

# Paediatric Emergencies

EDITED BY J. A. BLACK

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## Preface

An emergency can be defined as an acute illness in which lack of prompt and appropriate treatment may result in death, disability, or delayed recovery. In Europe and North America of all children admitted to hospital, 60 per cent are emergencies; in Africa and Asia this proportion is much higher.

Acute disease in children evolves more rapidly than in adults, but with correct treatment the child has a greater capacity for quick and complete recovery. Emergency treatment in the child must therefore be of a very high standard, and it is unfortunate that in most hospital services treatment of the emergency admission is in the hands of relatively junior staff, and the more experienced the clinician becomes, the less acute disease does he see. Normally, the Consultant or Specialist only becomes directly involved in emergency treatment when something goes wrong. It is for this reason that the management of the acutely ill child is seldom subjected to the same critical analysis as is that of the less acutely ill patient, and the traditions of emergency treatment are maintained at a sub-Consultant level, often with inadequate facilities. Thus the standard of emergency care in general paediatric departments tends to lag behind that of the more specialized units. In this book we have attempted to make available to the general paediatrician the practice of the best specialist units. With its emphasis on recognition of the emergency, we hope that this book will also be useful to those who are the first to see the acutely ill child, the family doctors, and the casualty officers. We have, where appropriate, attempted to describe the management of the emergency in sufficient detail to be of use to both medical and nursing staff.

We have included a section on diseases of the subtropics and tropics for a number of reasons, the most important being that rapid intercontinental travel makes it essential that the paediatrician should be able to recognize conditions which are not indigenous to his own country. Also, in many parts of the world, sick children are cared for by doctors without special training in paediatrics, and it seemed essential to

combine in one volume the paediatric aspects of the more important diseases of the tropics and subtropics, and the management of those emergencies such as asthma, convulsions, etc. which the non-paediatrician would have to treat. A third consideration was that, with a few notable exceptions, textbooks of tropical medicine give inadequate attention to the treatment of the sick child, and, conversely, the general paediatric textbooks deal perfunctorily with tropical disease.

I would like to thank Dr John Apley for his invaluable support and advice in putting together this book, and to express my gratitude to my family, and particularly to my wife, for their tolerance of the piles of papers which threatened for a time to become a permanent feature of our home.

I would also like to thank Miss Joan Beynon for her help with correspondence, and Miss Eve Turner, Mrs Joyce Andrews, and Mrs Sandra Parfitt for their care and patience with the typing.

I am also indebted to all the numerous contributors for their help and for their hard work.

J. A. B.



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# Paediatric Emergencies

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# Part I: Trauma, Accidents and Travel

## CHAPTER 1

### Management of Acute Cardiorespiratory Collapse or Arrest

J. C. Fallis and D. Anna Jarvis

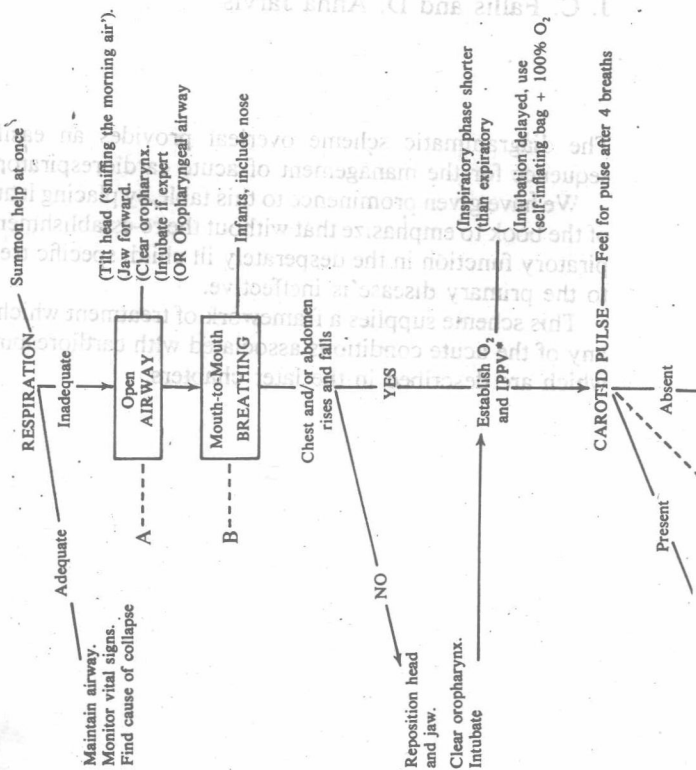
The diagrammatic scheme overleaf provides an easily memorized sequence for the management of acute cardiorespiratory failure.

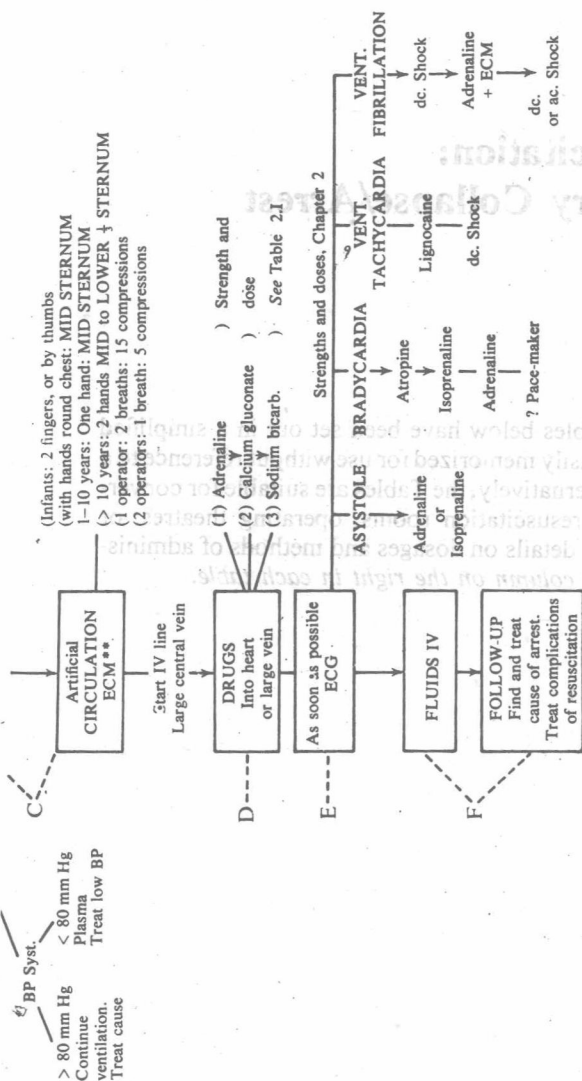
We have given prominence to this table by placing it at the beginning of the book to emphasize that without the re-establishment of cardiorespiratory function in the desperately ill child, specific treatment related to the primary disease is ineffective.

This scheme supplies a framework of treatment which is common to any of the acute conditions associated with cardiorespiratory collapse which are described in the later chapters.



# MANAGEMENT OF ACUTE CARDIORESPIRATORY COLLAPSE OR ARREST





\* Intermittent positive-pressure ventilation.

\*\* External cardiac massage or compression

#### NOTES

- (1) Resuscitation of the Newborn, see pages 599-606
- (2) Drugs in Resuscitation, see page 6
- (3) Use of Sympathomimetic Amines in Shock, see pages 115-119