a secure and steady ECG tracing. We hope this information will be useful to some of the readers.

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Response to: Possible Contribution of Transmembrane Ca^{2+} Influx to Adenylate Cyclase-mediated NO-cGMP Relaxation in Rat Aorta

To the Editor: — I enjoyed reading the interesting article by Iranami *et al.* entitled "A Beta-adrenoceptor Agonist Evokes a Nitric Oxide-cGMP relaxation Mechanism Modulated by Adenylyl Cyclase in Rat Aorta."[1] In their studies, they demonstrated that (1) isoproterenol can induce NO production in endothelial cells and (2) halothane did not inhibit isoproterenol-induced relaxation, but it inhibited acetylcholine-induced relaxation. The authors proposed that halothane inhibits NO-cGMP relaxation only when constitutive nitric oxide synthase (cNOS) is activated by Ca^{2+} released from internal stores.

However, there are several issues that need to be mentioned. First, in our experimental studies, neither isoproterenol nor forskolin, an adenylyl cyclase activator, was shown to directly activate nonselective cation current in cultured endothelial cells (unpublished observation).[2–4] Thus, the increase in Ca^{2+} influx caused by the increase of adenylyl cyclase activity is thus difficult to explain. Second, the statement that halothane inhibits the NO-cGMP relaxation only when cNOS is activated by Ca^{2+} released from internal stores is not entirely explained by the previous results showing that halothane can attenuate A23187-mediated endothelium-dependent relaxation[5] and increase in cGMP.[6] A23187, a Ca^{2+} ionophore, can increase Ca^{2+} influx from the exterior of the cell and also activate NO-cGMP production.[6] Third, the direct inhibition of halothane on voltage-gated Ca^{2+} current in vascular smooth muscle cells[7] may partly account for the failure of halothane to inhibit the isoproterenol-induced relaxation.

I am thus inclined to believe that the effect of halothane on the agonist-induced NO-cGMP mechanism in rat aorta still remains unclear.

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