Resuscitation, 8 (1980) 1—2

EDITORIAL

PUBLICATION OF 'RESUSCITATION' BY ELSEVIER/NORTH-HOLLAND

Since 1972, 216 papers from 27 countries — most of them from the United Kingdom, the United States, the Soviet Union and Italy — have been published in 'Resuscitation'. They have covered an extensive area concerned with acute medicine, emergency treatment and experimental studies in animals and man.

This issue is the first to be published by Elsevier/North-Holland of Amsterdam, the proprietorship having passed from Resuscitation Press of London recently. I would like to put on record our deep indebtedness to Mr. Anthony Evans who, as Managing Editor, set up the machinery for the journal. He has been responsible for its continued existence despite rising costs and some industrial problems in Britain. His experience has been invaluable, but the transfer of ownership of the journal to Elsevier/North-Holland means that he will no longer have this onerous task. He has been considerably assisted by Ms. Lorna Hawkes, of Resuscitation Press, and the journal would also like to record appreciation of her work.

I would also like to thank the retiring members of the Editorial Advisory Board, Dr. Frank Gollan of Miami, Dr. Henri Laborit of Paris, and Professor Bo Siesjo of Lund. Their help and distinction has been important to 'Resuscitation'. I would now like to welcome Professor George Andreyev of Riga, Professor Tess Brophy of Brisbane, Professor N. Mukharlyamov of Moscow and Dr. Josef Malatinsky of Bratislava. There are, of course, several other journals in specialised areas like intensive care, anaesthesia, forensic sciences and cryobiology. The aim of 'Resuscitation' is to publish papers which, firstly describe new findings in basic research relevant to clinical treatment of whole patients; this must include animal experiments, as, for ethical reasons, many basic physiological, biochemical and pathological phenomena cannot be examined in human beings. Secondly, papers describing new techniques of treatment or new applications of well-established techniques are of interest. Thirdly, reviews about controversial pathological mechanisms or treatment regimes are welcomed. Fourthly, case histories, including management of complex cases and the outcome of treatment come within the ambit of 'Resuscitation'. Fifthly, archival material, like reports of committees on the definition of death or the standardisation of performance of apparatus are welcomed; historical material — if not philosophical — also has a place in the journal.

There are still many fundamental and applied problems upon which research is needed. A few may be listed.

What are the biochemical changes whose irreversibility constitute cell death? Could they be slowed down or reversed?

What are the biochemical changes in the body, presumably initially in the extracellular fluids and subsequently intracellularly, which occur *during* dying? How may they be influenced by drugs, diet or physiotherapy?

What are the changes which occur when hypothermic cardiac arrest, which is reversible, progresses into death? How long does the initial stage last? Can its duration be prolonged?

Does hypothermia at temperatures of approximately 0°C have a protective effect more than that due to diminution of metabolism?

What is the pathophysiology of cerebral oedema? How does hypoxia cause it? Is it reversible?

What are the optimum conditions for artificial respiration for short and more prolonged periods, in hypothermia and in shock?

How do barbiturates increase the resistance to hypoxia?

What is the role, if any, of steroids in the treatment of patients during dying and during resuscitation?

What is the biochemical basis of coma which occurs in the absence of gross cerebral lesions?

What are the optimal haematological conditions for the full recovery of cerebral function after cardiac arrest? Can the degree of recovery be influenced by therapeutic intervention?

What is the pathophysiology of shocked lung, and what is the best treatment?

These are a few of the outstanding problems upon which research is needed. There are many techniques to tackle them, simple and complex, and their appropriateness must vary according to the country and conditions in which they are being done. In addition to the intensive or critical care aspects of 'Resuscitation', it has relevance to clinical and surgical hypothermia, rescue from drowning and mountain accident, mobile accident services and helicopter rescue, decompression in aircraft and deep sea diving, emergency treatment in accident centres, anaesthetic accidents, safety of equipment, and injuries in crime and civil disturbance. Papers have been published in most of these areas, and we are as anxious to publish work from less industrialised countries as from the most advanced centres.

It is intended to expand the scope and influence of 'Resuscitation', which will be facilitated by the resources and experiences of Elsevier/North-Holland.

HAROLD HILLMAN