Available online at www.sciencedirect.com

SciVerse ScienceDirect

journal homepage: www.elsevier.com/locate/mjafi

Original article

Extreme altitude pulmonary oedema (EAPO) in acclimatized soldiers

Maj Inam Danish Khan*

Resident (Pathology and Molecular Medicine), Army Hospital Research and Referral, Delhi Cantt 110010, India

ARTICLE INFO

Article history:

Received 21 September 2011

Accepted 3 April 2012

Keywords:

Extreme altitude

Acclimatization

Extreme Altitude

Pulmonary Oedema (EAPO)

HAPO Bag

ABSTRACT

Background: High Altitude Pulmonary Oedema (HAPO) is the most common challenging emergency at Siachen Glacier. This study was aimed at studying various aspects of Extreme Altitude Pulmonary Oedema (>5500 m/18,000 ft) while correlating it with acclimatization and post acclimatization duration of stay in retrospect and response to HAPO Bag nursing prospectively.

Methods: All clinical cases of HAPO on Siachen were included. Cases were diagnosed using Lake Louis criteria, standard treatment given and response monitored. Data was retrospectively correlated for acclimatization and post acclimatization duration of stay on glacier and prospectively for response to HAPO Bag nursing.

Results: Extreme Altitude Pulmonary Oedema presented in fully acclimatized, temporarily resident, mountain trained soldiers and also among native highlanders. HAPO Bag ensued dramatic improvement in the absence of oxygen. Extreme altitude presentation of HAPO with such findings has not been reported in literature earlier.

Conclusion: HAPO cannot be prevented at extreme altitudes beyond 5500 m (18,000 ft) by scheduled pre-induction acclimatization, mountain training or prolonged stay at such altitudes. The dictum 'Every day is a new day beyond 18,000 ft' needs to be emphasized and due care needs to be taken in ventures at extreme altitudes. HAPO Bag is an indispensable device to save precious lives and prolong survival at such altitudes due to paucity of available oxygen. Easy availability and universal know how should be ensured.

© 2012, Armed Forces Medical Services (AFMS). All rights reserved.

* Tel.: +91 8860179989 (mobile).

E-mail address: titan_afmc@yahoo.com.

0377-1237/\$ – see front matter © 2012, Armed Forces Medical Services (AFMS). All rights reserved.

<http://dx.doi.org/10.1016/j.mjafi.2012.04.018>

Full text is not available for online viewing

Full text is not available for online viewing

Full text is not available for online viewing

Full text is not available for online viewing

Full text is not available for online viewing

Full text is not available for online viewing