



Hyperbaric Oxygen Therapy Questions

1. What is the primary mechanism of action in hyperbaric oxygen therapy?

- A) Reduces carbon dioxide levels in tissues
- B) Increases oxygen delivery to tissues by pressurizing 100% oxygen
- C) Enhances nitrogen absorption in tissues
- D) Reduces the temperature of blood

2. What is the typical atmospheric pressure used during hyperbaric oxygen therapy?

- A) 1 atmosphere absolute (ATA)
- B) 1.5-3 atmospheres absolute (ATA)
- C) 4-5 atmospheres absolute (ATA)
- D) 0.5 atmospheres absolute (ATA)

3. Which of the following is NOT an indication for HBOT?

- A) Carbon monoxide poisoning
- B) Decompression sickness
- C) Severe anemia
- D) Hypertension

4. How does HBOT help in wound healing?

- A) By lowering pH levels in tissues
- B) By reducing angiogenesis
- C) By enhancing oxygen diffusion and promoting fibroblast activity
- D) By increasing nitrogen concentration in tissues

5. What is the primary contraindication for HBOT?

- A) Active middle ear infection
- B) Mild anemia
- C) Type 2 diabetes
- D) Hypertension

6. In which medical condition does HBOT reduce gas bubble size as a therapeutic effect?

- A) Stroke
- B) Decompression sickness
- C) Carbon monoxide poisoning
- D) Diabetic foot ulcer

7. What is a common side effect of hyperbaric oxygen therapy?

- A) Hypoxemia
- B) Barotrauma to the ears or sinuses
- C) Hypercapnia
- D) Hyponatremia

8. Hyperbaric oxygen therapy is approved for use in which of the following conditions by the FDA?

- A) Acute myocardial infarction
- B) Chronic bronchitis
- C) Radiation-induced tissue damage
- D) Asthma

9. What is the partial pressure of oxygen (P_{aO_2}) under 3 atmospheres absolute (ATA) with 100% F_{iO_2} ?

- A) 1233 mmHg
- B) 2233 mmHg
- C) 2233mmHg
- D) 4233 mmHg

10. Which of the following is an absolute contraindication to HBOT?

- A) Pregnancy
- B) Untreated pneumothorax
- C) Mild claustrophobia
- D) Diabetes mellitus