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Cover Photo by Andy Mills

To Heimlich

or



Not to Heimlich

The summer 1995 Edition of American Lifeguard magazine contained an article by Dr. Henry Heimlich which prompted many questions and concerns among lifeguard professionals. The story recommended using the Heimlich maneuver as the first line in resuscitating drowning victims. Let's look at the pros and cons of this approach and its possible implications.

The current American Heart Association protocols in treatment of near drowning victims are in conflict with Dr. Heimlich's recommendations. The American Heart Association calls for airway management, immediate rescue breathing by a mouth to mouth technique and chest compressions if the victim is pulseless. It is their recommendation that no specific treatment for aspirated water is required. However, they do indicate they use of the supine Heimlich maneuver if attempts at ventilation are unsuccessful due to a foreign body obstruction.

Dr. Heimlich addressed the USLA Spring Board of Directors meeting in Alexandria, Virginia. He recommended that all unconscious nonbreathing drowning victims be treated first with up to 5 Heimlich abdominal thrusts, stopping when water no longer flows from the mouth. This is followed with cardio-pulmonary resuscitation only when necessary. Dr. Heimlich believes that the water, which has been shown to enter the lungs in 90% of drowning victims, is what prevents successful resuscitation and that his techniques successfully removes this water, enabling the victim to resume breathing. He stated that using mouth to mouth first, wastes time and he quotes statistics which are implied to support this claim. He also cited the danger of performing CPR both to the victim (chest injuries, etc.) and to the rescuer (infectious disease) which are not present using his technique. He went on to, in fact, state that if "a drowning victim dies and the Heimlich maneuver was not the first treatment used, then the treatment was inadequate."



by Dr. Peter C. Wernicki

These are strong words. there is no doubt that the Heimlich maneuver has been responsible for saving thousands of choking victims, but does this carry over to it being the logical first step in drowning resuscitation. this is the question which two blue ribbon panels in 1993 and 1994 were formed to answer. They were convened by the National Institute of Medicine and contained numerous experts in the field who scientifically evaluated the use of the Heimlich maneuver in near drowning. All available pertinent and scientific studies were reviewed. The panel concluded:

"Although the Heimlich maneuver is useful for the removal of aspirated solid foreign bodies, there is no evidence that death from drowning is frequently caused by aspiration of a solid foreign body that is not effectively treated by the current emergency cardiac care recommendations. The Committee further finds that the evidence is insufficient to support the proposition that the Heimlich maneuver is useful for the removal of aspirated liquid. Moreover, because there is no evidence to support Heimlich's hypothesis that substantial amounts of water are aspirated by near drowning victims or that such aspirated liquid causes brain damage and death. The Committee finds that the available evidence does not support routine use of the Heimlich maneuver in the care of near drowning victims".

The committee also had concerns about the routine use of the Heimlich maneuver in near drowning because of 1.) the

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amount of time taken to perform the maneuver until the patient is no longer expelling water (as recommended by Heimlich) and the resulting delay in CPR, 2.) possible complications of the maneuver, especially if associated with a cervical spine fracture, and 30 the problems with teaching rescue workers a different protocol for resuscitation of near drowning victims versus other cardiopulmonary arrests. Finally, concerns were also raised about the use of the Heimlich maneuver in causing aspiration of gastric materials and it's subsequent serious sequela.

Therefore, it was determined that the current Emergency Care Committee (ECC) of the American Heart Association recommendations for the establishment of the airway and ventilation should not be changed and that abdominal thrusts should be performed only after ventilation has been tried and shown to be ineffective due to a solid foreign body.

A recent statement by the International Life Saving Federation indicates that the use of the Heimlich maneuver in near drowning "has no place in the management" of near drowning. In fact, near drowning represents "an absolute contraindication to upper abdominal thrusts".

The American Red Cross also indicates complete support of the current ECC resuscitation guidelines.

Despite these recommendations, the Heimlich maneuver and modifications of it have been used successfully by many lifeguards on an individual basis and as per protocol (eg., the Chicago "break"). It probably does work in many instances, but by what mechanism? How does it compare to routine CPR, and what are the rates of potential complications? The answers to these questions are unknown. With this in mind, where do you, as the individual lifeguard or agency, stand? Ellis & Associates are currently using the Heimlich maneuver on a routine basis. Should you use the Heimlich maneuver in resuscitating drowning victims? All agencies have established protocols for resuscitating drowning victims. In most cases these will follow the ECC and National Safety Council recommendations to use CPR first. You should therefore perform as you were instructed and trained to do within your protocols. If

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these include use of the Heimlich maneuver and you question it's use, or if they do not include the Heimlich maneuver and you are concerned about it's possible benefits with regard to near drowning, you should first discuss this with your local EMS hierarchy, your supervisor and other knowledgeable resources prior to making any changes.

The final answer is obviously not yet in and there is currently considerable debate and discussion on the issue. Unfortunately the bulk of the evidence presented by Dr. Heimlich when carefully examined is mainly anecdotal and not per say scientific. Furthermore, most of the scientific data available does not support his conclusions. There are no clear prospective double-blind studies available on this topic to give us unequivocal answers. these may never be done for ethical and practical reasons but further research, including animal studies, may shed more light on the topic.

The medical community would certainly encourage Dr. Heimlich and his institute to undertake such essential research. We are all in the business of saving lives and if the Heimlich maneuver is proven in the future to be more beneficial than current resuscitation methods for near drowning we would all embrace it gratefully and be further indebted to Dr. Heimlich.

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