between World Wars I and II. Although the device was used as a
ventilator in several hospitals, few contemporaries took the idea of
ACD-CPR seriously. In 1994 Smithline et al., using a Hayek Oscillator
(Breasy Medical, London, UK) as a substitute for the Biomotor, con-
formed his findings.

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In Reply.—We thank Dr. Koetter and Dr. Maleck for commending
our work on the history, in Europe and the United States, of
the discovery of cardiac massage. Their remarks are interesting but call for
a number of comments about the facts and the thrust of our article.

Janos Balassa did indeed report experimenting with compression of
the chest, but he shared with a very large number of authors of the
time the goal of achieving artificial ventilation, as opposed to cardiac
massage. His own words leave no room for ambiguity: “I exerted
bellows-like pressure to the chest imitating breathing.” As
for Eisenmenger, we agree that he made a large contribution to
the history of cardiac massage. He developed a technique of compression
of the chest and abdomen similar to that described by Crile. His
primary goal, however, was to improve ventilation rather than
circulation, as pointed out recently by Koetter and Maleck: “In 1900 . . . a
device for suction on the upper thorax was proposed as a method to
improve ventilation of the lung apices in tuberculosis.” Only later, at
a time when the scientific community had accepted cardiac massage
and was aware of the results obtained by Crile, did Eisenmenger
suggest that his technique be used in circulatory arrest.

Beyond the raw historical facts, our main objective was to analyze
why a technique (external cardiac massage) fell into oblivion after
being developed and widely commented on by the scientific commu-
nity. To illustrate how extraordinary was this passage into limbo, we
selected those American and European experiments that were per-
formed earliest and that made the largest contributions to scientific
debate at the beginning of the twentieth century.

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