"Student" Days

To the Editor:

Just a follow-up note on "Student." In the April issue you categorized him as a "long-ago writer on statistical matters." Actually, "Student" was William S. Gossett (1876–1937), a chemist and industrial research scientist, who was hired by the Guinness brewery to help them produce more uniform brews. He was too embarrassed (he graduated from Oxford) to admit to readers of his scientific papers that he was doing work for such a crass commercial organization as a brewery, so he elected to use a nom de plume. Gossett hired Ronald Fisher as an assistant. All of our small number statistics can be traced back to the Guinness brewery. They could not produce every bottle of stout in duplicate and have an Irishman drink one bottle before selling its partner. Nor could they afford not to check anything at all. Gossett and Fisher asked the brewery bosses how much "error" could the bosses tolerate. Gossett and Fisher developed sampling techniques, random number tables, "t" tests, etc. to help Guinness to be more effective in selecting barley, yeast, etc. It is a fascinating story. Gossett's son, by the way, was a pediatrician, who died a few years back. His (the son's) obituary was published in Lancet.

In the March issue you reviewed a book by Edwin Chargaff—but his name was spelled incorrectly throughout as Chargoff. I checked some Chargaff books on my shelf just to be sure.

Clinical Chemistry is a fine journal. Keep up the good work.

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Transient Increase in CK-BB after a Road Traffic Accident

To the Editor:

Massey and Goe (1) reported a transient increase in serum creatine kinase-BB activity after cardiac or respiratory arrest (1). They concluded that a short burst of CK-BB enters the blood during resuscitation of patients who have in this way experienced a period of anoxia. This contrasts with the normal finding of relatively constant BB activity in those cases where BB is detected. Spooner et al. (2) reported a patient with high serum BB, which decreased over 10 days. It was suggested that this was due to total release from necrosing tumor tissue.

We wish to report the transient appearance of CK-BB in the serum of a 24-year-old man admitted through the Casualty Department of this hospital after a traffic accident. The patient had been thrown forward onto the car steering wheel. He was admitted with grizing of the chest complicated by acute dyspnea, and a diagnosis of traumatic pneumothorax was made. Two days later he was transferred to the Intensive Care Unit, in respiratory distress. He was successfully treated and was discharged 16 days later.

As part of his initial examination an electrocardiogram was performed and blood taken for a cardiac enzyme profile. A second blood sample was taken for the same purpose ~2.5 h later, although the usual policy in the hospital is to take the second specimen 12 h after admission. The second of the two specimens showed an increased, though plausible, value for "MB" (immunoinhibition method). However, the sample taken on admission had an MB value that did not appear physiologically plausible. The enzyme profiles were not consistent with a myocardial infarction. Electrophoresis (agarose; Corning) showed the presence of a substantial concentration of CK-BB.

Of the total CK in the admission sample, 23% was the BB isoenzyme, decreasing to 7% after 2.5 h. No further blood samples were taken until the patient was transferred to the Intensive Care Unit. By that time (57 h after admission) the total CK had doubled relative to the value at admission, but no BB was detected in the serum.

This patient gave no history of any damage other than that sustained to the chest. Thus we assume that the transient detection of CK-BB resulted from perforation of the chest. Subsequent respiratory problems were not associated with the presence of CK-BB.

Motor car drivers admitted to the Accident and Emergency Department as accident victims are not infrequently tested for suspected myocardial infarction. The possibility that chest damage may lead to a falsely high value for CK-MB (by immunoinhibition methods), as found in this case, should be noted.

References

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More on Rapid Detection of Urinary Albumin at Low Concentration

To the Editor:

We read the interesting paper by Cappe et al. (1). Their results appear to be very similar to those we obtained on studying the possibility to use "Albuscreen" (Cambridge Life Science, Cambridge, U.K.)—in Italy, "Albufast-20"—with a cutoff set at 20 mg/L, and "Microbumintest" (Ames Division, Miles Laboratories, Elkhart, IN), a screening test based on "protein error" of a pH indicator.

Specimens, collected overnight from 120 diabetics, ages 18 to 65 y, and negative or "trace" by Albustix, were