Chapter 01: Chip Jones: Bronchiolitis

1. A nurse is providing care for a 4-month-old infant at the pediatric clinic. During the assessment the nurse should expect that the infant has reached which developmental milestone(s)? Select all that apply.
   A. Uses pincer grasp to pick up items
   B. Can roll over from front onto back
   C. Pulls self up to a standing position
   D. Recognizes family members' faces
   E. Pushes self up on arms from a prone position
   F. Sits with support

   ANS: B, D, E, F
   Rationale: At 4 months of age, an infant is able to roll over from prone to supine position, push the head/chest up on arms from a prone position, sit with support and recognize the faces of close family members. The use of the pincer grasp and the ability to pull self up to a standing position are expected at 10 months of age.

   PTS: 1 REF: p. 4 OBJ: 1
   NAT: Client Needs: Health Promotion and Maintenance
   TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Understand

2. A nurse is assessing a 3-month-old infant during a pediatric clinic visit. The nurse believes the infant is demonstrating early manifestations of respiratory distress. Which clinical manifestation(s) should the nurse document? Select all that apply.
   A. Bradycardia
   B. Acrocyanosis
   C. Intercostal retractions
   D. Nasal congestion
   E. Tachypnea

   ANS: D, E
   Rationale: Early signs of respiratory distress in an infant include fussiness, nasal congestion, tachypnea and no interest in feeding. Intercostal retractions are signs of moderate distress; bradycardia can be seen with severe respiratory distress. Acrocyanosis, in and of itself, is not a sign of respiratory distress as it can be caused by poor circulation and cold extremities.

   PTS: 1 REF: p. 8 OBJ: 4
   NAT: Client Needs: Physiological Integrity: Physiological Adaptation
   TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Apply

3. A nurse is caring for an infant newly admitted for suspected bronchiolitis. The infant's parent is very upset and states "I am so worried about my infant. What can you do to help my infant?" What is the nurse's **best** response?
   A. "There is no need to worry; we care for cases like this all the time."
   B. "I know this is hard for you but do not worry. We will be able to discharge your infant in a few days."
   C. "No worries; having you hold the infant is very helpful. The infant will be back at home in no time."
   D. "I know it is difficult to see your infant like this. We will suction your infant and

give oxygen to make the infant comfortable.

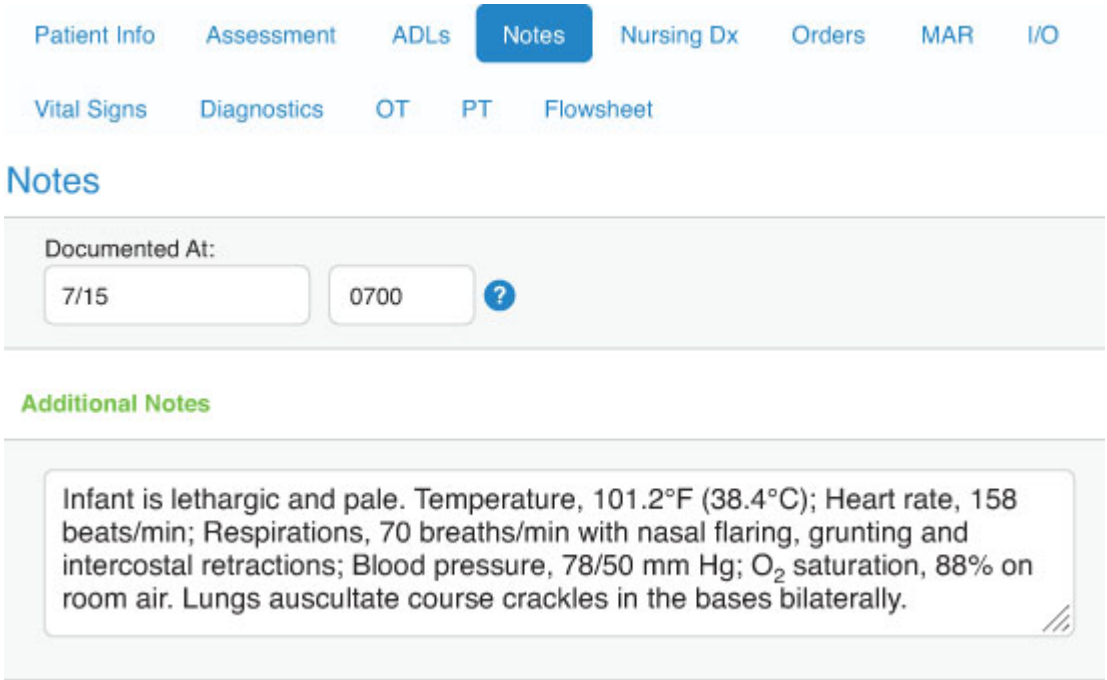
ANS: D
Rationale: The option that states that it is difficult to see the infant like this is the only response that explains to the parent what the nurse can do to help the infant and acknowledges the parent's concern. The remaining options recognize the parent's concern but do not answer the parent's question.

PTS: 1 REF: p. 10 OBJ: 7
NAT: Client Needs: Psychosocial Integrity
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Apply

4. A 3-month-old infant is hospitalized with a diagnosis of bronchiolitis. The nurse is creating a plan of care for the infant. Which intervention is a **priority**?
   A. Provide parental teaching on the antibiotics the infant will need to take at home.
   B. Administer oxygen to maintain the infant's oxygen saturation at or above 92%.
   C. Allow the parents to remain by the infant's side throughout the hospitalization.
   D. Keep the infant NPO until the condition has resolved.

   ANS: B
   Rationale: Therapeutic management of bronchiolitis includes the administration of oxygen to maintain O_2 saturation at 92% or higher. Current evidence shows that antibiotics do not improve outcomes in the treatment of bronchiolitis. Infants with bronchiolitis are encouraged to feed as tolerated to maintain nutrition and fluid balance. While it is important for the parents to be allowed to remain at the infant's side, it is not the priority.

   PTS: 1 REF: p. 14 OBJ: 7
   NAT: Client Needs: Physiological Integrity; Physiological Adaptation
   TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Apply

5. 

A nurse is caring for an infant admitted with a diagnosis of bronchiolitis. The nurse completes an assessment with the above findings. What is the nurse's **priority** in providing care to this infant?

A. Providing adequate fluids
B. Initiating tube feedings
C. Administering oxygen
D. Administering antipyretics

ANS: C

Rationale: The priority in providing care for this infant is to administer oxygen to increase the O_2 saturation to 92% or higher. Providing the infant adequate fluids and administering antipyretics is also important, but these actions are not the priority. There is no need to initiate tube feedings for this client.

PTS: 1 REF: p. 11 OBJ: 8
NAT: Client Needs: Safe, Effective Care Environment: Management of Care
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Analyze

6. An infant is diagnosed with bronchiolitis. The nurse is teaching the parent of how to use a bulb suction to clear the infant's airway. What is the **best** way for the nurse to evaluate the effectiveness of the teaching?

A. Guide the parent step by step through the procedure.
B. Have the parent verbalize each step of the procedure.
C. Observe the parent as he/she suctions the infant.
D. Provide the parent with written instructions of the procedure.

ANS: C

Rationale: The best way for the nurse to evaluate the parent's understanding of the teaching is for the parent to give a return demonstration so the nurse can observe the parent's technique. Having the parent verbalize the steps of the procedure will only tell the nurse that the parent remembered what was said; this does not assess the parent's ability to perform the procedure. Guiding the parent step by step or providing the parent with written instructions will not help the nurse evaluate the parent's understanding.

PTS: 1 REF: p. 11 OBJ: 8
NAT: Client Needs: Health Promotion and Maintenance
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Apply

7. Which statement **best** describes the difference between an infant's respiratory tract and that of an adult?

A. The infant's respiratory tract has more alveoli than the adult.
B. The trachea and bronchi have smaller lumens in the infant.
C. Because of the location of an infant's trachea airway obstruction is less likely.
D. Adults have more soft tissue surrounding the trachea than infants.

ANS: B

Rationale: The infant's respiratory tract has smaller bronchi and fewer alveoli than adults. An infant's neck is shorter, and the trachea lumen is smaller, not larger, than an adult. An infant's trachea has more surrounding soft tissue than an adult, which makes them more susceptible to obstruction. The location of an infant's trachea does not make airway obstruction more likely. It is the smaller lumen of the infant's trachea that can affect air flow.

PTS: 1 REF: p. 10 OBJ: 5
NAT: Client Needs: Physiological Integrity: Physiological Adaptation
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Understand

8. A nurse is preparing a class on infant wellness for parents at a community center. The parents have infants aged 2 to 4 months. Which information should the nurse include in the class? Select all that apply.
   A. TdaP vaccine
   B. Circumcision care
   C. Hearing screening
   D. Developmental milestones
   E. Varicella vaccine
   F. DTaP vaccine

   ANS: D, F
   Rationale: At 2-4 months of age, infants should receive their 1st and 2nd doses of the diphtheria, tetanus, and pertussis (DTaP) vaccine. The nurse should also provide information on expected developmental milestones. Newborn teaching includes circumcision care and hearing screening. The varicella vaccine is not given until 12 months of age. The TdaP vaccine, which has a dose of tetanus, and a reduced dose of the diphtheria and pertussis, is given to children 7 years and older.

   PTS: 1 REF: p. 3 OBJ: 2
   NAT: Client Needs: Health Promotion and Maintenance
   TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Apply

9. A 4-month-old male infant is seen in the emergency room with clinical manifestations of moderate respiratory distress including nasal stuffiness, nasal flaring, tachypnea, and grunting. The infant's health history includes birth at 34 weeks' gestation, a temperature of 100.3°F (37.9°C) and a cough for 2 days. Based on this information, the triage nurse suspects the infant has developed which condition?
   A. Bronchiolitis
   B. Bronchitis
   C. Croup
   D. Tuberculosis

   ANS: A
   Rationale: Based on the infant's age, gender, gestational age at birth, and symptoms, the nurse would suspect bronchiolitis. The infant's age, gender, gestational age at birth are all risk factors for respiratory syncytial virus (RSV), which is the primary causal pathogen of bronchiolitis. Croup causes inflammation of the larynx and trachea resulting in a barking cough that occurs primarily at night; prematurity is not a risk factor for croup. Bronchitis often occurs with an upper respiratory infection; a dry cough and fever may be present, but respirations remain unlabored. Tuberculosis in children is usually associated with those considered high risk (i.e., infected with HIV, exposed to family members with the disease).

   PTS: 1 REF: p. 10 OBJ: 6
   NAT: Client Needs: Physiological Integrity: Reduction of Risk Potential
   TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Analyze

10. An infant is being treated for bronchiolitis. The infant's parent asks the nurse why this condition has such an adverse effect on the infant's breathing. The nurse's response is based on which fact?
    A. Infants are obligate mouth breathers and have smaller tongues.
    B. Infants have cylindrical tracheas and longer necks than adults.
    C. Infants have a cartilaginous trachea and smaller bronchi than adults.
    D. Infants have a smaller number of bronchioles and alveoli than adults.

    ANS: C
    Rationale: Newborns are obligate nose breathers until about 4 weeks of age; thereafter, infants can breathe through their mouths and nose (as long as the nares are patent). Infants have larger tongues in relation to their mouths. Infants have shorter necks than adults; adults have a larynx that is more cylindrical; the infant's larynx has more of a funnel shape than an adult.

    PTS: 1 REF: p. 12 OBJ: 3
    NAT: Client Needs: Health Promotion and Maintenance
    TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Apply

11. A parent brings the infant in for a wellness visit. During the visit, the parent tells the nurse "I remember our conversation about me stopping smoking. I have cut down a lot and only smoke outside on the porch." What is the **best** response for the nurse to make?
    A. "I am glad to hear about the changes you have made. Keep up the good work!"
    B. "You should stop smoking completely! You are still putting your baby at risk."
    C. "It is not enough to just smoke outside. The smoke is still in your clothes when you come inside."
    D. "I am glad to hear about these positive changes. However, we need to talk about this more."

    ANS: D
    Rationale: It is important for the nurse to acknowledge the positive changes that were made, as well as the changes that are still needed. Even though the parent has cut down on the amount of smoking and has stopped smoking in the house, the infant is still at risk for thirdhand smoke (smoke and nicotine particles on the parent's clothing). The other statements either solely praise the parent for the changes made or point out what still needs to be done. And one is judgmental. None of those statements are therapeutic in nature.

    PTS: 1 REF: p. 2 OBJ: 2
    NAT: Client Needs: Health Promotion and Maintenance
    TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Analyze

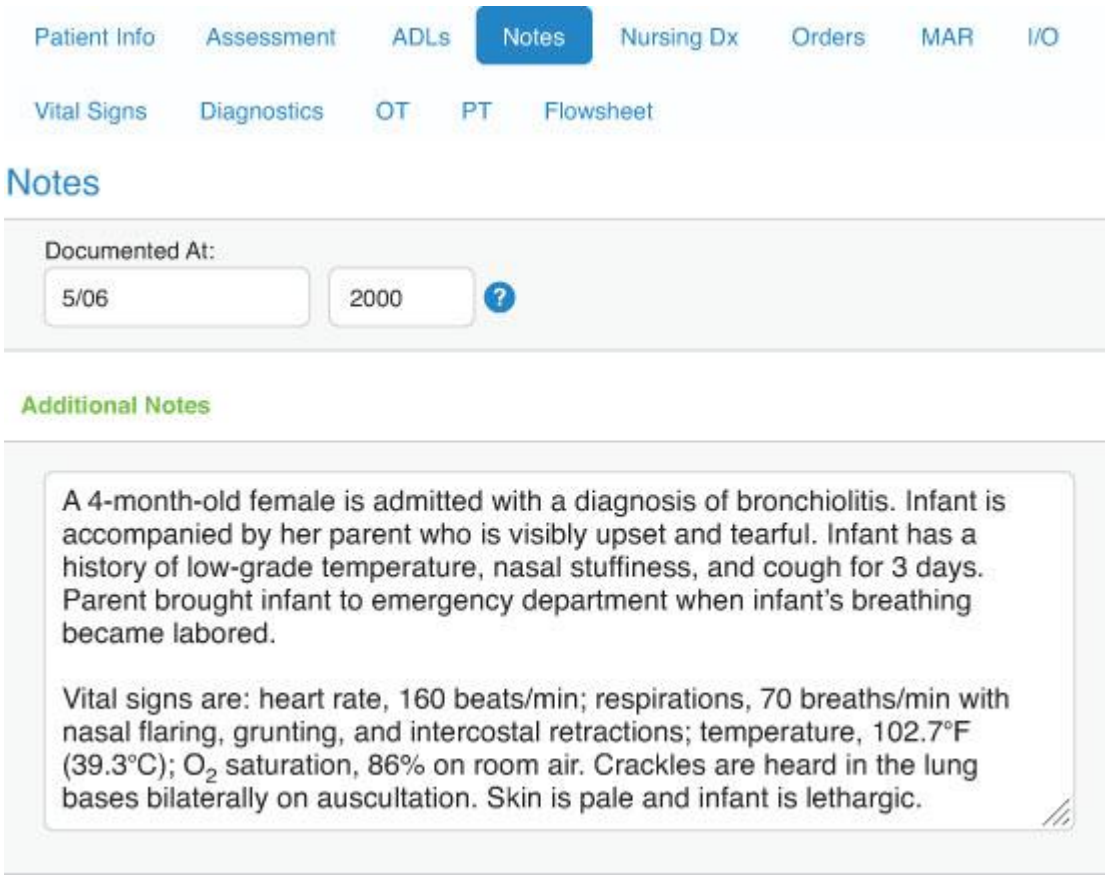
12. A nurse is reviewing the health records of several 4-month-old infants who were seen in the pediatric office today. Which infant behavior will require referral for further evaluation of growth and development?
    A. Reaches for nearby objects
    B. Unable to support head
    C. Cannot sit without assistance
    D. Rolls from prone to supine position

    ANS: B

Rationale: An infant at 4 months of age who cannot support his or her head should be referred for evaluation. A 4-month-old infant should be able to reach for objects of interest and should be able to roll from a prone to a supine position. A 4-month-old infant is not able to sit alone without support.

PTS: 1 REF: p. 3 OBJ: 1
NAT: Client Needs: Health Promotion and Maintenance
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Analyze

13.



A 4-month-old infant is admitted with a diagnosis of bronchiolitis. The nurse writes the above admission note. Based on the assessment findings, what inference can the nurse make about the infant's **initial** plan of care?

A. Antibiotics will be started and the infant will be closely monitored overnight.
B. The infant will be intubated and transferred to the intensive care nursery.
C. Supplemental oxygen will be administered and nasopharyngeal suctioning performed.
D. Intravenous fluids will be administered and the mother will be encouraged to feed the infant as tolerated.

ANS: C

Rationale: The initial plan of care will focus on maintaining a patent airway and improving gas exchange. Nasopharyngeal suctioning and administration of supplemental oxygen will achieve that goal. Intravenous fluids and feedings as tolerated will be part of the plan of care but not initially. Antibiotics are not recommended as part of the treatment for bronchiolitis because research has shown them not to affect outcomes. There is no indication as yet to intubate the infant or transfer to the intensive care nursery. If measures to clear the airway and supplemental oxygen do not improve ventilation, then intubation might be considered.

PTS: 1 REF: p. 12 OBJ: 7
NAT: Client Needs: Safe, Effective Care Environment: Management of Care
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Analyze

14. A 4-month-old infant has been admitted for moderate to severe respiratory distress secondary to bronchiolitis. The infant has been suctioned, placed on oxygen via nasal cannula at 3 liters per minute, and is receiving IV fluid at 20 milliliters per hour via pump. After an hour, the infant's O_2 saturation has increased from 86% to 92%. What action should the nurse take based on this assessment?
A. Document the assessment findings and continue to monitor the infant.
B. Notify the health care provider and anticipate weaning the infant from oxygen.
C. Increase the oxygen to 4 liters and suction the infant as needed.
D. Decrease the IV fluid rate and decrease the oxygen to 2 liters per minute.

ANS: A
Rationale: The nurse should document the findings and continue to monitor the infant. Although an O_2 saturation of 92% is acceptable, it is the minimal acceptable level. The infant should be monitored to make sure the level can be maintained. There is no indication at this time to increase the oxygen or IV fluid rate.

PTS: 1 REF: p. 12 OBJ: 8
NAT: Client Needs: Safe, Effective Care Environment: Management of Care
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Apply

15. A nurse is caring for an infant with a temperature of 102.5°F (39.1°C). The health care provider has prescribed acetaminophen 10 mg/kg every 4 to 6 hours for a temperature of 101.4° (38.6°C) or higher. The infant weighs 14 lb 8 oz (6.59 kg). How many milligrams should the nurse administer? Record your answer using a whole number.

ANS:
66

Rationale: The nurse should use the client's weight in kilograms. 6.59 kg x 10 mg/kg = 65.9 mg Rounding to the nearest whole number, 66 mg.

PTS: 1 REF: p. 6 OBJ: 7
NAT: Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Apply

16. The parent of an infant being treated for bronchiolitis is visibly upset and tearful. The parent states "I am so afraid for my infant. Is there something I could have done to prevent this from happening?" Which is the **best** response for the nurse to make?
A. "Please do not cry. I doubt you did anything to cause your infant to get sick."

B. "This must be very difficult for you. Let's talk about risk factors related to bronchiolitis."
C. "That does not matter now. It is more important that we focus on getting your infant well."
D. "There was nothing you could have done to prevent this. We will do everything we can to make your infant well again."

ANS: B
Rationale: Acknowledging that the situation is difficult is therapeutic and talking about risk factors for bronchiolitis will provide information about how to prevent the condition. The other statements are not therapeutic and do not provide any information to the parent about how to prevent the condition in the future.

PTS: 1 REF: p. 10 OBJ: 6
NAT: Client Needs: Psychosocial Integrity
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Apply

17. A community health nurse is conducting a parenting class on respiratory syncytial virus (RSV). What statement made by a parent indicates that the teaching has been successful?
A. "RSV season occurs primarily April through September."
B. "Exposure to second- or thirdhand smoke increases the risk for developing RSV."
C. "Infants are less affected by RSV than older children."
D. "Early initiation of antibiotics can lessen the severity of the infection."

ANS: B
Rationale: An infant exposed to second- or thirdhand smoke is at risk for developing RSV. RSV season runs from September through April. Current treatment recommendations for RSV do not include antibiotics. Infants are susceptible to RSV much more than older children.

PTS: 1 REF: p. 10 OBJ: 2
NAT: Client Needs: Health Promotion and Maintenance
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Apply

18. A nurse is caring for an infant admitted with a diagnosis of bronchiolitis. After completing an assessment, the nurse creates a plan of care for the infant. Which client goal would be **priority** in the plan of care?
A. The infant will attain oxygen saturation of 90% on room air.
B. The infant's airway will remain clear and free of mucus.
C. The infant's breathing will be less labored.
D. The infant will have decreased nasal stuffiness.

ANS: B
Rationale: Keeping the infant's airway clear is the top priority. An O_2 saturation of 90% on room air is minimally acceptable. It is important that the infant's breathing be less labored and that there is decreased nasal stuffiness, but having the airway clear and free of mucus is most important.

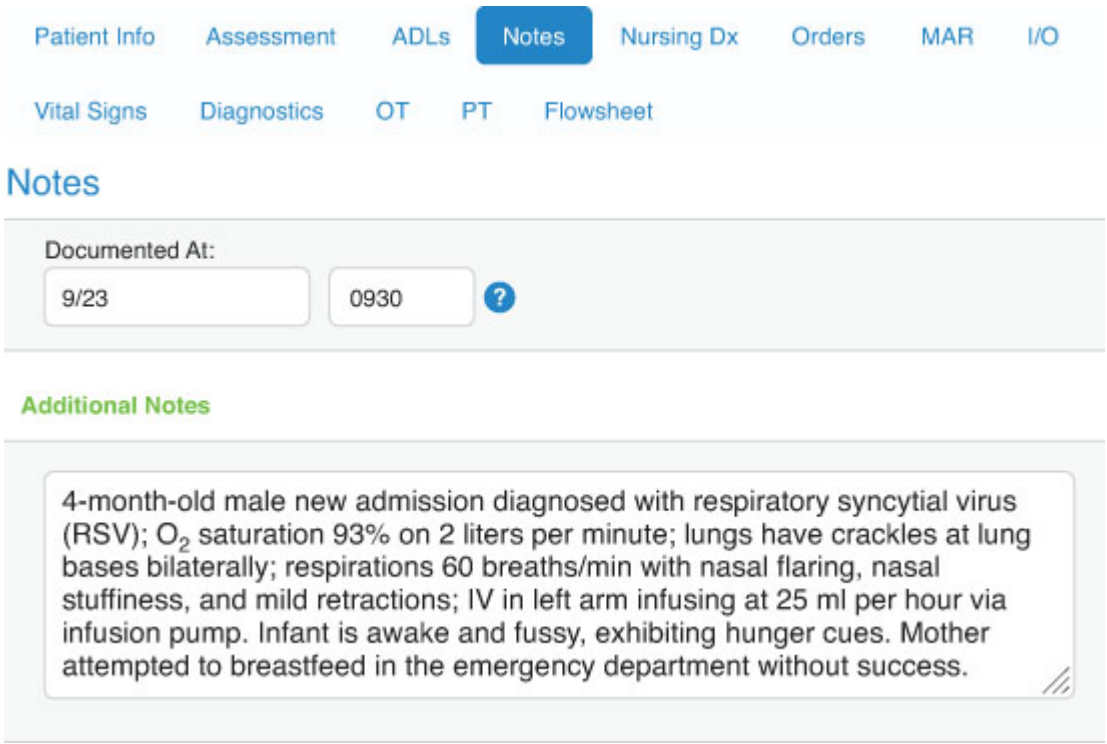
PTS: 1 REF: p. 9 OBJ: 4
NAT: Client Needs: Safe, Effective Care Environment: Management of Care
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Apply

19. A nurse is caring for an infant diagnosed with respiratory syncytial virus (RSV) bronchiolitis. The infant is scheduled to be discharged home and the nurse is preparing discharge instructions for the parents. What information should the nurse include in the instructions? Select all that apply.
A. Follow up with the health care provider in 2 weeks.
B. The infant may continue to cough for up to 2 weeks.
C. The importance of handwashing for all family members.
D. Contacting the health care provider for signs of worsening disease.
E. Isolating the infant at home for 2 weeks.

ANS: B, C, D
Rationale: Good hand hygiene, notifying the health care provider of signs of worsening condition, and the possibility that the infant may have a cough for up to 2 weeks are all important to include in the discharge instructions. Follow-up with the health care provider should be within a few days of discharge, not 2 weeks. There is no need to isolate the infant at home for 2 weeks.

PTS: 1 REF: p. 10 OBJ: 8
NAT: Client Needs: Health Promotion and Maintenance
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Apply

20.



A nurse has just received the above handoff report. Which nursing intervention will allow the infant to nurse successfully?
A. Increase the oxygen to 3 liters per minute.
B. Suction the nasopharynx.
C. Administer acetaminophen.
D. Maintain the infant in an upright position.

ANS: B

Rationale: Infants are obligate nose breathers, so suctioning the nasopharynx prior to feeding will make the infant comfortable and able to latch on successfully. The oxygen does not need to be increased as the O_2 saturation is at 93%, an acceptable level. Acetaminophen could be administered for a fever, but in this case, it is the nasal stuffiness that is causing the discomfort. It is recommended to keep the head of the bed elevated in infants who have respiratory distress, but it is the nasal stuffiness that is getting in the way of the infant breastfeeding.

PTS: 1 REF: p. 11-12 OBJ: 7
NAT: Client Needs: Physiological Integrity: Basic Care and Comfort
TOP: Chapter 1: Chip Green: Bronchiolitis BLM: Cognitive Level: Analyze