

Am I Going to Die?

An Introduction to Respiratory Assessment

by

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Part I – In the Beginning

“I’m glad the tournament was last weekend,” Lily thought as she gave a final spike to the ball over the net. At age 16, Lily had lettered the previous two years in volleyball and basketball. Today Lily had noticed that she was feeling stiff during the volleyball practice and more tired. Gathering up her gym bag, she headed out to her car. “I’m going to pass on our Friday pizza get-together tonight and just head home,” she called out to her teammates.

During the drive home, Lily noticed that she also had a scratchy throat and slight headache. She grabbed a glass of juice and headed into her room, ignoring the sandwich and fruit her mother had left out for dinner.

“Aren’t you going to eat?” her mother asked, poking her head into Lily’s room.

“No, I’m really just going to work on some homework. I’m not hungry and I don’t feel very good,” Lily replied.

Questions

1. *Cue recognition:* What symptoms of illness does Lily have?
2. *Hypotheses generation:* What are potential reasons for Lily’s symptoms?
3. *Hypotheses evaluation:* How would you know if Lily’s health was worsening?
4. *Taking action:* Which non-pharmacologic intervention recommendations made by the health care provider would be appropriate at this time? (Circle all that are applicable.)

fluids	NSAID (non-steroidal anti-inflammatory drug)	rest
soak in tub	chicken soup	vitamin C

5. *Clinical reasoning:* What are your priority concerns for Lily at this point?

Part II – In the Clinic

By Monday morning, Lily still did not feel well. “I’m not feeling good enough to go to school,” she reported to her mother as she walked into the kitchen carrying a tissue box and sniffing. “I really feel sick.”

“I’ll call and make an appointment for you to see the doctor if you are feeling that bad,” said her mother. “I want you to be well before the state volley ball tournament.”

At the clinic, Lily reported having a runny nose, fatigue, muscle stiffness, cough, scratchy throat, headache, and no appetite for the past two days. After the physical exam, Dr. Rosa reported back to Lily and her mother.

“Lily, you have a red, inflamed throat, some clear nasal drainage, and a non-productive cough. Your heart rate is regular without a murmur, and your abdomen is non-tender. I can hear scattered crackles in the bases of both lungs, which probably accounts for the cough. Your tympanic temperature is 100.6 °F with a pulse of 84, respirations of 22, and a B/P of 104/60. There is some anterior cervical lymph node enlargement bilaterally. If we put this all together, you seem to have an upper respiratory infection. I recommend extra fluids and rest for the next few days. Let me know if anything changes.”

Tuesday morning, Lily shuffled slowly into the kitchen. “Mom, I feel worse today than yesterday. I was freezing all night, and now I’m roasting. I coughed so much I hardly slept at all, and I had to use two pillows so I could breathe. What can I do to feel better?”

“Let’s call the doctor back. Maybe you need some medicine,” said Lily’s mom as she reached for the phone.

Later that morning at the clinic, Lily’s assessment revealed the following information:

- VS 103°F–104–30–120/80.
[Note: VS (vital signs) are typically recorded in the following order: temperature–pulse–respirations–blood pressure (B/P).]
- Frequent productive cough with yellowish sputum.
- Copious amounts of white nasal drainage.
- Tympanic membranes are clear.
- Enlarged and tender anterior cervical lymph nodes.
- SOB at rest.
- Lungs with rhonchi bilaterally in the bases and right middle lobe.
- SpO₂ of 92% on room air.
[Note: SpO₂ = oxygen saturation obtained by pulse oximetry. Normal SpO₂ level is > 95%, which would indicate adequate oxygen levels for the body.]

“Lily, this is now more than an upper respiratory infection. I think we should admit you to the hospital for a CXR, check for mononucleosis and strep throat, some respiratory treatments, oxygen for your hypoxemia, and IV antibiotics to get on top of this. It should be a short stay. We can get all of the lab work we need at the hospital,” said Dr. Rosa to Lily and her mom. “Go over to the hospital, and I’ll call to let them know you are to be admitted directly to the medical floor.”

Questions

1. Define the following terms:
 - a. crackles (rales):

 - b. rhonchi:

c. sputum:

d. B/P:

e. SOB:

f. SpO₂:

g. IV:

h. CXR:

i. hypoxemia:

2. *Cue recognition:* Based on the expected VS for a client of this age, how would you interpret Lily's most recent VS on Tuesday morning?
3. *Hypotheses generation:* What factors may have altered Lily's vital signs?
4. *Cue recognition:* What assessment data (cues) indicate a deterioration in Lily's status at this point?
5. *Hypotheses generation:* What information is a priority at this point?
6. *Hypotheses evaluation:* What assessment data would indicate an improvement in status?

Part III – In the Hospital

Upon arrival at the hospital, Lily was escorted to a room by her assigned nurse, Jeff.

“Go ahead and change into one of our highly fashionable gowns before the lab arrives. I’ll be back in a few minutes to get you admitted,” Jeff said.

“OK, thanks,” Lily replied as she sat down in the chair to rest after walking from the elevator to the room. “I’m more worried about getting blood drawn for the lab work than the color of the gown,” she said with a slight smile.

Quickly and efficiently, Jeff admitted Lily, started O₂ at 2 L (Liter)/minute per nasal cannula, assisted in obtaining diagnostics prescribed, completed an assessment, started an IV line to administer the prescribed antibiotic and gave the prescribed acetaminophen (Tylenol) for the fever. Admission and S/S information documented in the electronic health record included the following:

- VS: 103°F-104-32-122/84.
- SpO₂ saturation of 90% on 2 L of oxygen.
- SOB with exertion.
- WBC of 15,000 × 10³ μl.
- UA pending.
- Rapid strep negative.
- Monospot negative.
- Blood cultures pending.
- CXR done, awaiting radiologist interpretation.
- Lung sounds with bilateral rhonchi in the bases.
- Heart rate regular without murmur..
- Abdomen soft.

Questions

1. Define the following terms:
 - a. nasal cannula:

 - b. S/S:

 - c. WBC:

 - d. UA:

 - e. heart murmur:

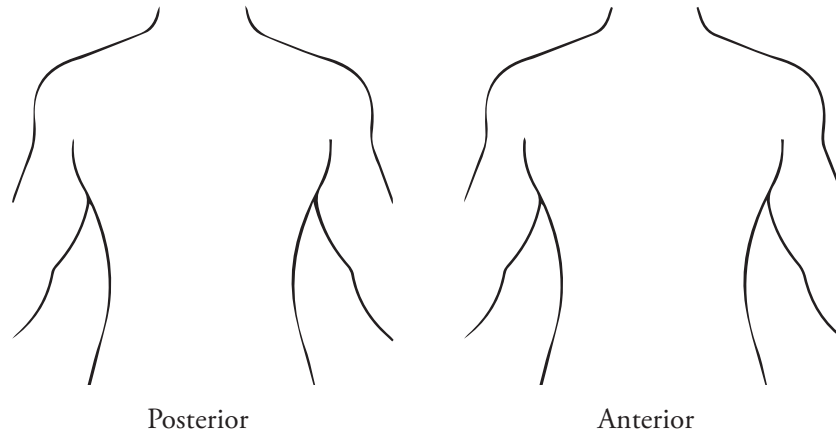
2. Describe three different ways oxygen can be administered and the typical flow rate for each method.

<i>Oxygen administration method</i>	<i>Flow rate and % oxygen delivered</i>
a.	
b.	
c.	

3. Describe the components of a respiratory assessment including stethoscope placement.

Components:

Stethoscope placement:



4. *Cue recognition:* What S/S and diagnostic laboratory results are concerning to the nurse?

5. *Cue recognition:* What is the significance of the following assessment findings? What additional information from the lab work would be needed to assess the severity of the patient status?

<i>Assessment finding</i>	<i>Significance</i>	<i>Follow-up/additional information needed</i>
WBC of $15,000 \times 10^3 \mu\text{l}$		
Temperature of 103°F		

Pulse of 104		
Respiratory rate of 32/min		
Oxygen saturation of 90% on 2 L of O ₂		

6. *Hypotheses Generation:* What growth and development factors should the nurse consider for this patient?

7. *Hypotheses Generation:* Which current sign is a priority concern for the nurse?

8. *Hypotheses evaluation/taking action:* How would the nurse evaluate the priority concern?

9. *Taking action:* Identify at least three interventions with rationales to assist any client who is experiencing SOB.

<i>Interventions</i>	<i>Rationale</i>

10. *Evaluating outcomes:* What would indicate an improvement in Lily’s status? A worsening of Lily’s status? Include assessment data and diagnostic data.

<i>Improving status</i>	<i>Worsening status</i>

Part IV – In Trouble

“I’m glad I’m in the hospital,” Lily thought. “I feel really lousy and can just sleep and not worry about anything.”

“Hey, Sleepyhead, I need to check your temperature,” Jeff said as he entered Lily’s room a few minutes later. “We need to be sure the medicines are doing their job. Hey ... Lily ... are you awake?”

Lily opened her eyes to look at Jeff. “I am ... having trouble ... breathing”

“No kidding,” Jeff thought to himself. Several thoughts simultaneously ran through his head as he raised the head of the bed, reached for the call light to summon additional help, increased the O₂ to 6 L by simple face mask and applied the pulse oximetry to her finger. “A temperature is not the biggest problem here—her respirations are about 44/min, she has supraclavicular retractions, she’s pale, the SpO₂ is at 87% on oxygen, and she looks scared. This girl is in real trouble,” he thought.

“Could you call for the Rapid Response team and call Dr. Rosa Armando, the ER doctor, respiratory therapy, and lab STAT to room 1214?” he asked when the unit secretary answered the call light. “I could also use some help and the crash cart.”

Just then Lily reached up and grabbed Jeff’s arm. With eyes wide and scared, Lily asked, “Am I going to die?”

Questions

1. *Cue recognition:* What are the new or changed S/S for Lily?
2. *Hypotheses generation:* What are possible reasons for the change in Lily’s status?
3. *Hypotheses evaluation:* What is the priority assessment for the care provider at this time?
4. *Taking Action:* What interventions did Jeff perform for the action? Provide a rationale for each action.

<i>Actions</i>	<i>Rationale for action</i>

5. *Evaluating action:* What data would indicate an improvement in the Lily’s status?
6. *Evaluating action:* What data would indicate a worsening in Lily’s status?

7. The following illnesses can all result in respiratory concerns. Identify key assessment findings for the following:

<i>Illness process</i>	<i>Key assessments</i>
Acute asthma exacerbation	
Acute respiratory distress syndrome	
Pneumonia	
Chronic bronchitis	

8. *Cue recognition:* Based on your data in the question above, what illness process do you think Lily has developed?
9. *Taking action:* Based on this illness process, what priority interventions do you anticipate for Lily?
10. *Taking action:* How would you respond to Lily's question, "Am I going to die?"

References

- Giddens, J.F. 2017. *Concepts for Nursing Practice*, 2nd ed. St. Louis, Missouri: Elsevier.
- Ignatavicius, D.D., M.L. Workman, and C.R. Rebar. 2018. *Medical-Surgical Nursing: Concepts for Interprofessional Collaborative Care*, 9th ed. St. Louis, MO: Elsevier.
- Leeuwen, A.M. and M.L. Bladh. 2017. *Davis's Comprehensive Handbook of Laboratory and Diagnostic Tests*, 7th ed. Philadelphia: F.A. Davis.
- Perry, A.G., P.A. Potter, and W.R. Ostendorf. 2018. *Clinical Nursing Skills and Techniques*, 9th ed. St. Louis, Missouri: Elsevier.
- Yoost, B.L. and L.R. Crawford. 2016. *Fundamentals of Nursing*. St. Louis, MO: Elsevier.