

Prehospital Care Protocols: HIGH ALTITUDE ILLNESS

A. PRESENTATION

1. HISTORY

- a. Present History
 - (1) Current and highest altitude
 - (2) Time at altitude
 - (3) Duration of ascent
- b. Past History
 - (1) Medical illnesses
 - (2) Current medications
 - (3) Previous experience at altitude

2. SYMPTOMS

- a. Headache
- b. Dyspnea
- c. Confusion
- d. Fatigue
- e. Nausea

3. SIGNS

- a. VITAL SIGNS: Respiratory rate
- b. RESPIRATORY: Respiratory distress; wet lung sounds; bloody or frothy sputum
- c. NEUROLOGIC: Level of consciousness (confusion, loss of coordination, coma)

B. STABILIZATION

1. BASIC LIFE SUPPORT

- a. Rest, position of comfort
- b. Oxygen 10 to 15 L/min via nonrebreathing mask; if prolonged transport expected, reduce flow to 1 to 2 L/min to conserve oxygen
- c. Descend at least 2000 to 3000 feet
- d. Suction as needed

2. ADVANCED LIFE SUPPORT

- a. Administer basic life support
- b. IV Fluid: NS TKO or as directed by base physician
- c. Furosemide 20 to 40 mg IV (children: 1 to 2 mg/kg/dose IV) for pulmonary edema if peripheral signs of fluid overload are present
- d. Dexamethasone 10 mg IV for cerebral edema; 4 mg PO or IM for acute mountain sickness and signs of neurologic deterioration.

C. BASE CONTACT

- 1. To consider IV fluid

D. SPECIAL CONSIDERATIONS

- 1. The most crucial point is recognition of high altitude illness; the mainstay of treatment is descent.
- 2. A milder form of illness, acute mountain sickness, may occur without CNS or respiratory symptoms. Rest and descent are indicated.

E. REFERENCES

- 1. Abbott J, Gifford M & Rosen P: Prehospital Emergency Care: A Guide for Paramedics, 3rd ed. Williams & Wilkins, Baltimore, MD, 1996.
- 2. Caroline NL: Emergency Care in the Streets, 5th ed. Little Brown, Boston, MA, 1995.
- 3. Grant HD, Murray RH Jr & Bergeron JD: Emergency Care, 7th ed. Prentice Hall, Englewood Cliffs, NJ, 1995.