Acute asphyxic asthma

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Introduction

Since the invention of mouth-to-mouth artificial respiration and endotracheal intubation for respiratory arrest resuscitation in 1960, the previous Schafer method of chest compression was largely abandoned, and this has been associated with a significant increase in deaths from asphyxic asthma [1-3]. The rise has never been explained. The problem persists and requires resolution.

If, after pulmonary arrest, chest compression is performed (Schafer’s method) there is immediate expulsion of air and resumption of breathing that frequently appeared to be normal by the time the patient reached hospital [4]. This information has not reached individuals who were in position to rescue these patients – usually family members or emergency personnel. Patients, particularly young patients, continue to die of acute asphyxic asthma because inflationary rescue procedures are used, either mouth to mouth lung inflation or endotracheal intubation and mechanical ventilation. In patients with acute asphyxic asthma after respiratory arrest, there are no reports in the literature of survival at home, except two cases of attempted mouth to mouth resuscitation in which no air could be forced into an already maximally extended chest wall. With the first chest compression (Schafer method) produced immediate expulsion of air from the mouth and resumption of respiration 4 and two cases in which endotracheal tubes and attempted inflation failed but chest compression produced immediate rescue [5,6]. It appears that the fully extended chest wall prevented any inspiration in both cases until external chest compression had made inhalation possible.

The cause of death in acute asphyxia asthma is not due to respiration failing because of increased narrowing of the bronchiole but due to the chest walls having reached their maximal shape and size. This was adequately proved in Case 2 described in this paper. The first compression was inadequate because it was unable to grip the hands together round his lower chest, but he immediately took a gasp in proving that he could inhale, without difficulty, but the chest wall had returned to its maximum size, so he could not breath in. He was then ordered to refrain from breathing in next time when pressed on his chest. The result was remarkably successful each succeeding compression produced more air out of the chest wall at the mouth and subsequent larger inhalations from the patient.

We would like to recommend that relatives of asthmatics, paramedics and physicians are taught the easiest form of Artificial Respiration Schafer’s method of chest compression. A description can be found at http://www.firstaidinasthma.co.uk surely this should be started immediately.

Replacing chest compression with the use of mouth-to-mouth resuscitation is causing the present continued incidence of acute asthma deaths in young and old. We would be prepared to start these myself in Carlisle immediately. There would be no danger to this and it would cost nothing!

References

2. Speizer FE, Doll R, Heaf P (1968) Observation on recent increase in mortality from asthma. BMJ 1: 335-343. [Crossref]
3. Speizer FE, Doll R, Heaf P, et.al. (1968) Investigation into the use of drugs preceding death from asthma. BMJ 1: 339-343. [Crossref]
4. Harrison R (2010) Chest compression first aid for respiratory arrest due to acute asphyxic asthma. EMJ Prehospital Care 1:59-61. [Crossref]