

ANSWERS TO CHAPTER REVIEW QUESTIONS

1. c The sol and gel layers together make up the mucosal blanket.
2. d While *bland* can mean boring and no taste, in reference to aerosols, it means they contain no medication.
3. a Hypertonic is both irritating for cough and draws water into the lumen of the airway to help hydrate the mucosal blanket.
4. b All are correct, except dornase alpha does not rupture the disulfide bonds; that is the mechanism of action of Mucomyst.
5. a The patient should be monitored for reflux of the solution, which could be aspirated, decrease in oxygen due to diffusion barrier, bradycardia due to vagal stimulation, and improved lung compliance, which could translate to a higher ventilatory volume delivered by the mechanical ventilator to the now-improved lungs. This could cause a pneumothorax.
6.
 - Prevents water from moving into and out of the epithelia
 - Protects the epithelia from irritants, microorganisms, and so on
 - Prevents infection
 - Lubricates the airway
7. The typical dose of Mucomyst is 3 to 5 ml of 20% instilled or nebulized.
8. (b) Mix with a short-acting bronchodilator to treat any present possible bronchospasm.
9. (b) Dose is $4 \text{ ml/kg} \times .8 \text{ kg} = 3.2 \text{ ml}$.
10. (c) Surfactant increases the risk of pulmonary hemorrhage.
11. (c) Surfactant used to prevent or treat RDS.
12. (b) Instilled into endotracheal tube with oxygenation, ventilation, and positional changes.
13. (c) Dose is $2.5 \text{ ml/kg} \times 1.5 \text{ kg} = 3.75 \text{ ml}$.