CASE REPORT

Acute mountain sickness: an unexpected management problem

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Br J Sports Med 2002;**36**:147–147

The Everest Marathon in the Nepal Himalayas has been run every 18 months since 1987, from Gorak Shep near Everest Base Camp to Namche Bazaar. This is a 26.2 mile marathon run from a starting altitude of 5184 m above sea level down to 3664 m over exceptionally difficult terrain. The route is predominantly downhill, although there are two steep uphill sections, with the ground underfoot varying from snow and ice and stony scree to boulders on glacial terminal moraine. To acclimatise properly there is a 17 day trek up to the starting point.

A team of medical staff supports the competitors and the Sherpas, marshals, and porters who accompany them. In November 2000, I was lucky enough to be one of the 10 doctors comprising the medical team. Most of our work involved

Take home message

Equipment designed for use in conventional clinical practice may perish in extreme climates: keep that which is dear to you warm in bed.

attending to the Everest Marathon group members, but it was, however, inevitable that we were asked to treat other tourists requiring medical attention along the way.

At Lobuche, at an altitude of 4900 m, the FIO_2 is only 50% of that at sea level, and the night air temperature was around -20°C . I was woken one night by a Sherpa from a nearby lodge at 3.00 am. A group of tourists staying there had come from Namche Bazaar in two days. This was a rate ascent of 1200 m in two days, greatly exceeding the recommended rate of 300 m a day, with a rest day every third day.¹ One of their number had symptoms of acute mountain sickness with headache and persistent vomiting. I had grabbed my medical kit from the foot of my tent, and took out my Littmann II stethoscope to examine her chest. Unfortunately, in the extreme cold, the rubber snapped in half, rendering it useless (fig 1). Direct auscultation confirmed her chest to be clear, and she recovered with oral rehydration and non-steroidal anti-inflammatory drugs. She was advised to descend that morning.

This tale has two important lessons for medics with an interest in environmental medicine. High altitude trekking is an increasingly popular tourist activity, and even those travelling with recognised companies often ascend more quickly than is recommended. We should continue to be instrumental in promoting increased awareness of the potential serious nature of acute mountain sickness with the possible development of high altitude pulmonary oedema or cerebral oedema. Trekkers continue to die in this region of Nepal.²

Also we need to take care of our own equipment at altitude. Care guidelines for Littmann's stethoscope clearly state that extremes of heat and cold should be avoided. Stethoscopes and other medical equipment should join our cameras and water bottles in the safety of the relative warmth at the bottom of our sleeping bags!

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Accepted 6 December 2001

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- 2 Himalayan Rescue Association Report: Fall 2000.

Figure 1 Stethoscope snapped in half as the result of the extreme cold.