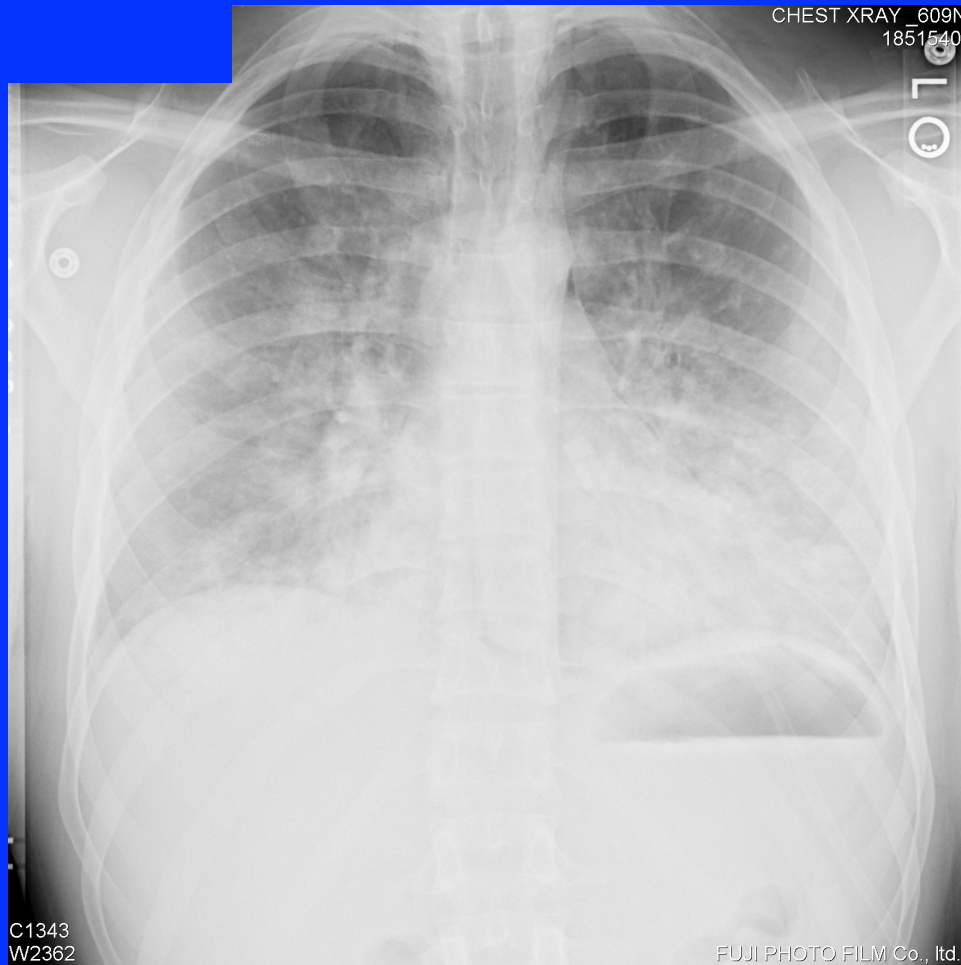


# Wind Rivers Case

- 22 year old male
- Backpacking trip Wind River Mountains
- Day 1: SLC to 9,000 ft., backpacked 10 miles, camped at 10,000 ft.
- Day 2 to 3: worsening weakness, dyspnea, cough productive of white and yellow sputum, confusion, gurgling in chest
- Day 4: SpO<sub>2</sub> 60% on room air

# Wind Rivers Case



# Wind Rivers Case

- It's already too late, you're in big trouble...
- How to avoid this situation:
  - Slower ascent, don't go to 10,000 ft in one day
  - Watch for weakness and cough on days 2-3, elevated heart rate and resp rate
  - Pulse oximetry very useful
    - Early: lower SpO<sub>2</sub> with exercise
    - Then low SpO<sub>2</sub> with rest, >10 points below normal
  -

# Wind Rivers Case

- What are priorities now?
  - Oxygen and descent
  - What if no oxygen?
  - How to descend?
  - Call for rescue or carry down?
  - Medications?
    - Perhaps nifedipine 30 mg every 12 hrs
    - **Or** Viagra or Cialis

# What is the treatment for HAPE?

(WMS guidelines)

- Descend in altitude until symptoms improve/resolve
- Supplemental oxygen to target an oxygen saturation (SpO<sub>2</sub>) >90%
- Portable hyperbaric chamber if descent or oxygen is not possible
- Oxygen alone if in or near a medical facility
- Nifedipine for adjunctive therapy