

Erratum

Caliber dependent calcitonin gene-related peptide-induced relaxation in rat coronary arteries: effect of K^+ on the tachyphylaxis [Eur. J. Pharmacol. (351) (1998) 53]¹

Majid Sheykhzade^{*}, Niels C. Berg Nyborg

Department of Pharmacology, The Royal Danish School of Pharmacy, Universitetsparken 2, DK-2100 Copenhagen Ø, Denmark

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Abstract

The influence of vessel caliber on rat calcitonin gene-related peptide (rat- α CGRP)-induced responses and the reproducibility of rat- α CGRP concentration–response curves were investigated in the left intramural coronary artery of Sprague–Dawley rats. Rat- α CGRP (10^{-11} – 10^{-7} M) induced concentration-dependent relaxations with a pD_2 -value equal to 8.43 ± 0.05 ($n = 44$) and maximal relaxation equal to $52 \pm 3\%$ ($n = 44$). Both the maximal relaxation and the sensitivity of rat- α CGRP were significantly and inversely correlated with vessel lumen diameter. The coronary arteries developed tachyphylaxis in response to rat- α CGRP, which was concentration dependently decreased by activating the vessels twice with a buffer containing 36 or 125 mM K^+ . The rat- α CGRP-curve became fully reproducible after activation of the arteries twice with 125 mM K^+ . These results indicate a caliber-related dependency of both the effect of and sensitivity to rat- α CGRP in intramural rat coronary arteries because the arteries become more sensitive and reactive to rat- α CGRP with decreasing caliber. Tachyphylaxis can be avoided by repeated activation with 125 mM K^+ . © 1998 Elsevier Science B.V. All rights reserved.

Keywords: CGRP (Calcitonin gene-related peptide); Vessel caliber; Tachyphylaxis; K^+ ; Coronary artery

In the above-mentioned article, on page 54, Section 2.2: ... $CaCl_2 \cdot 2H_2O$ 21.5 ... should read ... $CaCl_2 \cdot 2H_2O$ 1.5 ...

^{*} Corresponding author. Tel.: +45-3537-6777, ext. 546; Fax: +45-3537-4457; E-mail: mash@mail.dfh.dk

¹ PII of original article: S0014-2999(98)00290-8.