

**OLIVE VIEW-UCLA MEDICAL CENTER
RESPIRATORY CARE SERVICES - ADULT
POLICY & PROCEDURE**

**NUMBER: 867
VERSION: 1**

SUBJECT/TITLE: HELIUM/OXYGEN (HELIOX) THERAPY

POLICY: Helium Oxygen (Heliox) will not be given without a written doctors order. Delivery of this therapy is the responsibility of the respiratory practitioner.

PURPOSE: Helium is the only low-density gas acceptable for medical use. Since it is inert and unable to support life it is imperative that it always be mixed with oxygen. In a mixture with oxygen, helium will lower the total density of the mixture.

DEPARTMENTS: RESPIRATORY CARE SERVICES

EQUIPMENT:

- Cylinder of heliox (20% helium/80%oxygen).
- High-pressure regulator.
- Small or Large volume medication nebulizer
- Mouthpiece, mask or adapter for trach or ETT.
- Nose clip if mouthpiece is used.

PROCEDURE:

- Explain to patient that any spoken word may become “high pitched”, which might make speech almost unintelligible. Reassure the patient that this phenomenon will disappear within a few seconds after the therapy has been discontinued.
- Monitor pulse before, during and after treatment.
- It is imperative that there are no leaks anywhere in the system.
- Stay with the patient until his voice returns to its normal tone.

Precautions

- Because of the low density of the helium mixture it is a poor vehicle to deliver high therapeutic concentrations of humidity. If the patient is not N.P.O. have him drink a glass of water after the treatment.
- When using an oxygen flow meter it is imperative that factor correction is calculated for the lighter helium—oxygen mixture to deliver the desired flow rate. The flow meter is adjusted to a reading equal to the required rate divided by 1.8 for 80% - 20% and 1.0 for a 60% - 40.

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References:	
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