**BNURS506 Quiz Answering**

**Term:** Spring 2025
**Module 2:** HEENT, Integumentary, & Lymphatic
**Name:** Student Q

| #: | Your Answer | Feedback from Grader | Score |
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| 1 | Head/Neck<br>• Skin changes over the radiation field:<br>    ○ Erythema, desquamation, ulceration, or fibrosis<br>    ○ Signs of infection or delayed healing<br>• Lymphadenopathy or masses (to differentiate tumor progression vs. inflammatory changes)<br>• Pain or tenderness in the jaw or temporal-mandibular joint (TMJ dysfunction)<br>Eyes<br>While less directly affected, radiation near the orbit may cause:<br><br>• Dry eyes (keratoconjunctivitis sicca)<br>• Conjunctival irritation or redness<br>• Visual disturbances, if radiation is near the optic pathway<br>Ears<br>• Hearing changes (due to otitis media with effusion or sensorineural hearing loss from radiation or chemotherapy)<br>• Ear pain or fullness (can be related to Eustachian tube dysfunction)<br>• External otitis (especially if skin breakdown occurs near the ear)<br><br>Nose<br>• Nasal congestion or discharge (mucosal irritation or secondary infection)<br>• Epistaxis (from friable mucosa) | | / 10 |

- Loss of smell (anosmia)

Throat

This is the most critical area for complications like mucositis, xerostomia, and dysphagia:

*Oral Mucositis*

- Redness, ulcerations, or white patches on the mucosa, tongue, gingiva, palate, or pharynx
- Bleeding or pain with eating, drinking, or speaking
- Severity graded using scales like WHO or CTCAE

*Xerostomia (dry mouth)*

- Dry, sticky oral mucosa
- Thick or reduced saliva
- Cracked lips, fissured tongue
- Increased dental caries or oral infections (e.g., candidiasis)

*Candidiasis*

- White plaques on mucosa that may be wiped off, leaving erythematous base
- Associated with burning or altered taste

*Dysphagia and Nutritional Impact*

- Difficulty initiating swallowing or throat pain
- Voice changes (hoarseness or wet/gurgly voice)
- Weight loss or reduced oral intake
- Aspiration risk signs: coughing with swallowing, throat clearing, or wet breath sounds
- Consider referral to speech-language pathology (SLP) for formal swallow evaluation

References:

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| 2 | References:<br><br>Feedback: | | / 10 |
| 3 | 1. You would perform the Confrontation Visual Field Test.<br>• How to perform it:<br>Have the patient cover one eye while you cover the opposite eye (e.g., patient covers right eye, you cover your left). While maintaining eye contact with the patient, bring your finger or a small object in from the periphery in each quadrant (superior, inferior, temporal, and nasal fields), and ask the patient to indicate when they first see it.<br>• Abnormal result:<br>The patient is unable to see the object at the same time as you do in any quadrant, which would suggest visual field defects, such as peripheral vision loss. This aligns with her complaint of "narrowing" vision.<br><br>2. Swelling of the optic disc due to increased intracranial pressure (ICP).<br>• Features visible: blurred disc margins, elevation of the disc, hyperemia, and obscuration of vessels as they leave the disc.<br>This finding is consistent with her complaint of: | Correct description of the confrontation visual field test, and correct description of an abnormal result.<br>The image itself is showing swelling the optic disc, this is called papilledema.<br>Good discussion of the diagnostic tests such as MRI and lumbar puncture. Great job at discussing what each test could show for ICP. Treatment options are spot on as well, I did find some discussion about concurrent oral steroids as well as acetazolamide.<br>Overall, good job, however there are no references here and no in-text citations so I do have do subtract a point, which I hate to do! | 7 / 10 |

- Pulsatile headaches worsened when lying down (a classic sign of raised ICP).
- "Whooshing" sound (pulsatile tinnitus).
- Peripheral visual field loss.

3. Diagnostics:

1. Neuroimaging:
    - MRI or CT of the brain to rule out space-occupying lesions, masses, or venous sinus thrombosis.
    - If imaging is negative, proceed with lumbar puncture to:
        - Measure opening pressure (likely elevated).
        - Analyze cerebrospinal fluid (CSF) to rule out infection/inflammation.
2. Visual field testing (automated perimetry)
    - To quantify the extent of peripheral vision loss.

Likely Diagnosis:

- Idiopathic Intracranial Hypertension/HTN
- Brain tumors
- Head injury

Treatment:

- Acetazolamide– reduces CSF production and ICP.
- Weight loss if BMI is elevated.
- Serial lumbar punctures may be used temporarily for symptom relief.
- Surgical options if vision is threatened and medical management fails.
- Ophthalmology and neurology follow-up are essential.

References:

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<tr><td>4</td><td>References:<br><br>Feedback:</td><td></td><td>/ 10</td></tr>
<tr><td>5</td><td>Likely Diagnosis: Acute Otitis Media with Possible Perforation<br>Symptoms Noted:<ul><li>Fever (100.4°F)</li><li>Irritability and poor feeding</li><li>Tugging/pulling at the ear</li><li>Ear pain (otalgia)</li><li>Yellow ear discharge (suggesting ruptured eardrum)</li><li>Recent upper respiratory infection (runny nose, cough) – a typical precursor to AOM</li><li>Allergies/asthma history can increase susceptibility due to inflammation and Eustachian tube dysfunction</li></ul><br>Pathophysiology Explanation for Dr. Aldrin:<br>“After a cold or allergic flare-up like what this child had with pollen exposure, inflammation and congestion can block the Eustachian tube. This prevents normal drainage from the middle ear, allowing fluid and bacteria to build up behind the eardrum, leading to infection. Pressure builds and may cause</td><td>Thank you for giving such specific and definite answers in this complex situation. The scenario does not just question our knowledge and skills in the assessment, pathophysiology and pharmacology of Acute Otitis Media (AOM) but also tests our professionalism, advocate for patient safety and collaboration in an ethical dilemma such as this, and you did the right things in the right way. Impressive and kudos!</td><td>10/ 10</td></tr>
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the eardrum to bulge and sometimes rupture, which is likely what we're seeing with the ear discharge."

Recommended Management:

1. Antibiotics:
   - Since the child is <2 years old with bilateral or severe AOM, and has otorrhea, antibiotic treatment is indicated.
   - Amoxicillin (80–90 mg/kg/day divided BID)
   - Duration: 10 days typically
2. Pain Control:
   - Continue with acetaminophen or ibuprofen for pain and fever.
3. Follow-Up:
   - Recheck in 48–72 hours or sooner if symptoms worsen.
   - After healing, check for hearing issues due to possible fluid persistence.
4. Ear Care:
   - Keep ear dry if there's discharge.
   - Avoid inserting anything into the ear, including cotton swabs.

Treatment Talking Points to the Father:
"Your child likely has an ear infection caused by bacteria that got into the middle ear after his recent cold and allergy episode. The yellow drainage is likely because the pressure inside the ear caused the eardrum to rupture, which is painful but actually helps relieve some pressure. We'll treat this with antibiotics to clear the infection and give him some medicine to help with the pain. He should start feeling better in a day or two, but we'll keep an eye on his ear to make sure it heals properly."

References:

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| 6 | References:<br><br>Feedback: | | / 10 |
| 7 | Given the symptoms and findings — mild snoring, occasional apnea, chronic serous otitis media with hearing loss, and enlarged tonsils — the otolaryngologist is likely to recommend:<br>1. Adenoidectomy and/or tonsillectomy – especially if there is concern for obstructive sleep-disordered breathing (SDB) due to enlarged tonsils and adenoids, which is consistent with her snoring and apnea.<br>2. Tympanostomy tube placement – due to the chronic serous otitis media (fluid in the middle ear for >3 months) and associated hearing loss.<br>According to the American Academy of Pediatrics (AAP):<br>● Tonsillectomy is recommended for children with obstructive sleep-disordered breathing (OSDB) and enlarged tonsils when it leads to significant symptoms (like apnea, poor sleep, behavioral changes). | You got the recommended combination surgery: adenotonsillectomy with tympanostomy and you fully addressed all the expected concerns of the nervous family. Without sources or any feedback for this extremely thorough answer, I cannot give more than partial credit. | 5/ 10 |

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| | • Tympanostomy tubes are recommended for children with bilateral otitis media with effusion (OME) lasting ≥3 months and documented hearing loss.<br>Patient/Family Education for the Nervous Family<br>It's natural to feel nervous when a child is facing surgery or medical interventions. Here's how you can educate and reassure the family:<br>Purpose of the Procedures<br>• Tonsillectomy/adenoidectomy: To improve breathing during sleep, reduce snoring and apnea, and improve overall sleep quality. Poor sleep from OSDB can affect mood, growth, and learning.<br>• Ear tubes (tympanostomy): To drain fluid from the middle ear and restore hearing, which is critical for speech and language development at this age.<br>Safety and Effectiveness<br>• These are common pediatric procedures with a strong safety record.<br>• Most children recover quickly and have significant improvement in sleep, behavior, and hearing.<br><br>What to Expect After Surgery<br>• Tonsillectomy: Sore throat for a week or two, soft foods, and pain management with medications.<br>• Ear tubes: Usually done in minutes under general anesthesia, minimal recovery, often go home the same day.<br>• Follow-up includes monitoring tube function and checking for resolution of sleep-disordered breathing.<br>Reassurance<br>• Emphasize that the interventions are evidence-based and aim to significantly improve her quality of life.<br>• Most children show marked improvement in sleep, fewer ear infections, better hearing, and overall well-being.<br>Encouraging Questions | | |

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| | Invite the family to ask anything. Normalize their worries and provide space to talk about the anesthesia, post-op care, or risks.<br><br>References:<br><br>Feedback: | | |
| 8 | References:<br><br>Feedback: | | / 10 |
| 9 | 1. Description to Include with the Photo:<br>"9 mm asymmetric, darkly pigmented lesion with irregular borders and variegated coloration (dark brown to black) located on the left upper back. The lesion appears flat, non-ulcerated, and distinct from surrounding skin. Patient reports recent noticeable change in size. No other similar lesions observed on full skin assessment. Photo uploaded for dermatology/provider evaluation."<br><br>2. What Do You Suspect and Why? | 1 - Your answer correctly indicated the shape, border, color, size, and evolution of the nevi. You also added that there were no other nevi visible. Excellent! (3/3 pts)<br><br>2 - Your answer correctly indicated the likely diagnosis of melanoma and that the patient was at high risk due to immunosuppression from HIV. This specific case was superficial spreading melanoma. You correctly | 9 / 10 |

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| | I suspect malignant melanoma, based on the lesion's:<br>• Asymmetry – not evenly shaped.<br>• Border irregularity – edges are uneven and poorly defined.<br>• Color variation – multiple shades (dark brown to black).<br>• Diameter – >6 mm (this one is 9 mm).<br>• Evolution – patient reports recent change in size, which is a red flag.<br>These criteria match the ABCDEs of melanoma, which guide skin cancer assessment.<br>The patient's immunocompromised status due to HIV also raises the risk for skin malignancies.<br><br>3. Additional History to Ask the Patient:<br>To support suspicion of melanoma, ask:<br>1. "Have you noticed any changes in the color, shape, or texture of this spot recently?"<br>  ○ Evolution is a key melanoma sign.<br>2. "Have you ever had skin cancer or abnormal moles biopsied before?"<br>  ○ Personal or family history of melanoma increases risk.<br>3. "Do you spend a lot of time in the sun or have a history of frequent sunburns?"<br>  ○ UV exposure is a major risk factor, especially in fair-skinned individuals.<br><br>References:<br><br>Feedback: | identified that this atypical nevi is suspicious for cancer using the ABCDE method. (4/4 pts)<br><br>3 - Your answer correctly identified at least 3 questions that would provide additional history to support the suspicion of melanoma. (3/3 pts)<br><br>*Although you answered all the questions correctly, I did take 1 point off for no references :( * | |

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<tr><td>10</td><td>References:<br><br>Feedback:</td><td></td><td>/ 10</td></tr>
<tr><td>11</td><td>Rationale for Staging at a 4:<ul><li>Full-thickness tissue loss is clearly present.</li><li>Exposed structures such as muscle or possibly bone or supporting structures can be seen in the wound bed.</li><li>There is undermining and tunneling, with visible tissue damage extending beneath the surrounding skin.</li><li>Slough and/or eschar may be present, but do not obscure the depth of tissue loss.</li></ul>This meets the NPUAP (National Pressure Ulcer Advisory Panel) definition of a Stage 4 pressure injury: "Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone."<br><br>Three Interventions to Treat John’s Pressure Ulcer<br>1. Pressure Redistribution and Offloading<ul><li>Use a pressure-relieving mattress such as an alternating pressure bed.</li><li>Implement frequent repositioning (every 2 hours) to relieve pressure on the sacrum.</li><li>Use offloading devices like wedges or foam cushions to reduce pressure points.</li></ul>2. Wound Care Management</td><td>The slough in the wound prevents visualization of the wound bed, obscures the depth of tissue loss, and makes the wound unstageable. You did a great job of listing the characteristics of a stage 4 pressure injury and listing at least 3 appropriate interventions. Also, great job noting the importance of proper glycemic management when a patient with type 2 diabetes has any wound.<br><br>Point rationale:<ul><li>0/2 points for correctly staging the wound</li><li>2/2 points for a rationale that states the characteristics of the wound stage given in the answer</li><li>6/6 points for interventions (2 points per intervention)</li></ul></td><td>8 / 10</td></tr>
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| | ● Debridement of necrotic tissue if present (surgical, enzymatic, or autolytic depending on wound status and stability).<br>● Dressings that maintain a moist wound environment and protect from infection (e.g., hydrocolloid, alginate, or antimicrobial dressings).<br>● Monitor for signs of infection and use topical/systemic antibiotics if indicated.<br>3. Nutritional and Glycemic Support<br>● Ensure adequate nutrition: High-protein diet, multivitamins (especially Vitamin C and Zinc), and hydration.<br>● Optimize blood glucose levels, as poor glycemic control can impair wound healing — crucial due to his Type 2 diabetes.<br><br>References:<br><br>Edsberg, L. E., Black, J. M., Goldberg, M., McNichol, L., Moore, L., & Sieggreen, M. (2016). Revised National Pressure Ulcer Advisory Panel Pressure Injury Staging System: Revised Pressure Injury Staging System. *J Wound Ostomy Continence Nurs, 43*(6), 585-597. doi:10.1097/won.0000000000000281<br><br>Feedback: | | |
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| | References:<br><br>Feedback: | | |
| 13 | Expected Diagnosis:<br>Most likely diagnoses include:<br>● Skin and Soft Tissue Infections (SSTIs) such as:<br>○ Cellulitis<br>○ Cutaneous abscesses<br>○ Possible necrotizing soft tissue infection (due to the severity, fever, and systemic symptoms)<br>● Sepsis or early sepsis – due to fever, tachycardia, elevated BP, and systemic symptoms.<br>● Consider MRSA (Methicillin-Resistant Staphylococcus aureus) due to IV drug use and recurrent infections.<br>Labs and Diagnostic Tests Likely Ordered:<br>1. Basic labs:<br>○ CBC with differential – check WBC count for infection<br>○ BMP – electrolyte balance, renal function (esp. with infection and drug use)<br>○ Lactic acid – elevated in sepsis<br>○ Blood cultures – rule out bacteremia<br>○ Wound culture and sensitivity – identify causative bacteria and antibiotic sensitivity<br>○ Urine drug screen – assess for substances<br>○ HIV/Hepatitis panel – due to high-risk IV drug use<br>2. Imaging:<br>○ Ultrasound of the abscesses – assess for fluid collection or need for drainage | Great answer. These are all accurate findings, you forgot to provide the reference and feedback. I hate taking points off with such good and valid information that you provided. | 8/ 10 |

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| | ○ X-ray or CT scan if necrotizing fasciitis or deep abscess is suspected<br>Nursing Priorities:<br>1. Infection control:<br>○ Implement contact precautions (esp. if MRSA suspected)<br>○ Monitor for signs of sepsis progression<br>2. Pain management:<br>○ Administer analgesics as ordered<br>○ Assess pain regularly<br>3. Wound care:<br>○ Assist with or perform abscess drainage if ordered<br>○ Apply appropriate dressings<br>○ Monitor for changes in size, drainage, or signs of worsening infection<br>4. Supportive care and monitoring:<br>○ Monitor vital signs closely<br>○ Ensure hydration<br>○ Monitor mental status for worsening sepsis<br>5. Patient education & advocacy:<br>○ Discuss the risks of unsafe injection practices<br>○ Offer resources for substance use treatment<br><br>References:<br><br>Feedback: | | |
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| 15 | 1) Clinical Significance and Potential Cause of Digital Clubbing<br>Digital clubbing is a physical finding characterized by:<br>• Bulbous enlargement of the distal phalanges,<br>• Increased nail curvature,<br>• Softening of the nail beds,<br>• Often associated with chronic hypoxia or systemic diseases.<br>While Mr. Smith's $SpO_2$ is currently normal (97%), digital clubbing may indicate a chronic underlying issue rather than an acute drop in oxygen levels.<br>Potential Underlying Cause:<br>Given Mr. Smith's:<br>• History of smoking,<br>• New-onset dyspnea, and<br>• Development of digital clubbing,<br>A top concern is lung cancer, particularly non-small cell lung cancer (NSCLC), which is commonly associated with hypertrophic osteoarthropathy, a condition that includes digital clubbing.<br>Other possibilities to consider include:<br>• Interstitial lung disease (ILD),<br>• Chronic pulmonary infections (e.g., bronchiectasis),<br>• Pulmonary fibrosis,<br>• Less likely: cyanotic congenital heart disease, given his age and history. | While your answers were very lengthy, you did identify a potential underlying cause for the digital clubbing and give an explanation for this answer. You also identified two clinical priorities for this patient and emphasized the importance of escalation and collaboration. I have to subtract one point due to the lack of references you gave, as I don't know where these detailed answers were sourced from. Also, I'd love to hear feedback about this question if you have it! | 9/ 10 |

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| | 2) Top Two Clinical Priorities & Nurse Actions<br>Priority #1: Further Diagnostic Evaluation<br>Why? Digital clubbing with new dyspnea may signal serious pulmonary pathology.<br>• Action: Promptly report findings to the provider.<br>• Recommend ordering a chest X-ray or CT scan to assess for lung pathology.<br>• Request pulmonary function tests (PFTs) if not previously done.<br>Priority #2: Monitoring and Managing Cardiopulmonary Status<br>Why? Early symptoms of significant cardiopulmonary disease may be present even without hypoxia at rest.<br>• Action: Assess for exertional oxygen desaturation (e.g., 6-minute walk test or pulse oximetry during ambulation).<br>• Review medication changes that may impact respiratory function (e.g., beta blockers).<br>• Document any progressive dyspnea, fatigue, or cough.<br>Escalation and Collaboration:<br>• Clearly document the presence of clubbing, dyspnea, and history.<br>• Verbally communicate the concern to the provider, emphasizing the change in function and physical findings.<br>• Offer to coordinate follow-up imaging/lab work, and suggest a pulmonology referral if indicated.<br><br>References:<br><br>Feedback: | | |

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| 16 | References:<br><br>Feedback: | | / 10 |
| 17 | Michael's symptoms and assessment findings align with classic signs of Hodgkin’s Lymphoma, a type of lymphatic cancer typically seen in young adults.<br><br>Assessment Findings and Symptoms Suggestive of Hodgkin’s Lymphoma:<br>1. Painless Lymphadenopathy<br>○ Enlarged, firm, non-tender lymph node in the cervical region is a hallmark feature.<br>○ Often asymmetrical and persistent.<br>2. B Symptoms (Systemic symptoms that indicate more advanced disease):<br>○ Intermittent fevers (T > 38°C),<br>○ Drenching night sweats,<br>○ Unintentional weight loss (><br>Priority Nursing Actions<br>○ 1. Facilitate Diagnostic Workup<br>○ Ensure labs are drawn promptly:<br>○ CBC – To check for anemia, leukocytosis or lymphocytopenia<br>○ ESR or LDH – Often elevated in lymphoma<br>○ Prepare for imaging: | Great job answering the questions with detailed assessments and clear prioritization of the workup. I also appreciate how you used bullet points to clearly highlight the symptoms present in the illness. You correctly identified the first priority intervention. However, to earn full points, additional information was needed, such as a discussion of continued education or an explanation of your reasoning behind your answers. Also, I'm curious about the source you used to find your answer. Thank you for your feedback | 8/ 10 |

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| | ○ Chest X-ray or CT scan to evaluate for mediastinal lymphadenopathy or other lymph node involvement.<br>○ 2. Monitor for Complications<br>○ Vital signs monitoring to assess for changes in fever pattern, infection risk, or early signs of sepsis or immune suppression.<br>○ Monitor for respiratory symptoms as large mediastinal masses can cause compression.<br>○ 3. Provide Education and Emotional Support<br>○ Educate the patient about the purpose of labs and imaging.<br>○ Offer reassurance while explaining that enlarged lymph nodes and systemic symptoms warrant thorough evaluation.<br>○ Anticipate potential need for biopsy (e.g., excisional or core needle) if imaging supports lymphoproliferative disease.<br>○ 4. Communicate Findings to the Provider<br>○ Promptly notify the provider of the B symptoms and lymphadenopathy.<br>○ Advocate for urgent oncology or hematology referral if initial workup supports suspicion.<br><br>References:<br><br>Feedback: | | |
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| | References:<br><br>Feedback: | | |
| 19 | Patient Education Response:<br>"That's a great question! Let me explain a bit. Lymph nodes are a normal part of your immune system. They act like filters, trapping germs and helping your body fight off infections. We all have lymph nodes throughout our body—including in the neck, underarms, and chest.<br>The swelling you're noticing in your supraclavicular lymph node, especially on just one side and lasting for a couple of weeks without signs of infection, can sometimes be a signal that your body is reacting to something deeper inside, not just a cold or flu. That area drains lymph fluid from the chest, lungs, and abdomen, so when the node is enlarged, it might mean something is going on in those areas.<br>That's why the doctor has ordered a chest x-ray—it helps take a closer look at your lungs and the area behind your breastbone to see if there are other enlarged lymph nodes, infections, or masses that could be causing this swelling. It's just one step in helping us figure out the full picture so we can get you the best care possible.<br>It doesn't mean anything scary right now—it's just being thorough to rule things out."<br>The chest x-ray is a non-invasive and quick screening tool to guide next steps in care—potentially followed by CT imaging or referral to a specialist if needed. | So far this is the best response I've read - such good work!! First, I loved that you put your response in quotes and were so thoughtful about exactly what you would say, maybe what you wouldn't say. Your education was spot on - clear, to the point, simple, but with enough information that the patient will truly understand what's happening. I also so appreciate you saying - nothing scary right now - because this could definitely be a scary situation for the patient. Really well done!<br><br>I'm hoping you just forgot your references. And if you have feedback for me, I'd love to hear it! I based your score on your response and took one point due to lack of a reference. With a reference it would have been 10/10!! | 9/ 10 |

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| | **Why This Matters- only for nursing reference not for patient to hear yet.**<br>This kind of lymphadenopathy (especially right-sided supraclavicular) might be a sign of a deeper issue like:<br>• Mediastinal lymphadenopathy<br>• Lung pathology  like tumors or infections<br>• Lymphoma or other malignancies<br><br>References:<br><br>Feedback: | | |
| 20 | References:<br><br>Feedback: | | / 10 |