References


* Corresponding author. Tel.: +33 1 42 16 56 43; fax: +33 1 42 16 56 39.
E-mail address: frederique.jault@psl.ap-hop-paris.fr.
doi:10.1016/j.ejcts.2006.11.005

Letter to the Editor

What will the ‘creatinine kinase’ be in 2016?

Antonis Ioannidesa, Adel Helmyb, Ioannis Dimitropoulosc, Vassili Vassilioud*

aBart’s and Royal London NHS Trust, London EC1A 7BE, UK
bAcademic Department of Neurosurgery, Addenbrooke’s Hospital, Cambridge CB2 2QQ, UK
cUniversity of Cambridge and Addenbrooke’s Hospital, Cambridge CB2 2QQ, UK

Received 17 October 2006; accepted 16 November 2006; Available online 15 December 2006

Keywords: CK; Creatinine kinase; Creatine kinase; Myocardial damage

Reading the article by Florath and colleagues [1], we are both surprised and concerned with the use of the term ‘creatinine kinase’ as a measure of myocardial damage. We are surprised as such a term does not exist and concerned that we see this published in a specialist journal. We are certain that the authors wished to refer to creatine kinase, often abbreviated as CK, an enzyme that catalyzes the reversible phosphorylation of creatine to phosphorylcreatine. The conversion of creatine to creatinine requires no enzymatic input and no enzyme called ‘creatinine kinase’ exists.

We are concerned that this trend of incorrect terminology is rapidly increasing. A Medline search performed on October 14th, 2006 for the incorrect term ‘creatinine kinase’ revealed 437 entries. Organizing these entries according to which decade they were published, we could see that from 1966—1976 there were only 2 incorrect entries, from 1976—1986 there were 27, from 1986—1996 there were 170 and from 1996—2006 (rather worryingly) there were 238. This represents a disproportionate increase of the incorrect term (creatinine kinase) compared with the correct term (creatine kinase). If this trend continues, using mathematical modelling (\(y = 85.1x - 103.5\), correlation: \(R^2 = 0.9397\), or \(y = 2.1816x^{3.6113}\), correlation: \(R^2 = 0.9821\)), we estimate that in the next decade there will be just under 350 incorrect entries appearing in Medline. We are hoping that letters such as this one will help reduce this number.

Acknowledgement

We are grateful to S. Tsiakkouris, of the Computer Laboratory, University of Cambridge, UK, for his valuable assistance with mathematical modelling.

Reference


* Corresponding author. Address: 3 Ventress Farm Court, Cambridge CB1 8HD, UK. Tel.: +44 7739745476; fax: +44 117 9596235.
E-mail address: vassiliou@doctors.org.uk.
doi:10.1016/j.ejcts.2006.11.020

Reply to the Letter to the Editor

Reply to Ioannides et al.

Ines Florath*, Alexander Albert
Heart Institute Lahr/Baden, Hohbergweg 2, 77933 Lahr, Germany

Received 14 November 2006; accepted 16 November 2006; Available online 15 December 2006

Keywords: Aortic valve replacement; Risk factors; CK; Creatine kinase; Creatinine kinase

We apologize for misnaming the enzyme creatine kinase and thank Ioannides and colleagues [1] for calling the attention to this point.

Reference


* Corresponding author.
E-mail addresses: ines.florath@heart-lahr.com (I. Florath).
alexander.albert@heart-lahr.com (A. Albert).
doi:10.1016/j.ejcts.2006.11.021