



Hyperbaric Oxygen Therapy

Answers

- 1) B**
Increases oxygen delivery to tissues by pressurizing 100% oxygen

- 2) B**
1.5-3 atmospheres absolute (ATA)

- 3) D**
Hypertension

- 4) C**
By enhancing oxygen diffusion and promoting fibroblast activity

- 5) A**
Active middle ear infection

- 6) B**
Decompression sickness

- 7) B**
Barotrauma to the ears or sinuses

- 8) C**
Radiation-induced tissue damage

9) B (2233 mmHg)

To calculate the partial pressure of oxygen (PaO₂) under 3 atmospheres absolute (ATA) with 100% FiO₂

Formula:

$$PaO_2 = (\text{Barometric Pressure} - \text{Water Vapor Pressure}) \times FiO_2$$

1. Barometric Pressure at 3 ATA = $3 \times 760 \text{ mmHg} = 2280 \text{ mmHg}$
2. Water Vapor Pressure = 47 mmHg (at body temperature, 37°C)
3. FiO₂ = 100%

Calculation:

$$PaO_2 = (2280 - 47) \times 1.0$$

$$PaO_2 = 2233 \text{ mmHg}$$

10) B

Untreated pneumothorax