To the Editor

Each year millions of people travel to high-altitude regions all over the world – the Himalayas in Asia, Alps in Europe, Rockies in the United States, and Andes in South America. It is more and more common to climb a few-thousand peaks in search of adventure. An increase in the number of tourists visiting high-altitude regions gives a false impression that mountain climbing is much easier than it really is. It is very common, especially in the Himalayas, that people who travel to high-altitude regions have no altitude experience. In this letter, I would like to report the cases of 2 patients who were seen at the Himalayan Rescue Association (HRA) Clinic in Manang, which lies at an altitude of 3500 m in the Annapurna region of Nepal. Both patients had a history of sulfa allergy and had travelled to high-altitude areas for the first time.

The first patient was a middle-aged woman with a history of hyperparathyroidism, diet-controlled diabetes, and allergy to sulfonamide. She was seen at the HRA Clinic in the late afternoon with the symptoms of acute mountain sickness. The patient complained of headache, dizziness, and significant weakness. She did not have any altitude experience before. A physical examination revealed no pathological findings, except for significant weakness. She was able to sit and walk but with support. She was in poor general state but she was conscious and logically answered the questions. Saturation was 96%; there were no dehydration signs; the Glasgow Coma Scale (GCS) score was 15/15. During history taking, she reported that on the same day she had climbed from Manang (3500 m) to Yak Kharka (4000 m). During the ascent, she experienced a mild headache, which persisted until Yak Kharka but later resolved after paracetamol use. She then started to feel dizzy and unstable to walk. Because of sulfa allergy in history, she did not take acetazolamide. She decided to descent to Manang to the HRA Clinic.

The other patient, a 22-year-old woman without any history of disease and drug use but with a history of sulfa allergy, was seen at the HRA Clinic in Manang with symptoms of acute mountain sickness. The patient complained of headache and significant weakness. She did not have any previous altitude experience. A physical examination revealed no pathological findings, except for significant weakness. She was conscious and logically answered the questions. Saturation was 91% and the heart rate was 91 beats/min; there were no signs of dehydration; the GCS score was 15/15. The Lake Louise scale score was 4 points (weakness, 2 points; headache, 2 points). After a more detailed history taking, the patient reported that on the same day she had climbed from Tilicho Base Camp (4100 m) to Tilicho Lake (4900 m). During the climb, she developed a headache but she continued to ascend. Then, headache increased to 3 points in the Lake Louise scale score and new symptoms developed: dizziness, weakness, nausea, dyspnea, and tachycardia. The patient decided to descent to Tilicho Base Camp (it took 2.5 h), where she was waiting 1.5 h for horses to descent. Given a history of sulfa allergy, she did not take acetazolamide but 4 mg of dexamethasone. Her condition improved. In the afternoon, she got to the HRA Clinic.

During their stay at the HRA Manang Clinic, both patients were closely observed, no drugs were administered, and after a few hours, they were discharged and remained under the care of their friends.

Sulfa allergy complicates pharmacological prophylaxis or treatment of acute mountain sickness. In patients with a history of anaphylaxis to sulfonamide, acetazolamide is contraindicated. Our patients knew about their allergy, which is particularly important while travelling into remote areas with limited access to medical services, such as the Himalayas.

A rapid ascent to altitudes above 2500 m is associated with a risk of developing different types of altitude illnesses including acute mountain sickness, high-altitude cerebral edema, or high-altitude pulmonary edema. It is possible to avoid these conditions by proper acclimatization. A gradual and slow ascent is of vital importance. It is typically recommended to increase the sleeping elevation not more than 500 m per day over 3000 m. Every 3 to 4 days, a 1-day rest should be considered. In planning the rate of the ascent, the altitude at which someone sleeps

LETTER TO THE EDITOR

Acetazolamide and sulfa allergy: how to deal with sulfa allergy at altitude?
LETTER TO THE EDITOR  

Acetazolamide and sulfa allergy: how to deal with sulfa allergy at altitude?

For example, if a person is planning a prolonged trek at 3000 m to 4300 m, he or she should acclimatize at moderate altitude for several nights before climbing a few-thousand peak. It is suggested for such individuals to have dexamethasone in their first aid kit. A medical consultation is strongly recommended a few months before travelling to mountainous regions.

Acknowledgments  I thank the HRA, Dr. Buddha Basnyat, and Dr. Ken Zafren for the opportunity to work at the HRA Manang Clinic; I am also grateful to Dr. Tom Sutherland for cooperation in clinical work and Bhuvan Acharya for assistance with translation and clinical care of patients.

Author name and affiliation  Marta Kurdziel (Himalayan Rescue Association, Manang Clinic, Manang, Nepal; Department of Cardiology, Silesian Center for Heart Diseases, Katowice, Poland.)

Correspondence to:  Marta Kurdziel, MD, Śląskie Centrum Chorób Serca, Oddział Chorób Serca i Naczyni, ul. M. Curie-Skłodowskiej 9, 41-800 Zabrze, Poland, phone: +48-32-273-26-81, fax: +48-32-373-38-19, e-mail: kurdzielmarta@gmail.com.

REFERENCES