References


In Reply—I thank Drs Jones and Taylor for their interest in and comments about my editorial. They reinforce my point that currently available non-synaptic-selective α2 agonists have sedative and hemodynamic effects, and that, at high doses, these hemodynamic effects may cause undesirable side effects. In addition to the cardiovascular and pulmonary effects discussed by Drs Jones and Taylor, at high doses, these compounds may have deleterious effects on vital organ blood flow in animals and humans. When α2 agonists are used for sedative purposes, their peripheral vasoconstrictive effects seem to cause most of the undesirable side effects, such as the ones described by Drs Jones and Taylor. Fortunately, it appears that the centrally mediated sedative/sympatholytic effects and the peripherally mediated vasoconstrictive effects are mediated by different α2 receptor subtypes. To provide the desired therapeutic effect (sedation) without side effects (vasoconstriction) is precisely why subtype-specific α2 agonists may, in the future, provide the bases for a reversible intravenous anesthetic technique in humans. However, before my enthusiasm for the potential role of the use of α2 agonists in a reversible intravenous anesthetic technique can become reality, new drugs must be developed, undergo rigorous preclinical and clinical testing, and be evaluated by experts in appropriate regulatory agencies, as is common with all new drugs. Meanwhile, continuing research work in this area will lead to better understanding of these compounds, help us to avoid serious side effects, and improve the anesthetic care of animals and humans.

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Janos Balassa and Rudolf Eisenmenger: Forgotten Pioneers of Resuscitation

To the Editor.—The review of Juvin and Desmonts¹ is excellent, especially with respect to French contributions to internal cardiac massage. However, two pioneers are missing.

Firstly, Janos Balassa (1814–1868) should be mentioned, who, in 1858, successfully performed cricopharyngotomy followed by chest compressions during a case of asphyxia from laryngitis.²–⁴

Secondly, Rudolf Eisenmenger (1871–1946) published, in 1903, a device for suction and pressure on the abdomen (and lower chest) to promote breathing and circulation.⁵ He was the first to propose active compression–decompression cardiopulmonary resuscitation (ACD-CPR) and a device (Lautenschläger, Munich, Germany) to do so, which was later named Biomorphic.⁶ With his device at least one successful resuscitation in cardiac arrest is documented.⁷ Animal experiments in 1929 showed the device to generate not only blood pressure, but also blood flow, as evidenced by carbon dioxide exhalation and transport of intravenously injected dye to all parts of the body.⁸ Eisenmenger worked on and published information about ACD-CPR from 1903 until 1942.⁹ He thus upheld external cardiac resuscitation in the "dark age"

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