

# Circulation

JOURNAL OF THE AMERICAN HEART ASSOCIATION



## **Editorial: The Closed Chest Method of Cardiopulmonary Resuscitation Benefits and Hazards**

*Circulation* 1962;26:324

Circulation is published by the American Heart Association, 7272 Greenville Avenue,  
Dallas, TX 72514

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Online ISSN: 1524-4539

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## Editorial

### The Closed Chest Method of Cardiopulmonary Resuscitation Benefits and Hazards

**I**N VIEW of the growing interest in the closed chest method of cardiopulmonary resuscitation, and the possible dangers in its indiscriminate use, the following statement has been prepared as a guide to the public regarding the present place of this new technique.

The closed chest method of cardiopulmonary resuscitation has been proved effective as a medical procedure in certain cases of stoppage or disruption of the heart beat. However, it is to be considered a temporary method and additional medical treatment, which may include the use of drugs and an electric defibrillator, is usually required to restore the circulation permanently.

The heart beat may stop as a result of a variety of conditions or circumstances such as water submersion, electrical shock, asphyxiation, heart attack, or during anesthesia or surgery. Most people who experience sudden stoppage or disruption of the heart beat (cardiac arrest) cannot be saved even under ideal circumstances in a hospital. The least measure of success has been experienced in coronary heart "attack" cases. However, the prompt use of cardiopulmonary resuscitation has enabled lives to be saved which previously might have been lost. The new technique of closed chest cardiac massage makes it possible to continue blood circulation without opening the chest, thus greatly extending the possibilities for attempting saving of life. Consequently, it is the desire of all concerned to achieve widespread use of this method where it can be used safely and effectively.

The public should be advised, however, that the application of closed chest cardiopulmonary resuscitation calls for a working diagnosis of the victim's condition. It is important

to be sure that the circulation has actually stopped because the method involves certain hazards. Reported injuries to patients have included damage to the heart and liver, internal bleeding, multiple rib fractures, and puncture of the lungs. In untrained hands the risk of injury is increased. It is particularly important to avoid the possibility of inflicting serious injury on a person under the mistaken impression that cardiac arrest has occurred when the individual has simply fainted or lost consciousness from some other cause.

Successful application of closed chest cardiopulmonary resuscitation depends on thorough and careful training. One is most unlikely to be able to achieve artificial blood circulation by this method if his only training is from reading written instructions.

In view of these facts, it is suggested that closed chest cardiopulmonary resuscitation be applied only by carefully trained personnel so that it may be utilized with the greatest safety and effectiveness. Two qualified persons are preferable because it is necessary to maintain artificial respiration at the same time the heart is being massaged externally. A decision as to whether training in this procedure should be extended to certain segments of the general public must be postponed until further experience accumulates.

The undersigned organizations joining in this statement believe that emphasis should be placed at this time on training physicians, dentists, nurses, and specially qualified emergency rescue personnel so that the procedure will become more widely available.

American Heart Association, Inc.  
American National Red Cross  
Industrial Medical Association