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## EDITORIAL

BURNS account for some 800 deaths annually in Great Britain and cause much disability, deformity and suffering. The total number of people burnt annually is not known but it has been estimated that some 10,000 burnt patients require admission to hospital annually at a cost of £1½ million. For many years the sinister role played by lack of circulating plasma and the importance of early adequate replacement has been recognised, and at Burns Centres it is rare indeed to lose a patient in the shock phase of burns; however without adequate intravenous fluid replacement it has often been assumed that the outlook of those with extensive burns (more than 30% of the body surface burnt) was wellnigh hopeless and that the prognosis in mass burns casualties where adequate intravenous fluid replacement is unlikely to be readily available is indeed grave. In 1960, Wilson and Stirman followed up the experimental work of Moyer *et al.* (1944), showing that it was possible, in many cases, to maintain an adequate circulating blood volume by oral fluid replacement and in this number Miller reports a further series of cases treated in this way, without any added mortality or complications.

The significance of this work in the management of mass casualties or in isolated circumstances cannot be overstressed. Another noteworthy feature is the lowered incidence of pulmonary congestion as Phillips and Cope (1962) have shown that lung complications are a serious and often overlooked factor in burns. Many burns cases suffer from damage to the bronchial tree and the terminal fatal infection often starts in the lungs and not in the burn wound itself. Also, in many conflagrations toxic substances may complicate the burn, for instance carbon monoxide is almost invariably present, wool and silk can give off cyanides, artificial fabrics produce oxides of nitrogen, leather hides and cottons, and other animal or vegetable materials may produce hydrogen sulphide, while building materials liberate phosgene; flame resistant materials when they eventually burn give heavy toxic smoke, therefore the advice to crawl out of a burning building may be unsound.

The role of hyperbaric oxygen in burns is only now coming to the fore and it indeed may be life-saving in cases of facial burns or where smoke has complicated the position.

It has been cynically observed that whereas burns of 50% or more of the body surface used to die in 5 hours, with modern fluid replacement therapy death is delayed for 5 days and the problem of the late death is far from being solved. Recent work with convalescent burns serum has however given encouraging results and Lorthoir's (1963) treatment of burns by dermabrasion whilst still controversial, may be of value in removing the damaged tissue and preventing the absorption of toxic materials. The severe burn, however, will remain one of the worst types of injury with which the surgeon has to cope and the answer to these problems is unlikely to be simple.

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