

EXTERNAL CARDIAC MASSAGE AND MOUTH-TO-MOUTH BREATHING IN GENERAL PRACTICE

REPORT OF A CASE

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Although 'mouth-to-mouth breathing' has been known since Biblical times (when the prophet Elisha revived a child by breathing into its mouth), this method of resuscitation had been neglected in favour of more complicated procedures such as Schafer's, Silvester's and the Holger-Nielsen method. Likewise, the procedure of external cardiac massage was not considered until recently, and generations of medical students were admonished to 'make an incision in the midline through the linea alba large enough to insert the hand: start cardiac massage from below the diaphragm, at first with a quick, forcible movement for half a minute: the base of the left hand over the lower thorax aiding in the manoeuvre'.¹

CASE REPORT

On 20 June 1962 I was called to treat a Coloured male patient, J.G., aged 74 years, who had been in perfect health until that afternoon. I was informed by his relatives that while walking he suddenly became weak and fell to the ground unconscious. On examination I found that the patient was in a coma and did not respond to any commands. The extremities were cold and sweating. The pulse was irregular and beating at 110 per minute. The blood pressure was 280/130 mm.Hg. Before the examination could be completed, however, the patient's breathing became irregular, and then ceased. The pulse, as felt at the wrist, and the cardiac sounds could not be detected. Clinical death was assumed.

Thereupon I decided to institute external cardiac massage and mouth-to-mouth breathing without delay. With the assistance of the persons at the bedside I moved the patient from the bed on to the floor, so that he lay flat on his back. I now began pressing over the lower end of the sternum, with both hands together, palms facing downward and the tips of the fingers pointing towards his head. I started pressing rhythmically downwards with a force sufficient to obtain a good pulse at the wrist.

Thereafter I instructed one of the bystanders in the method

of external cardiac massage. I must add that such is the simplicity of this procedure that after a few seconds of explanation a person with no special abilities could master it. Then I paid attention to the provision of an adequate airway and artificial respiration. With my one hand I held the patient's jaw upwards and forwards, so that he should not swallow his tongue. I quickly cleared his mouth of mucus, inserted a plastic airway ('resusitube'), and began mouth-to-mouth breathing. After I had blown in a few breaths, I explained the technique to another bystander and he relieved me. After approximately 10 minutes of concerted effort, the patient's breathing could be maintained without artificial respiration. The breathing was now of the Cheyne-Stokes type (periodic breathing). Cardiac action was resumed as soon as the cardiac massage was commenced. When I left the patient, approximately one hour later, he was still comatose and breathing periodically. He was referred to hospital for further investigation where it was concluded that he had had a cerebrovascular accident as a result of hypertension.

The patient was seen on 2 July, when he was still confined to bed owing to paresis of both lower limbs. Mentally he seemed normal. He ate well and complained only of his inability to move about. He had no recollection of what happened to him when he became unconscious. His blood pressure was now 130/80 mm.Hg.

CONCLUSION AND SUMMARY

1. A case of resuscitation by means of external cardiac massage and mouth-to-mouth breathing is reported.
2. Both these methods are so simple that they can be applied by untrained persons in seconds.
3. All medical practitioners should carry plastic airways in their bags.
4. Resuscitation should be attempted with vigour even in extreme old age.

REFERENCE

1. Bailey, H. (1960): *Pye's Surgical Handicraft*, 16th ed. Bristol: John Wright.