



Henry J. Heimlich, M.D.
Professor of Advanced Clinical Sciences

OCT 3 1985

September 24, 1985

Joseph P. Ornato, M.D.
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Dear Dr. Ornato:

I am responding to your letter of August 23, 1985, concerning your activities as chairman of a panel to update the treatment of drowning, at the Conference in Dallas, July 11-13, 1985, cosponsored by the American Red Cross.

As Chairman of the panel on drowning, it is your responsibility to transmit the recommendations and conclusions of your panel to the Conference Steering Committee. Based on your report, that Committee derives Standards and Guidelines for the treatment of drowning to be taught by the Red Cross and American Heart Association for the next five years. Subsequent to the Conference, you reversed your panel's recommendations and withheld their conclusions in your report to the Conference Steering Committee. Should your action go unchallenged, existing errors in Red Cross instructions will not be disclosed or corrected and unnecessary drowning deaths will continue to occur.

All facts in this letter, which cites changes and omissions in your report to the Conference Steering Committee, are documented in the official Conference tapes, published in scientific journals, or are available in your written reports to your panel and statements in your letter of August 23.

IN YOUR REPORT TO THE CONFERENCE STEERING COMMITTEE, YOU ALTERED YOUR PANEL'S CONCLUSIONS IN THE FOLLOWING MANNER:

1. You withheld from the Conference Steering Committee the recommendation of your panel.

On July 12, 1985, in the presence of a large audience of Conference participants, the panel that you chaired made the following recommendation after discussion of scientific evidence: In the drowning person, the rescuer should first perform mouth-to-mouth breathing and, if the victim "does not respond promptly", then the Heimlich Maneuver should be performed.

Your panel's recommendation to use the Heimlich Maneuver for drowning came

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about in the following manner: Your panel consisted of three participants -- Dr. Modell, Dr. Steinman and myself -- and one nonparticipating Red Cross observer. Dr. Modell, in his presentation, initially advised against using the Heimlich Maneuver in drowning stating that it might cause aspiration of gastric contents. I presented the scientific evidence for use of the Heimlich Maneuver and why such aspiration was not of concern. Dr. Modell then stated: "I would recommend that in the near-drowned victim that mouth-to-mouth be done first and if the patient does not respond promptly, then the, let me call it the abdominal thrust as described by Heimlich, then there will be no question about it." I agreed, but recommended that those who believe it is important to first expel water from the lungs be permitted to use the Heimlich Maneuver as the initial procedure.

Dr. Modell then said: "Well, that I will leave up to our chairman and his committee. I think they've heard what we've had to say and I think it is true that we don't violently disagree. We may disagree on methodology, or whether the chicken came first or the egg came first, and which is the proper one to come first, and hopefully, Joe (Ornato), you have some direction for that."

July 13, 1985, after meeting in private with your Committee the night before, you reported to the 350 conference participants that your panel concluded that the Heimlich Maneuver should be used in drowning persons when mouth-to-mouth does not achieve adequate ventilation.

Furthermore, subsequent to the Conference, your first written report to your panel, July 22, 1985, reaffirmed the recommendation that the Heimlich Maneuver be used for the treatment for drowning when mouth-to-mouth does not achieve adequate ventilation. (App I)

In your report of August 19, 1985, to the Conference Steering Committee, you totally omitted your panel's recommendation that the Heimlich Maneuver be used when mouth-to-mouth fails. Instead your report advises against use of the Heimlich Maneuver, even in drowning victims who do not respond to mouth-to-mouth and are, therefore, condemned to die. (App II) In your letter to me of August 23, a copy of which you sent to the Conference Steering Committee, you do not mention your panel's recommendation that the Heimlich Maneuver be used following mouth-to-mouth failure. You obscured that fact by referring only to my recommendation that the Heimlich Maneuver be permitted to be used first.

2. You withheld from the Conference Steering Committee the scientific evidence indicating that a large amount of water is aspirated by drowning persons, thus concealing the need to expel water from the lungs by means of the Heimlich Maneuver.

Your original draft report of July 22, 1985, to your panel, based on the scientific evidence presented at your panel's open session, describes the "flooding of the lungs" that occurs in drowning and states "aspiration of a moderate amount of water (up to 22 ml/kg body weight) occurs in 80-90 percent of drownings". (App I) That figure, based on Dr. Modell's published studies, means that a 100 lb drowning person aspirates up to 1000 cc of water.

Your report to the Conference Steering Committee of August 19, 1985, does

not report the above figures and merely states: "Modell (2-3) found that at most only a modest amount of water is aspirated..." (App II) Thus your report conceals the evidence that a large volume of water is aspirated by a drowning person.

Another omission from your Conference Steering Committee report of August 19 further serves to distract attention from the large volume of aspirated water in the airway of drowning victims. Your report states that Modell found that "fresh water is rapidly absorbed from the lungs into the circulation". (App II) You omitted the remainder of Dr. Modell's finding, namely, that sea water (salt water) is not absorbed from the lungs but draws additional water into the lungs from the circulation. In addition, you did not mention the following facts presented at your panel meeting: When fresh water is absorbed from the lungs of a person who is drowning, it is replaced in the lungs by more water. After cardiac arrest occurs, no additional water can be absorbed.

In your report to the Conference Steering Committee, August 19, 1985, after claiming that "At most only a modest amount of water is aspirated", you state that "most authorities" feel that water need not be expelled from the lungs of a drowning person. (App II) Who are the "most authorities" whose opinion caused you to reverse your panel's recommendation to expel water from the lungs by means of the Heimlich Maneuver?

Reviewing your three draft reports to your panel in sequence reveals the manner in which you gradually removed your panel's recommendations and conclusions from your report to the Conference Steering Committee.

3. Professor Patrick proved that the Heimlich Maneuver expels water from the lungs of a drowning victim. In your letter of August 23, you attempt to discredit his work by falsely accusing him of intubating the patient's esophagus rather than the trachea.

Professor Edward Patrick, M.D., Ph.D., published a scientific paper proving that the Heimlich Maneuver expelled water from the lungs. Use of the Maneuver saved the life of a drowning two year old after mouth-to-mouth and mechanical air insufflation utilized for over a half an hour had failed to revive the infant. In your letter of August 23, 1985, to me, in an attempt to dismiss that scientific evidence, you accuse Dr. Patrick of malfeasance, speculating that he "inadvertently inserted an endotracheal tube in the esophagus and didn't recognize it". Dr. Patrick, in his letter of September 4, 1985, to you, responds with the radiological proof that the endotracheal tube was in the trachea.

Unable to challenge Professor Patrick's scientific facts, you further seek to demean his work by saying his article did not undergo peer review. Dr. Patrick, whose scientific textbooks are published throughout the world, in his letter of September 4 to you, names the professor who confirmed the accuracy of his findings through peer review. Once again, it was proved that the Heimlich Maneuver expelled the water from the lungs. (App III) Have you notified the Conference Steering Committee that you were in error and that the scientific evidence shows that your panel's recommendation to use the Heimlich Maneuver in drowning was correct?

You attribute your charges against Dr. Patrick to "the opinion of the

group". Who are the members of "the group"? Anonymity is not acceptable for scientists considering life and death data. In the same letter of August 23, you advise that it is the intention of "one committee member" of your panel to repeat tests of the Heimlich Maneuver in animals, even though the success of the Maneuver in drowning has already been established for humans. Since there were only three of us, it must be either Dr. Steinman or Dr. Modell. It seems unlikely that Dr. Steinman has an animal laboratory at his Coast Guard station. Dr. Modell has an animal laboratory. But at your open panel meeting on July 12, 1985 at the Dallas Conference, the official tapes show that after the scientific evidence was presented and discussed, including the volume of water in the lungs of a drowning victim and the possibility of aspiration of gastric contents, Dr. Modell was the first member of your panel to recommend that the Heimlich Maneuver be used to treat drowning victims. At that time, he also advised you to transmit that recommendation to the Conference Steering Committee. Who is the nameless committee member, Dr. Ornato, who would now embark on such an animal study that would only serve to delay exposure and correction of present errors in Red Cross instructions for the treatment of drowning and result in further loss of life?

In addition, you state that Dr. Patrick's case report is "the only (your emphasis) such evidence anywhere in the literature" of a successful use of the Heimlich Maneuver for drowning. That is not true. Although the scientific documentation in that case alone provides with certainty the evidence that the Heimlich Maneuver expels water from the lungs, you will find additional cases reported in the Journal of the American Medical Association (JAMA) and other journals. These articles document case reports in which mouth-to-mouth resuscitation failed; the drowning person recovered after the Heimlich Maneuver expelled water from the lungs. Those cases were also reported at your panel meeting.

Along with your letter of August 23, you disseminated two letters published relative to my 1981 article in the Annals of Emergency Medicine. In your letter, once again, you avoided any mention of the scientific evidence in the article, claiming, without any basis, that the article contained no scientific data from animal or human research. You ignore the 24 references cited in the article as did the other two letter writers, who were so advised in my published response which you also possess. Those 24 references provide scientific evidence that subdiaphragmatic pressure, as in the Heimlich Maneuver, expels water from the lungs of drowning persons.

4. In your report to the Conference Steering Committee of August 19 and in your letter of August 23, you advise against using the Heimlich Maneuver to save a drowning victim, speculating that it may cause aspiration of gastric contents. Your panel, in its open session on July 22, discarded that supposition for the following reason:

Even assuming that the victim may aspirate, an unlikely possibility, your panel recommended that the Heimlich Maneuver should be used after mouth-to-mouth has failed, rather than letting the drowning person die. When the Heimlich Maneuver saves a drowning victim after mouth-to-mouth fails, the possibility of the recovered person aspirating is of little consequence compared to condemning him to die. You present no scientific evidence for reversing your panel's action in that regard.

You also include in your report to the Conference Steering Committee a totally unrelated procedure, jackknifing the victim, as a cause of aspiration. (App II) Jackknifing was discarded long ago as it did not expel water from the lungs. (See Annals of Emergency Medicine, 1981)

5. You sent the Conference Steering Committee my letter of August 19, inaccurately designating my statements as a "minority" opinion.

Of the three participants on your panel, Dr. Modell and I agreed, before an audience at your open panel meeting, that the Heimlich Maneuver should be used in drowning. Dr. Modell recommended that mouth-to-mouth be performed first, and I agreed. You confirmed, before the entire conference and in the first written report to your panel, that use of the Heimlich Maneuver in drowning was your panel's conclusion. Given three panel members, who are the secret "majority" who reversed that recommendation?

You state in your letter that I misunderstood the process for revision of the Standards for CPR. On the contrary, I am very familiar with this process. Ten years ago, I observed a panel similar to yours induce the American Red Cross to recommend backslaps for choking, despite medical references extending over 130 years that revealed the dangers of that treatment. That Red Cross panel based its report to its Steering Committee on personal bias rather than scientific evidence, as attested to by Dr. James Jude, a Red Cross adviser on CPR for more than 25 years. In the official tapes of the Dallas 1985 Conference, Dr. Jude reveals:

"I was a member of the National Research Council Meeting on the Airway Management, I think it was 7 or 8 years ago and this problem was discussed. Dr. Gordon was there, Dr. Guildner. There was no question that the decision at that time was that the abdominal thrust maneuver was probably as good as or perhaps the best but had not definitely been established whether or not the back blow was of value or not of value. The real reason that apparently there is a misconception that the abdominal thrust maneuver is not a good maneuver is really is what it's called.... if we get rid of our personality conflicts, and we call it what it should be called, an abdominal thrust maneuver, a descriptive maneuver, which is absolutely no different than a Heimlich Maneuver then indeed we wouldn't have had to stay up till 2:00 AM in the morning at that particular meeting in Washington if we did not have a long debate over what it was to be called."

An article, "The Biopolitics of Choking", published in the Utah State Medical Journal by Dr. Harry Gibbons, Director of Health, Salt Lake City and County, provides additional insight as to the workings of your organization.

During that ten year period, other panels perpetuated the backslap error. At the July 11-13, 1985 Dallas Conference, cosponsored by the Red Cross, backslaps were eliminated as a treatment for choking. The reports of complications and deaths in choking adults and children following back blows, that occurred in that ten year period, and the scientific basis for those accidents, were presented at the 1985 Dallas Conference and are reported in medical journals. It was as a result of those deaths, that backslaps were eliminated and the Heimlich Maneuver was recommended as the sole first aid treatment for choking.

That same process is now evident in regard to the treatment of drowning. Regrettably, in 1960, the Red Cross was induced by its advisers to adopt mouth-to-mouth resuscitation as the first treatment for drowning, and previously ap-

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proved methods that expelled water from the lungs were discarded. The importance of expelling water from the lungs was not appreciated at that time. You can not get air into the lungs until you get the water out. For more than 20 years, deaths from drowning have increased annually, at present exceeding 8,000 per year.

The scientific error of not evacuating water from the lungs, that dates back 25 years, must be admitted and corrected. Published scientific evidence proves that a large amount of water is aspirated by 80-90 percent of drowning victims, up to 1000 cc in a 100 lb person according to Dr. Modell, and that the Heimlich Maneuver expels that water from the lungs. Your panel recommended that the Heimlich Maneuver be used in the treatment of drowning in order to expel water from the lungs. We can not wait another five years, as suggested by Dr. Modell at your panel meeting, for your "group" to acknowledge the scientific evidence that already exists. (See transcript of official Conference tapes)

Finally, your statement concerning our conversation is misquoted and out of context, therefore, is flatly rejected. You express anger over my having disseminated correspondence regarding your report to officials. Secrecy and anonymity have no place in medical science. I see no cause for concern or anger about a scientific report being scrutinized by other scientists, officials or the press, provided it is accurate and complete. I, along with many physicians, scientists and public health officials, am determined to prevent one more unnecessary drowning or choking death. To accomplish that goal, the transactions leading to American Red Cross first aid instructions will be made available to any interested party.

Any recommendation by the Conference Steering Committee for the treatment of drowning will be invalid as it will be based on an inaccurate and incomplete report of your panel's conclusions. Through a copy of this letter, I am advising the Conference Steering Committee that should it accept your report, rather than the scientific facts presented at the open meetings, I reserve the right to include an expository report in any written or published document that is produced.

Sincerely,


Henry J. Heimlich, M.D.

HJH/jh

Enclosures

cc: R. Albarran-Sotelo, M.D.,
Conference Steering Committee
President, American Red Cross
Dean, Medical College of VA
President, VA Commonwealth Univ.
J. M. Fattu, M.D., Ph.D.
R. Mendelsohn, M.D.
T. Hughes, M.D.

W. H. Montgomery, M.D.
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H. Gibbons, M.D.
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J. Hendrickson
Interested parties