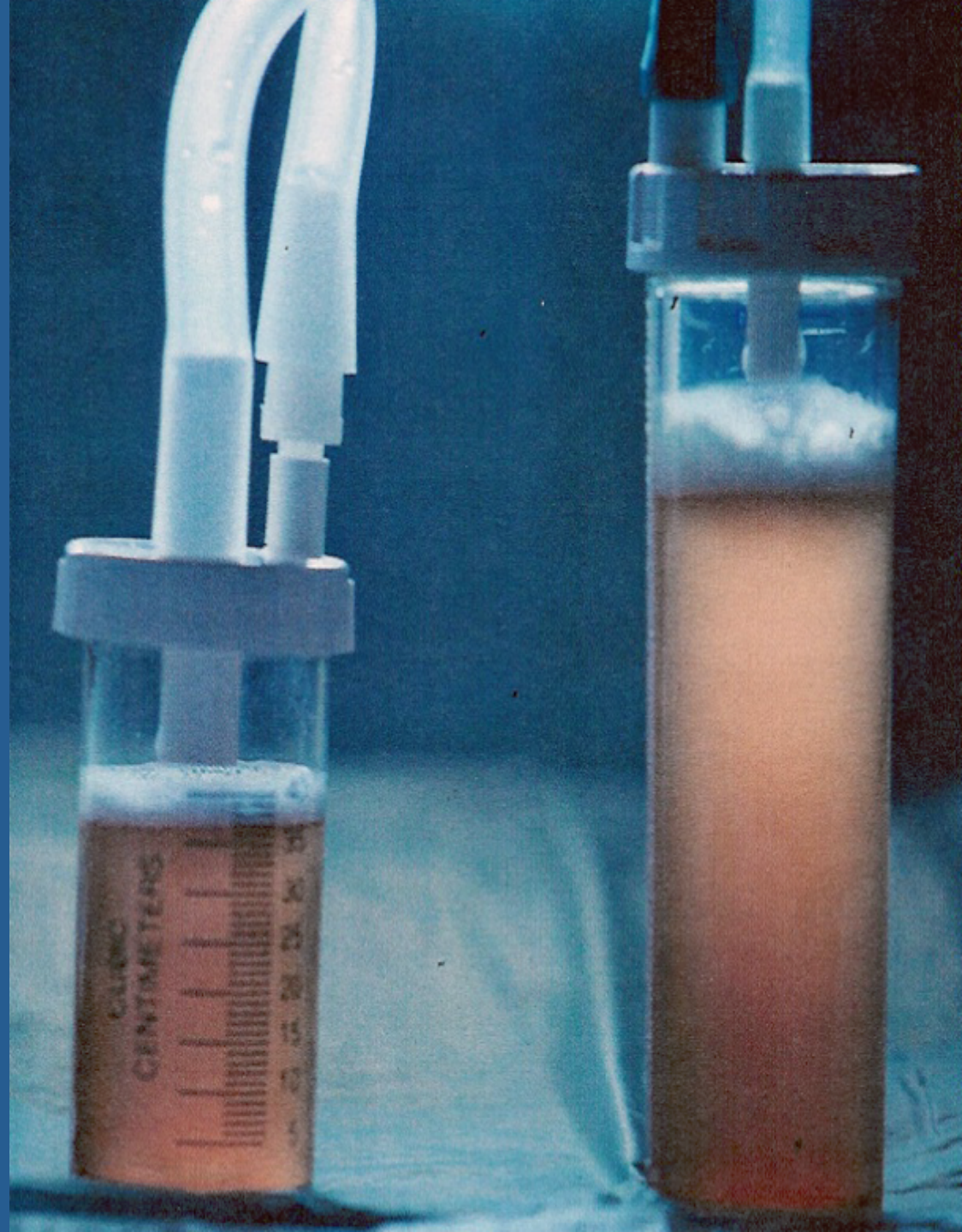


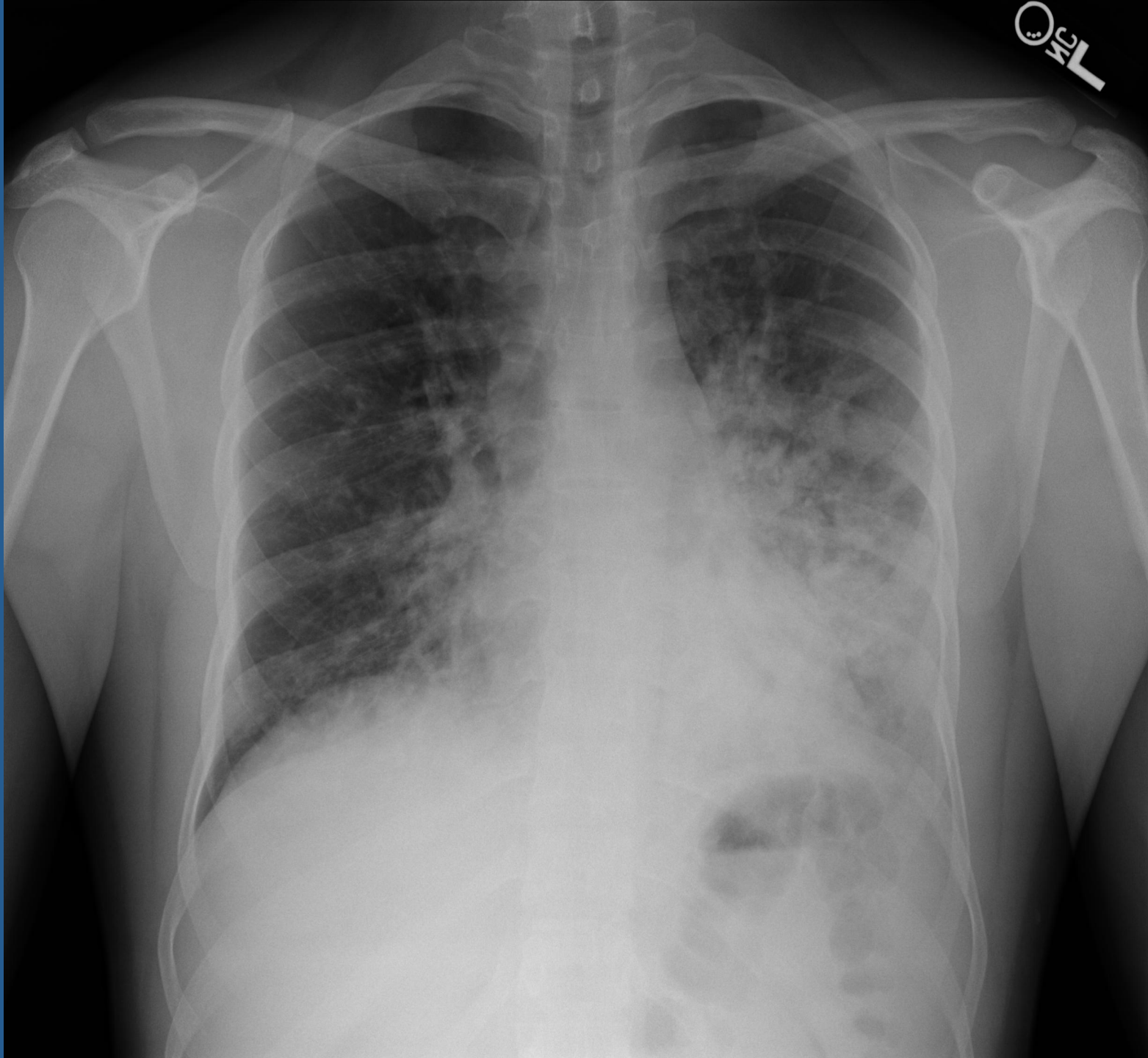
Longitudinal BAL in early HAPE

HAPE is a non-inflammatory, high permeability leak of the alveolar-capillary barrier

E Swenson, 2002, JAMA



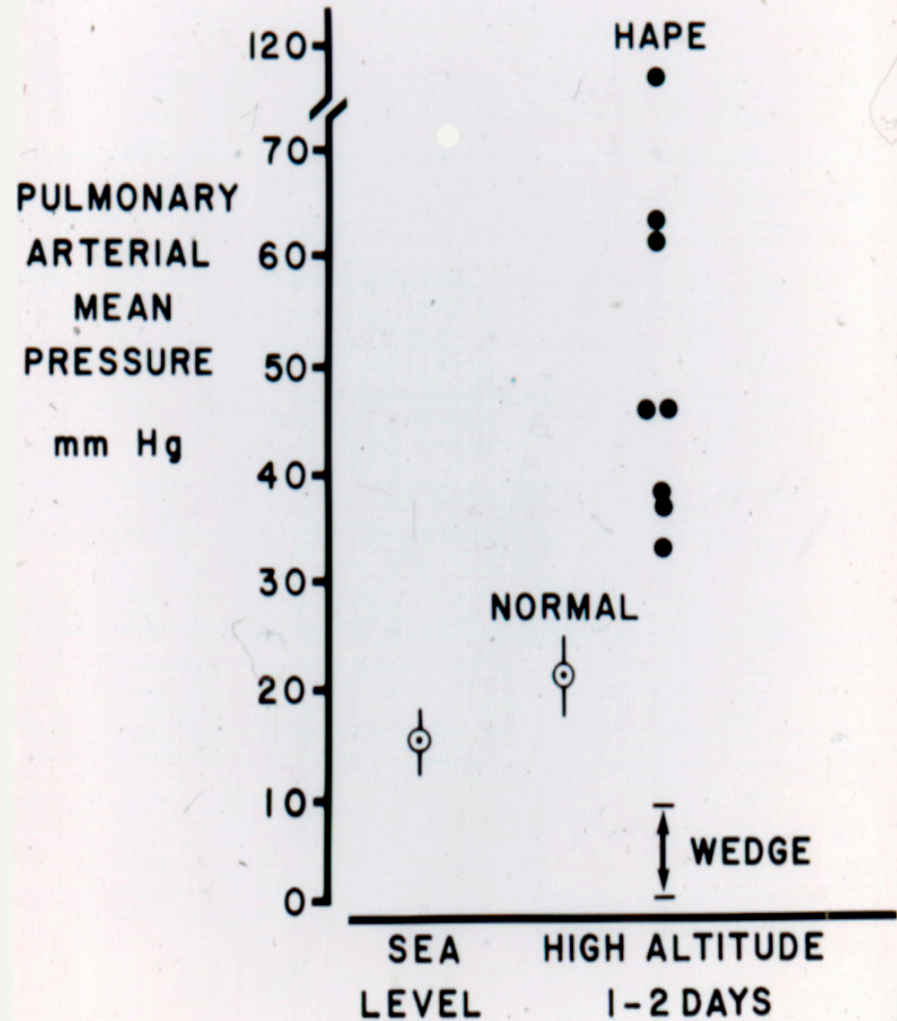


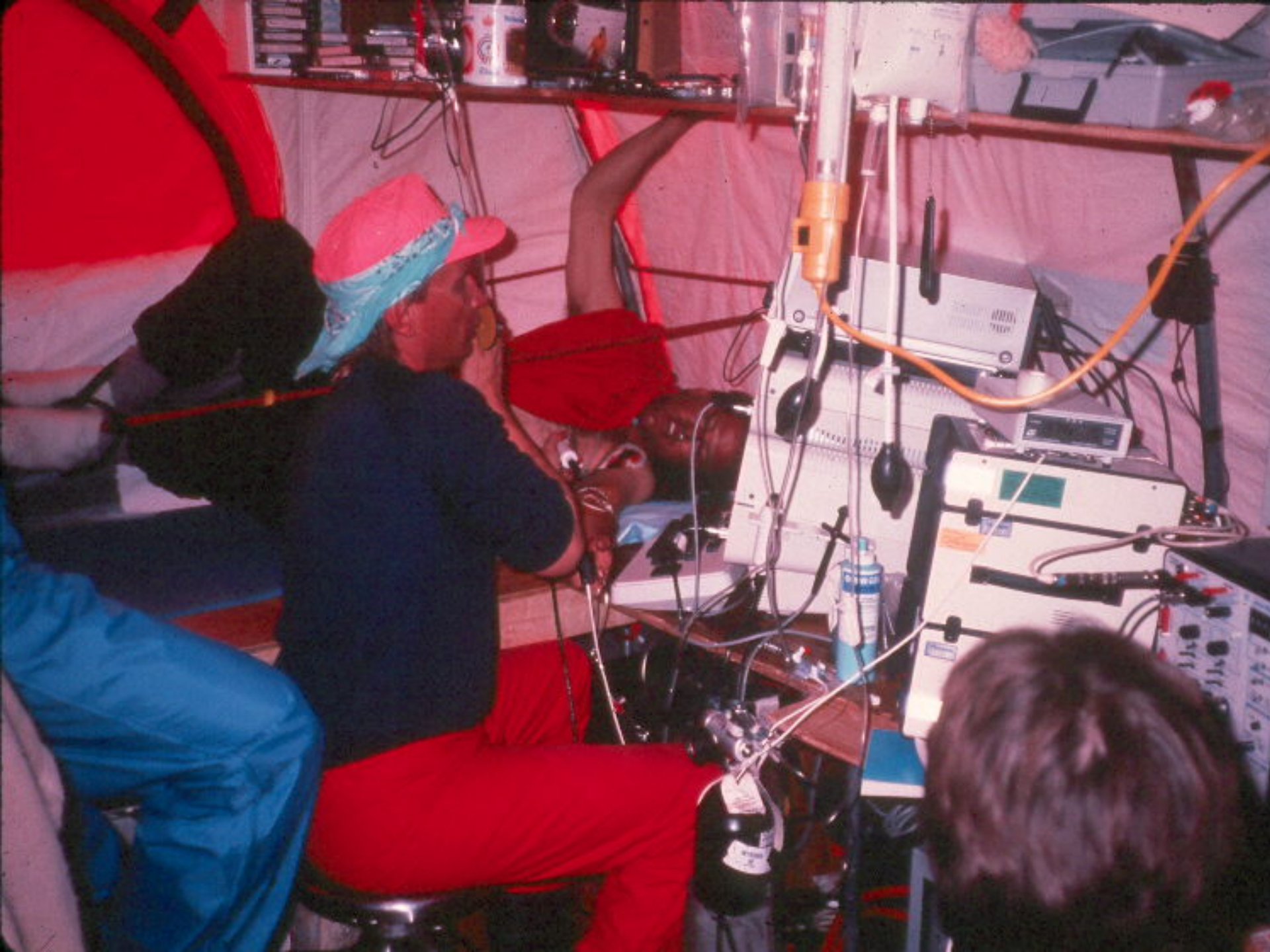


HAPE: Risk factors

- Genetic susceptibility
 - Low carotid body response and other factors
- Residence < 1000 m, or >2500 m (re-entry)
- Fast rate of ascent
- Altitude reached
- Past history of HAPE
- Male, children (re-entry)
- Exertion, cold
- Pre-existing illness
 - Abnormal pulmonary circulation
 - Current respiratory infection?

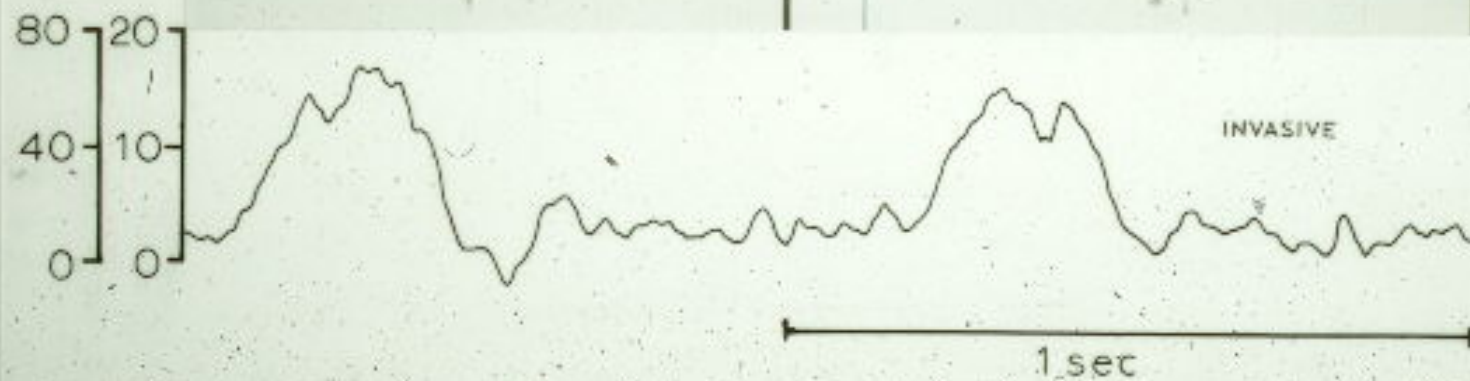
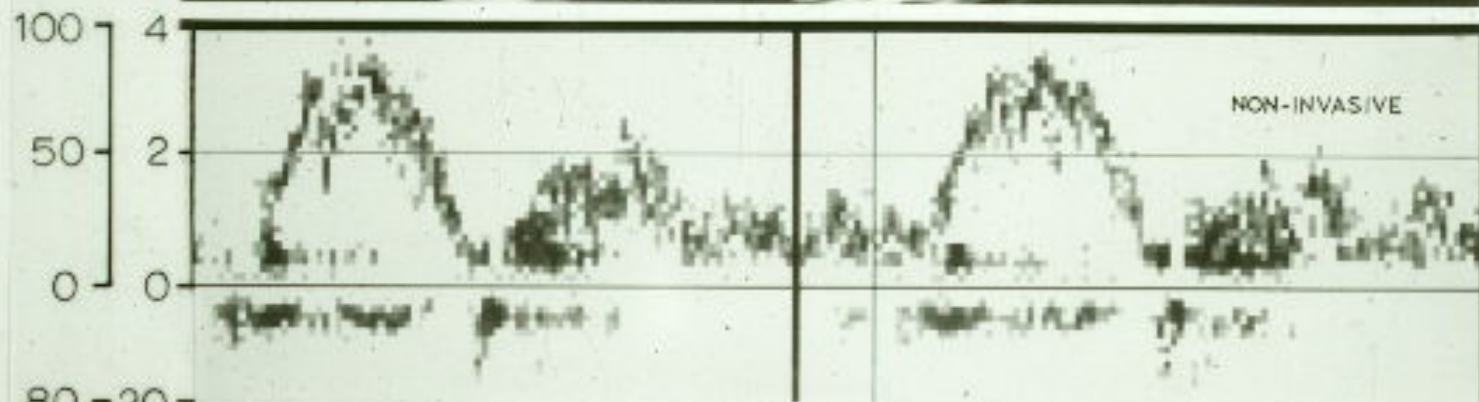
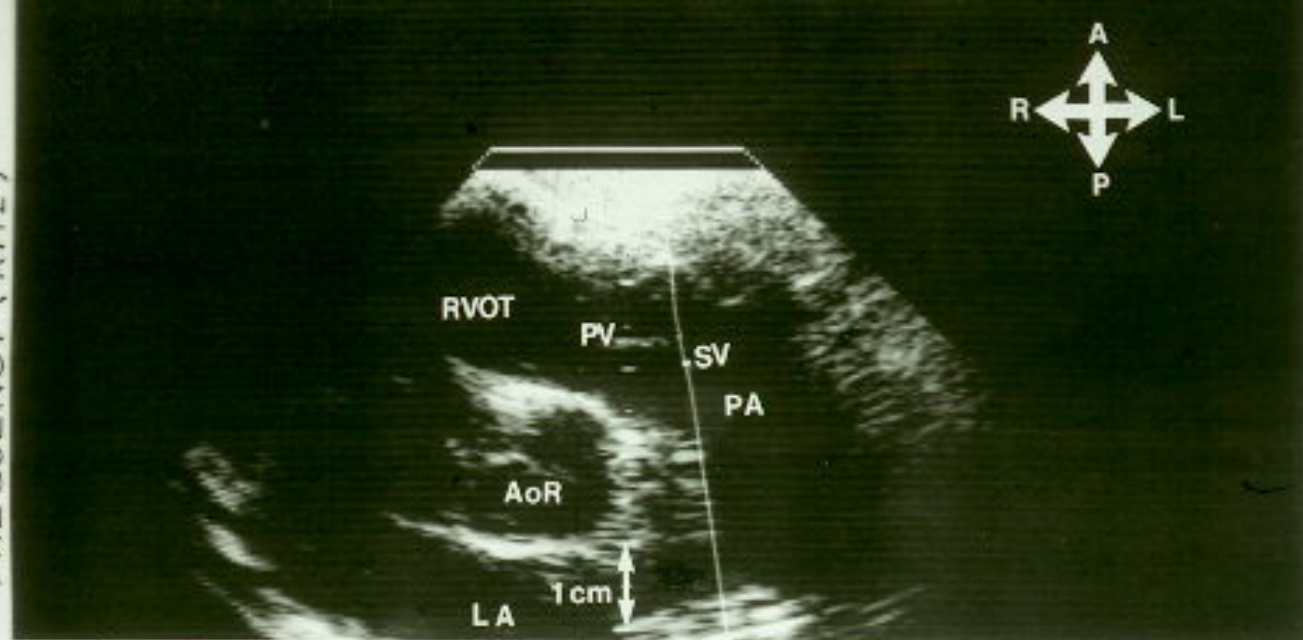
What causes HAPE?



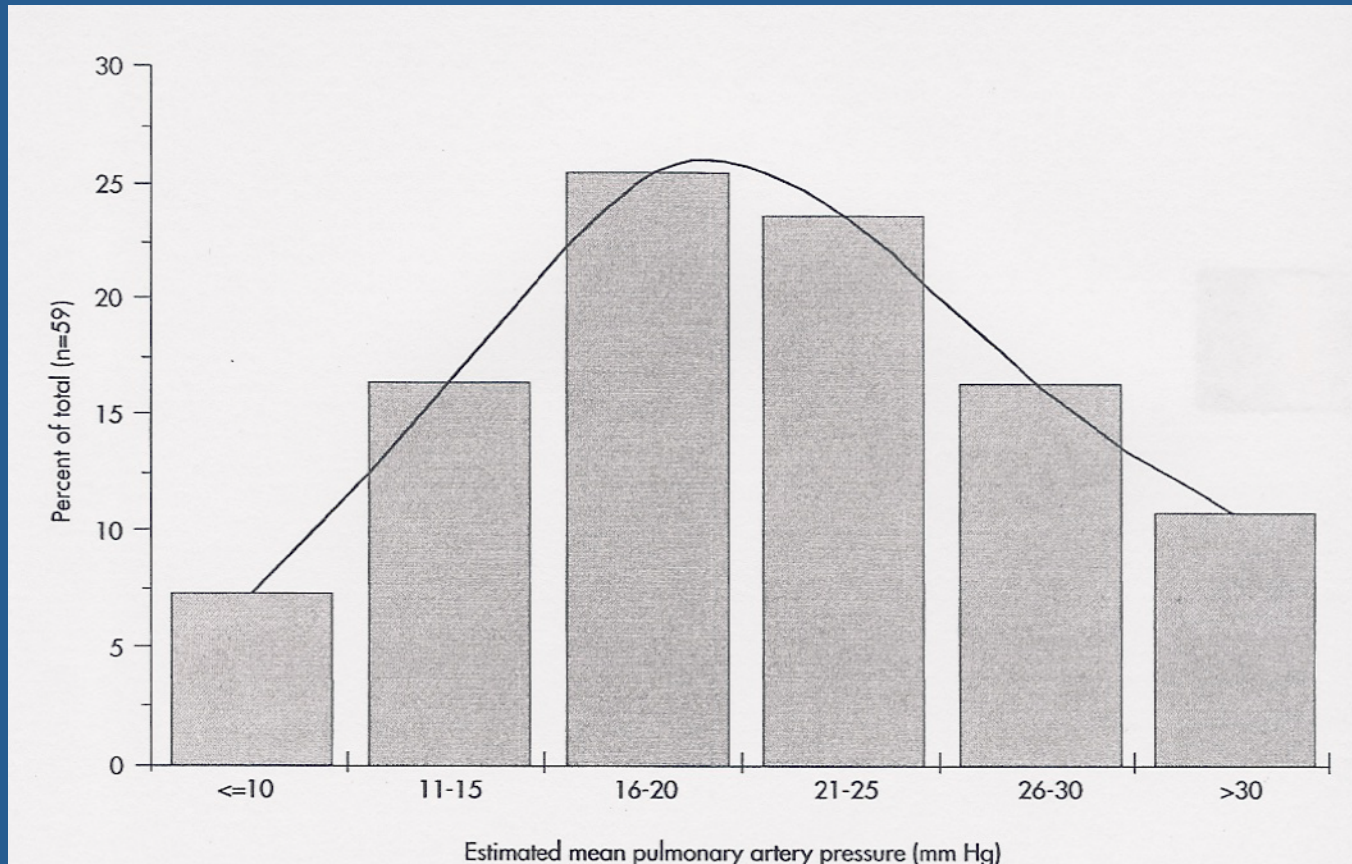




VELOCITY (cm/sec)
FREQUENCY (KHz)



Distribution of mean PAP at 4300m on Mt McKinley



Pulmonary vascular resistance

Normal

HAPE

