

# • **Contraindications to HBO**

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Absolute Contraindication

- Untreated pneumothorax

## • Relative Contraindication

- Seizure disorder (Not under control)
- Fever > 102.5 F (39.2 C)
- Severe Pulmonary Disease
- Altered Mental Status (unless intubated)
- Doxorubicin, Bleomycin, Cis-platinum,
- Disulfiram, Sulfamylon
- Claustrophobia

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# Special Considerations

- Malignancy Concern
  - No stimulation of growth
  - Based on controlled trials conducted as
  - investigated radiosensitizer effect of HBO
  - Additional investigations showed no
  - enhanced growth of the cancers.
  - In fact some showed inhibited growth of
  - tumor.

# Complications of HBO

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- Confinement Anxiety
- Barotrauma
  - Ear and Sinus squeeze
  - Pneumothorax, gas embolism (very rare)
- O<sub>2</sub> toxicity seizure (3:10000)
- Other
  - Hypoglycemia in diabetic patients
  - Reversible myopia
  - Fire , Pulmonary edema (rare)
  - ROP in premie

# HBO Case Considerations

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- A mechanical-ventilated child with probable delayed radiation injuries
- Unvented both middle ear cavities
- Probable poor gastric emptying
- Conditions which may be relative contraindications
  - Previous respiratory disease
  - Seizure disorder
  - Previous chemotherapy
  - Suspected recurrent tumor
  - Fever
- Multi-disciplinary team

# HBO case management

- Multi-disciplinary team management
- Parents Discussion and Consent form
- Type of Chamber Consideration
  - Monoplace VS Multiplace
- Critical Care Equipments Used in chamber
- Critical Care Check List : Pre-HBO/ Post-HBO
- Physiologic and Hemodynamic Monitoring and Management
- Post-HBO care



# HBO Case Management (Cont.)

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- Advise myringotomies with pressure equalizing (PE) tubes.
- Advise gastric emptying and decompression while ascending.
- Non-compressible fluid replace the air in any cuff and/or balloon
- Equipment used
- Critical care management in children.
- HBO protocol was set at 2.0 ATA for 90 minutes once a day for 20 sessions.

# Equipment Used in Multiplace Chambers

