

### **Analysis**

Unusual fatigue and headache should be recognized as early HAPE indicators. It may be a good idea to rest a day or descend even at low altitude. Getting proper fluids even several days prior to a long driving trip and hot approach hike is recommended.

Climbing with a strong group who were ready to leave the Cirque after only two days of climbing and after a two day drive may have saved my life. They unselfishly gave up their climbing holiday to get me to medical attention. (Source: Dennis Fenstermacher)

## **PNEUMONIA, ACUTE MOUNTAIN SICKNESS, FROSTBITE, WEATHER**

### **Wyoming, Tetons**

On December 31, 1986, Blair Rich (32) called my residence from Moose and reported that a member of his Grand Teton climbing party was in trouble at the Lower Saddle. I responded to Park HQ and contacted Rich and fellow party member Brad Jensen (25).

Rich and Jensen related the following information. They, along with their friends Fred Witesman (32) and Grant Moedl (34), had skied up to the Lower Saddle on the Grand Teton on Sunday, December 28. The four spent the night at the Saddle and attempted to climb the Exum Ridge on December 29. The group reached a point about 60 meters above the top of the Friction Pitch. Approaching darkness forced them to make an unintended bivouac at that point.

The four erected a tent on a small platform that they stomped out in the snow. During the night, a storm came up accompanied by high winds, snow and reduced visibility. Without sleeping bags, the four climbers spent a cold night, and by morning Jensen and Moedl had started to develop frostbite in their feet. Moedl was further presenting symptoms of either acute mountain sickness or HAPE. He had a headache, refused to eat, was coughing and experiencing significant shortness of breath.

Moedl's condition had deteriorated to the point where he required actual assistance from the other three in moving. From the bivouac site, Witesman climbed about 12 meters up and left. He then pioneered a two rope length traverse that enabled the party to get off the Exum Ridge and reach the main Owen rappel. They lowered Moedl down to the Upper Saddle. All four continued their descent down the Owen couloir, reaching the Lower Saddle about 1600. Moedl's condition improved somewhat during the descent, although he was slow and was still experiencing shortness of breath.

On the saddle, the party discovered that their tent had been destroyed by the wind. They established another tent, and Jensen and Rich departed for the valley floor at 1730. Witesman remained with Moedl at the Lower Saddle. Rich and Jensen reached Moose and reported the situation to me at 0300.

Rich related Moedl's medical problems to me and reported that Moedl had an elevated pulse and respiratory rate. He said that Moedl had difficulty speaking and was coughing up blood. I examined the feet of Jensen and noted the presence of frostbite on his toes. I had Rich drive Jensen to St. John's Hospital for examination; Jensen was subsequently admitted to the hospital for one night.

Arrangements were made for a helicopter flight to the Lower Saddle come morning. Ranger Burgette and I departed the airport in the Mountain Rotors helicopter at 0937. A half dozen passes over the Saddle were made, but high winds prevented a landing. On the first pass, both Witesman and Moedl were observed standing outside their tent, although one of them soon disappeared into the tent and was not seen again. We departed the scene and returned to the airport at 1007.

Even though the observation of both subjects standing was a good sign, we decided to establish a visual on the party using a telescope from Craighead Hill. At 1200, both subjects were observed descending on the moraine. Continued observations over the next two and a half hours revealed that one member of the party, probably Moedl, was descending without a pack. This individual was proceeding extremely slowly. Neither of the two reached the Caves until 1430.

It was clear that the two would not make it down on their own that day. Observations of the subject without the pack indicated that he was still suffering from some malady, either mountain sickness or HAPE. It was also assumed that this person probably was suffering from frostbite of unknown degree. As a result, the helicopter was again summoned. The plan called for trying to fly the victim(s) out from the Garnet Meadows.

Pilot Johnson succeeded in dropping Ranger Burgette and me off near the Caves at 1455. We contacted Witesman and Moedl about 15 minutes later. Moedl complained that his feet were very cold. Various symptoms associated with chest congestion were also noted. Moedl was escorted down to the meadows to await the flight out. Witesman was in fine shape and elected to stay at the Caves that night in order to carry out gear the following day.

Pilot Johnson returned to the Meadows at 1740. Moedl, Burgette, and I flew out to St. John's Hospital, where Moedl was turned over to the medical staff. He was suffering from second degree frostbite of both feet and fluid in both lungs. At this writing, it has not been determined whether the lung fluids are the result of HAPE or pneumonia. Moedl was admitted to the hospital. (Source: Peter Armington, Ranger, Grand Teton National Park)

### **Analysis**

After a lot of thought, analysis and discussion with Pete Armington and Dan Burgette (NPS Climbing Rangers), we don't think we should do anything different. A smaller party would have sped up the ascent, but would have reduced our ability for self-rescue. Brad's frostbite problem was due to his spending more effort on Grant than on his own condition. His was a very cheap lesson in where the "line" is with respect to cold injuries. We survived and extricated ourselves off of the mountain because we were prepared in the following areas: decision making (#1 factor), medical ability (intermediate EMT), technical ability, proper gear—including bivouac gear and emergency extras, knowledge of the route and the mountain, close friendship and team work, great trust in each other, lots of study-experience and preparation. Sometimes it seems like a waste of time preparing and carrying extra gear, but it paid off—big. (Source: Fred Witesman)