencing a large vessel occlusion and requires immediate intervention (Goldstein, 2025).</td><td>Great work! The T in FAST typically stands for Time – as in last known well, or time to seek care. I think you meant that but put “test”, but no points deducted since its not a symptom. I think you knew this but accidentally left it out – I was looking for the right MCA. Thank you for the feedback, that would be an interesting question to ask, though I’ve found it much more difficult to find nursing care resources!</td><td>9.5/ 10</td></tr>
</table>

| | | | |
|---|---|---|---|
| | Based on the patient's blood pressure and affected left side, I would anticipate the CT findings to demonstrate occlusion of the middle cerebral artery (Nogles & Galuska, 2023).<br><br>Treatment options include intravenous tissue plasminogen activator (TPA) and thrombectomy, based on the timing of the patient's symptom onset (Nogles & Galuska, 2023). To be eligible for TPA, onset of symptoms must be within the last 4.5 hours and to be eligible for thrombectomy, onset of symptoms must be within the last 24 hours (Nogles & Galuska, 2023). The medic stated the patient's "last known well" was 1 hour ago which is great because she is eligible for TPA.<br><br>References:<br><br>Goldstein, L.B. (2025, May 6). Use and utility of stroke scales and grading systems. *UpToDate*. Retrieved May 14, 2025, from https://www-uptodate-com/contents/use-and-utility-of-stroke-scales-and-grading-systems<br><br>Nogles, T.E., & Galuska, M.A. (2023). *Middle cerebral arterial stroke*. StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK556132/<br><br>Feedback:<br>This was a fun question and I really appreciate the review of the two scales for quick stroke symptom assessment. I am familiar with FAST but not with LAMS so that was fun to learn about. I thought this was a good combo of identifying some basic information and then critically thinking to apply that information to a very real scenario. I've never worked ED so I don't have insight into the things a nurse would do once the patient gets there but you could rephrase it in those terms – as the nurse what are you anticipating setting up or getting ready for this patient? | | |
| 13 | To assess for compartment syndrome, the nurse would evaluate the following:<br>● Assess skin and note any lesions, swelling, or color changes | Nursing assessments to rule out compartment syndrome include:<br>- Evaluate for pain that is out of proportion to the injury, | 9/ 10 |

| | | | |
|---|---|---|---|
| | • Palpate the arm noting any abnormal tension, tenderness, or temperatures<br>• Check for pulses<br>• Conduct two-point discrimination test on the arm to determine if Tony can feel and distinguish between two nearby objects on his arm as two separate things and not one<br>• Assess Tony's ability to move the arm and his range of motion (Torlincasi et al., 2023)<br><br>Surgical fasciotomy is the definitive treatment for compartmental syndrome and is performed to reduce intracompartmental pressure, restore circulation to the affected limb, and prevent necrosis (Torlincasi et al., 2023).<br>References:<br><br>Torlincasi, A.M., Lopez, R.A., & Waseem, M. (2023). *Acute compartment syndrome*. StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK448124/<br><br>Feedback:<br>Great question! Simple and straightforward but very pertinent to something a nurse would be highly involved in to ensure this kid got the care he needs. I've never assessed for compartment syndrome before so this was good learning for me, thank you and great job! | and/or unrelieved by analgesics and worsened by movement of Tony's fingers<br>- Assess for numbness, tingling<br>- Assess for motor weakness.<br>- Pulse assessment is important but likely impeded by Tony's cast.<br>- Cap refill of the fingers<br>- Assess for swelling<br>- Assess for changes in color/palor of the skin<br>- Temperature: assess for coolness of the skin<br>(7 /8 points) Disproportionate pain is a definitive feature of compartment syndrome - your note about palpating to look for abnormal tension tenderness or temp did not specify what the findings would be for compartment syndrome<br>If Tony's symptoms persist after removal or bi-valving the cast, the definitive treatment for compartment syndrome is emergent decompressive fasciotomy. In this procedure the fascia is surgically opened to relieve pressure in the affected limb/compartment, thus restoring perfusion and preventing irreversible damage. Untreated compartment syndrome can lead to | |

| | | | |
|---|---|---|---|
| | | muscle necrosis, permanent motor/sensory deficits, and loss of the affected limb. (2/2 points) | |
| 15 | Based on the lab values and the patient's history, he is likely experiencing acute gout flare (Zhang et al., 2023). The patient's consumption of pork, liver and beer the night before likely contributed to the flare-up as these are high-purine food items (Fenando et al., 2024). Acute gout flare is generally self-limiting but medication may be indicated for patient comfort; first-line medication therapy is an NSAID or systemic glucocorticoid to address the inflammation and pain (Fenando et al., 2024). The patient may also be advised to rest and place ice packs on his foot to reduce inflammation and to avoid foods high in purine such as organ meats, shellfish, beer, and beverages with high fructose corn syrup (Fenando et al., 2024).<br><br>References:<br>Fenando, A., Rednam, M., Gujarathi, R., & Widrich, J. (2024). *Gout* StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK546606/<br><br>Zhang, J., Sun, W., Gao, F., Lu, J., Li, K., Xu, Y., Li, Y., Li, C., & Chen, Y. (2023). Changes of serum uric acid level during acute gout flare and related factors. *Frontiers in Endocrinology, 14*, 1077059. https://doi.org/10.3389/fendo.2023.1077059<br><br>Feedback:<br>Great question! I thought you did well asking the student not only to identify the diagnosis and treatment but also some non-pharmacological interventions that could be included in the patient's education. I think it's important for student nurses to learn how we help patients understand the lifestyle choices that contribute to their health and how to prevent further occurrences. | #1: Correct diagnosis and correct identification of provoking factors mentioned in patient's history – 4/4 pts<br><br>#2: Correct identification of medication – 2/2 pts<br><br>#3: Correct identification of nonpharmacologic strategy to include in patient's education – 2/2 pts<br><br>References: 0.5 pt<br><br>In-text citations:0.5 pt<br><br>Great job and thank you for the feedback! | 10/ 10 |
| 17 | Gary sustained a femoral shaft fracture. Based on the imaging, I think his fracture would be classified as oblique (Boston Medical Center, n.d.). | Amazing job answering this question! You got the diagnosis (including the | 10/ 10 |

| | | | |
|---|---|---|---|
| | Nonpharmacological pain management approaches for patients with femur fracture include immobilization, ice, elevation, and use of a transcutaneous electrical nerve stimulation unit (Hsu et al., 2019).<br><br>The gold standard of femur fracture repair is surgical fixation with intramedullary nail, or IMN (Denisiuk & Afsari, 2023). This link provides an engaging and interactive walkthrough of IMN insertion during surgery: https://surgeryreference.aofoundation.org/orthopedic-trauma/adult-trauma/basic-technique/basic-principles-of-im-nailing<br><br>References:<br><br>Boston Medical Center (n.d.). Femur shaft fracture. https://www.bmc.org/patient-care/conditions-we-treat/db/femur-shaft-fracture<br><br>Denisiuk, M., & Afsari, A. (2023). *Femoral shaft fractures.* StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK556057/<br><br>Hsu, J.R., Mir, H., Wally, M.K., & Seymour, R.B. (2019, January 22). Clinical practice guidelines for pain management in acute musculoskeletal injury. *Journal of Orthopaedic Trauma, 33*(5), e158–e182. https://doi.org/10.1097/<br><br>Feedback:<br>I especially liked the part of this question asking about non-pharmacological pain management. Several of the sources I read referenced a TENS unit and I was not aware of this intervention for this type of injury. Fun learning for me! I couldn't find anything super specific about 2 pain management techniques specific to this type of fracture – or I got the fracture classification wrong! I'm not sure but it was fun to look up and try to answer. Hope you enjoy the link to the interactive tool for IMNs. That was fun for me too. | classification/pattern), nonpharmacological pain interventions, and correctly identified what IMN is. That link you provided is fun to play around with; good find! Usually, the go-to pain relief measures with orthopedic procedures such as this are ice and elevation, which you properly identified. I also appreciate your feedback, especially with the use of TENS as a mode of pain management. I learned something new here, too! | |

| | | | |
|---|---|---|---|
| 19 | 1. Based on assessment, I am concerned about cellulitis on John's right foot (Brown & Watson, 2023).<br>2. Cellulitis occurs when bacteria penetrate the skin through an open wound and cytokines and neutrophils flood the affected area. This produces erythema, edema, warmth, and tenderness upon palpation, as observed in John's foot (Brown & Watson, 2023).<br>3. I would anticipate oral antibiotic therapy specific to streptococcal bacteria, as this is the most common microorganism associated with cellulitis (Brown & Watson, 2023). John also has an open wound which places him at risk for methicillin-resistant staph aureus; because of this, I would anticipate administering trimethoprim-sulfamethoxazole and cephalexin (Brown & Watson, 2023).<br>4. John should be educated about the importance of maintaining his antibiotic regimen to completion, to keep his wound clean and dry, and to elevate the wounded foot above the heart as he's able to reduce edema (Brown & Watson, 2023). He may also benefit from education regarding diabetes, good foot care, and delayed wound healing.<br><br>References:<br><br>Brown, B.D., & Watson, K.L.H. (2023, August 7). *Cellulitis*. StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK549770/<br><br>Feedback:<br>Great question. I really appreciated the numbered components with associated points; it was very clear and easy to follow with good nursing application. Nice work. | | / 10 |