## The importance of isoenzymes in creatinine kinase elevations

To the Editor,

I read with great interest the case report by Eyüboğlu et al.<sup>1</sup> about rhabdomyolysis due to isoniazid poisoning resulting from the use of intramuscular pyridoxine. However, some equivocal condition needs to be clarified.

The convulsion two hours after admission was related to drug toxicity according to the authors. However, rhabdomyolysis developed three days later despite attempts towards its prevention. In the interim, six doses of intramuscular injection had been administered. The origin of the rhabdomyolysis seems to be related to the injections rather than the isoniazid. In fact, rhabdomyolysis is suspicious since the suggestive findings of myoglobinuria, kidney dysfunction and electrolyte disturbances were not accompanying. Nevertheless, it is crucial to demonstrate not only the origin of the rhabdomyolysis but also the origin of creatinine kinase (CK). The elevations in CK may have originated from smooth muscle, heart, liver, brain, or macro-CK syndrome<sup>2</sup>. CK elevation can show a wide spectrum of conditions from serious to benign<sup>3</sup>. It would have been more precise if the authors had revealed isoenzymes of CK in this reported case.

Key words: rhabdomyolysis, isoniazid, pyridoxine.

## REFERENCES

- Eyüboğlu T, Derinöz O. Rhabdomyolysis due to isoniazid poisoning resulting from the use of intramuscular pyridoxine. Turk J Pediatr 2013; 55: 328-330
- Axinte CI, Alexa T, Cracana I, Alexa ID. Macro-creatine kinase syndrome as an underdiagnosed cause of ck-mb increase in the absence of myocardial infarction: two case reports. Rev Med Chir Soc Med Nat Iasi 2012; 116: 1033-1038.
- Neocleous C, Spanou C, Mpampalis E, et al. Unnecessary diagnostic investigations in acute benign childhood myositis: a case series report. Scott Med J 2012; 57: 182.

Dr. Onur Sakallıoğlu

Başkent University Faculty of Medicine, Ankara, and Department of Pediatric Nephrology, Zübeyde Hanım Training and Research Hospital, Karşıyaka, İzmir, Turkey. E-mail: onursakallioglu@hotmail.com