ment of acute mountain sickness (AMS). Thanks to the authors for their contribution.

We know that high altitude leads to some negative effects without acclimatizing on pulmonary and cardiovascular systems. AMS is a syndrome due to the rapid ascending to high-altitude in aviators and mountainers. It is a serious health problem especially in obese subjects. In present study, we want to learn that the subjects were taken to high altitude as volunteers or part of their duties. In our country, we perform like these researches in hypobaric chamber with simulating hypoxia because of legal issues. At hypobaric chamber, we can monitor oxygen saturation, blood pressure and heart rhythm of the subjects so we can easily stop the hypoxia and give oxygen to the subjects. We have some questions about the design of this article. Did the subjects take oxygen when the oxygen saturation was below the threshold value? It could be emphasized that the subjects stayed at high altitude for 24 hours or not and individuals were taken at what speed and which vehicle to high altitude.

In relation to these, we also know that there are some recent studies about the effects of high altitude on cardiac parameters (2). For example we reported a case of cardiac decompression sickness on an aviator (3) and an asystolia during hypobaric chamber training 30,000 feet (4). In another study, we investigated the acute effects of hypoxia on noninvasive electrocardiographic parameters in aviators (5).

In conclusion, although the obese and non-obese subjects had same conditions before high altitude, what happened there and how high altitude was caused problems for the obese. The subject is very important and we believe that these findings will act as a guide for further studies.

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Author’s Reply

Authors of this mentioned article did not send any reply for this Letter to Editor, in spite of our insistently requests.

Shisha versus cigarette smoking and endothelial function

To the Editor,

The recent report on “Shisha versus cigarette smoking and endothelial function” is very interesting. Selim et al. (1) published, reported in 2013 December issue of The Anatolian Journal of Cardiology that “Shisha smoking has a more hazardous effect on brachial artery endothelial-dependent flow mediated vasodilation compared to cigarette.” This conclusion is very interesting and should be discussed. In fact, the recent report showed that there was no difference in aerosol produced by cigarette and shisha (2). There are many factors that affected the final measured outcome. The dosage has to be mentioned. Poredos et al. (3) demonstrated that “smoking is associated with dose-related increase of intima-media thickness and endothelial dysfunction.” The genetic underlying of each subject is also important factor to be considered.

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Mortal suicidal acetazolamide intoxication in a young female

To the Editor,

Acetazolamide is a carbonic anhydrase inhibitor used in the treatment of glaucoma, epilepsy, benign intracranial hypertension, metabolic alkalosis and is also used as a diuretic. Hyperchloremic metabolic acido-asis, renal stones, renal potassium wasting are some toxicities of chronic acetazolamide usage. In elderly or diabetic patients and
patients with decreased renal function, mild to severe metabolic acido-
sis is seen more commonly (1, 2).

However, there is scarce information about clinical presentations of
patients with acute acetazolamide toxicity. There is only one report
defining an accidental poisoning of an infant who was treated success-
fully with sodium bicarbonate (3). To the best of our knowledge, this is
the first case to implicate acute acetazolamide intoxication as a cause
of deep metabolic acidosis and secondary total atrioventricular block
and death in an adult who committed suicide.

A previously healthy 39-year-old female was brought to our emer-
gency department by her relatives because of drowsiness. Blood pres-
sure and heart rate were 80/40 mm Hg, 19 beats/min respectively. ECG
showed complete atrioventricular block and heart rate of 16-19 bpm
(Fig. 1). Arterial blood gases under nasal oxygen revealed a pH of 7.119,
pO2; 95 mm Hg, pCO2; 14 mm Hg, lactate; 12.8 mmol/L, HCO3; 6.9 mmol/L
and although bicarbonate replacement didn’t change it. Intermittent
boluses of sodium bicarbonate, followed by an infusion, were com-
menced. She was intubated because of severe dyspnoea. Blood sodi-
um, potassium and calcium levels were normal so didn’t replacement it.
Dopamine 3 mcg/kg/min and dobutamine 10 mcg/kg were commenced.
Transvenous pacing was started immediately. Routine blood chemistry
revealed normal electrolytes, elevated troponin, creatinine and liver
function tests. Transthoracic echocardiography showed mild global
hypokinesia of left ventricle. Additional doses of bicarbonate and other
supportive treatment did not work and she died because of circulatory
collapse a few hours after admission. Next day, her relatives found an
empty acetazolamide box belonged to her father in her bag.

Main pathology in our patient was resistant deep metabolic acido-
sis. Although the exact time was not known she had ingested 2500 mg
acetazolamide before clinical presentation. We think that this was the
main reason of the severe acidosis which caused cardiac complica-
tions. Lactic acidosis secondary to hemodynamic deterioration proba-
bly contributed to the deep acidosis. Most probable reason of elevated
troponin, creatinine and liver function tests was ischemic injury
because of bradycardia and hypotension.

Life-threatening metabolic acidosis during acetazolamide therapy
has been observed only in patients with renal impairment such as dia-
abetics, elderly patients. Overdose with acetazolamide and its manage-
ment have been reported rarely and we were unable to identify any
reports implicating suicide attempt with acetazolamide.

Almost all reports define metabolic side effects of chronic acetazol-
amide intoxication on brain, gastrointestinal and neuromuscular sys-

tem, especially in patients with decreased renal function (1, 2, 4, 5).
However our case has shown that acute high dose acetazolamide can
also cause deep metabolic acidosis and mortality in previously healthy
individuals.

In addition to supportive treatment, bicarbonate should be consid-
ered as treatment for metabolic acidosis resulting from acetazolamide
intoxication. Therefore, hemodialysis may be helpful in the management
of acetazolamide overdose, particularly when complicated by renal
failure (2, 5). There is no amiable evidence based information to use
activated charcoal on acetazolamide poisoning.

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