LETTERS TO THE EDITOR

Antioxidant-related enzymes in myocardial zones and human pericardial fluid in relation to the cause of death

Dear Sir,

we were interested to read the paper by Ramos et al. [1], in which they regarded glutathione peroxidase (GSH-Px) and superoxide dismutase (SOD) as new biochemical markers of myocardial hypoxia. They compared only 5 (!) cases of acute myocardial infarction with 38 cases of noncardiac cause of death. They did not publish the measured values of each case. Therefore it is not possible to test the statistical analyses they used (ANOVA I and ANOVA II analyses of variance).

R. Lemke (🖂)

Institut für Rechtsmedizin, Klinikum der RWTH Aachen, Pauwelsstrasse 30, D-52057 Aachen, Germany

T. Reineke

Institut für Medizinische Informatik und Biometrie, Klinikum der RWTH Aachen, Pauwelsstrasse 30, D-52057 Aachen, Germany We carried out two-tailed unpaired t-tests with the available data shown in Table 1.

A significant p-value was exclusively found for the differences of GSH-Px activities in the interventricular septum. Unfortunately in this case the t-test is not permissible because of the "significant" differences of the variances. Therefore we used the Welch-test, but we could not verify any significance (p = 0.1385).

We therefore believe that the conclusions presented in Ramos et al. (1997) are incorrect.

Reference

Ramos V, Valenzuela A, Villanueva M, Miranda T (1997) Antioxidant-related enzymes in myocardial zones and human pericardial fluid in relation to the cause of death. Int J Legal Med 110:1–4