Letters to the Editor

Health Screening on Aconcagua

To the Editor:

In recent years National Park Authorities controlling access to Cerro Aconcagua (6962 m) have insisted that all mountaineers must first agree to participate in a health screening program before climbing the peak. On arrival at 2 altitudes—3395 m and 4365 m—individuals undergo a series of tests that include arterial oxygen saturation, heart rate, and blood pressure measurement. In some cases this has led to members of expeditions being diagnosed with hypertension and prevented from ascending further until their blood pressure has been treated. This approach raises a number of concerns:

1. On Aconcagua, a diagnosis of hypertension is usually made following 2 blood pressure measurements taken on successive days. However, in some instances treatment is begun after just a single measurement. Both approaches are contrary to a number of national guidelines, including the latest from the British Hypertension Society, which states, “An average of 2 readings at each of a number of visits should be used to guide the decision to treat” and which emphasizes the importance of avoiding treatment “on the basis of an isolated measurement.”¹ One or two measurements are just too unreliable—especially in those who have just completed a strenuous trek and who are aware that the “trip of a lifetime” may be delayed or cancelled by a high blood pressure measurement!
2. Even if an accurate recording is obtained, the authors of this letter are not aware of any peer-reviewed evidence identifying blood pressure as a reliable predictor of high-altitude illness or other diseases at altitude. Indeed, a rise in blood pressure tends to be a normal healthy response during the first few weeks at altitude.² In one study conducted on Aconcagua, diastolic blood pressure rose by 10 to 25 mm Hg in 14 healthy men during the course of 22 days spent at altitudes above 4270 m.³ There also appears to be a lack of evidence to support the treatment of newly diagnosed hypertension at altitude. Rather than reduce medical problems at altitude, the side effects of newly prescribed anti-hypertensives may trigger a host of side effects ranging

from minor gastrointestinal disturbances to life-threatening cases of anaphylaxis.

Each year the world’s highest mountains attract many who are inexperienced and poorly equipped. This inevitably leads to a considerable amount of illness that ranges from simple soft tissue injuries to potentially fatal conditions such as high-altitude pulmonary edema and high-altitude cerebral edema. It is therefore vital that appropriate medical treatment can be easily accessed. However, the use of blood pressure measurement as a screening tool for high-altitude illnesses or other diseases clearly has its limitations.

For many years the Himalayan Rescue Association has supported a number of high-altitude medical posts throughout the Nepali Himalaya. These not only provide a high standard of affordable medical care, but they also focus upon educating all those who venture to altitude through a series of regular lectures and printed notices. This approach, supplemented by a number of free Web-based publications such as “Travel at High Altitude” (www.medex.org.uk), may be a more reliable way of making mountains such as Cerro Aconcagua safer places to visit.

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