Most of our cases had received varying amounts of sulfathiazole before reaching us. No untoward effects following the injection of pentothal were noted, even when large doses of the sulfathiazole had been given.

"Reactions similar to, although milder than, ether convulsions have long been recognized with pentothal. We experienced a number of such reactions, usually late in the operation or after return to the ward. They varied in degree from mild shivering to rather severe jaundice. Their incidence was reduced when the heating facilities in the theatres were improved, and they may well have been thermal in origin. A carbon dioxide and oxygen mixture was run into the bag and artificial respiration carried out by compression of the bag. Three cases required artificial respiration on the wards. This was carried out by the Schaeffer method with direct flow from the oxygen tank passed directly into the endotracheal tube under low pressure. The use of larger doses of coramine than we formerly employed, given intravenously, firmly convinced us of the efficacy of this agent. Four or five c.c. were given directly into the vein in severe cases. We did not have to resort to tracheotomy or cardiac massage in any of our cases."

J. C. M. C.


"The enemy has produced the worst wound he could, and its consequences are cumulative—dehydration increased by unusual fluid loss in sweat and vomitus, continuing hemorrhage or plasma loss, pain making rest impossible, increasing emotional exhaustion, developing infection—these and other factors are set in operation by the initial wound. Their progress in the seriously wounded is to be checked in most cases only by surgery or by death. . . . The initial assumption of the writer, in common with most physicians treating the wounded, was that bad wounds are generally associated with bad pain. This was early found to be incorrect. Careful observers in battalion aid stations estimated that only about one-fifth of the freshly wounded had bad pain. . . . Of all of the various types of wounds considered, patients with penetrated abdomens have by far the most pain. . . . Mental agitation and thirst are factors that may be as important to the patient as pain. . . . Repeatedly it was found that a small dose of a barbiturate would provide relief not obtainable by reasonable doses of morphine. Barbiturate sedation offers a real addition to the treatment of the distress of wounded men. Small doses of barbiturates (60 mg. sodium amytal intravenously) and small doses of morphine will frequently accomplish what large doses of either will fail to do satisfactorily. . . . Recognition of the man already in poor condition presents few problems. The main difficulty comes in early identification of the patient whose condition is deteriorating, recognition of this early enough to check the destroying forces. . . . The estimate of which patients will bear watching is usually made on the basis of their immediate appearance: Cool extremities and pale skin, with abnormal delay in filling of skin vessels blanched by pressure. The blood pressure may or may not be below normal. If it is, resuscitative care is obviously urgent. The pulse is usually rapid and of rather small volume. The appearance of the wound, its extent, the presence of signs of considerable blood loss either internal or external as in blood-soaked clothing, a history of delay in hospital admission, of exposure,
of exhaustion, are all points of value.

"With the fairly general acceptance of the view that the cause of deterioration of the wounded patient's general condition is reduced circulating blood volume, problems of therapy become considerably simplified. This simplification is extended with the further acceptance of the evidence that, excepting the processes that lead to dehydration, fluid lost from the circulation is to be explained by loss at the injury site alone (except perhaps shortly before death, when some general increase in capillary permeability may occur as a result of profound anoxia). Therapy falls into three main channels: Treatment of the reduced blood volume; treatment of the local wound; and treatment of pain and mental distress. . . . Experience has shown that about 2.5 per cent of battle casualties (under the conditions of study) will require intensive resuscitative measures. . . . Surgery is an inseparable part of resuscitation in its broad sense. On occasion there can be no resuscitation, even temporarily, without surgery."

J. C. M. C.


"Careful preoperative preparation was carried out, and [of 854 cases] local (1-percent procaine hydrochloride) anesthesia was used on 366 patients. . . . No patient was allowed to return to his station until the incision was completely healed. This averaged 14 days. Because it was thought that local infiltration with the procaine might be partially responsible for postoperative edema and tardy healing, spinal anesthesia, using 50 mg. of procaine, was employed instead of local. Two hundred twenty-one consecutive patients . . . were operated upon this revised technic. . . . [In] 100 consecutive cases in our series local anesthesia (1-percent procaine to which from 10 to 12 drops of epinephrine hydrochloride per 30 cc. of solution were added) was employed. In no cases was more than 5 cc. of anesthetic solution utilized, in order to minimize distortion and trauma of tissue. In all cases satisfactory anesthesia was obtained. The operative technic employed in these 100 cases [was different than in other groups]. . . . The healing time in these 100 cases was 9.6 days."

J. C. M. C.


"An obstructed airway is the most frequent cause of difficulty in anaesthesia, and if the airway is kept scrupulously clear, all other causes of anaesthetic dangers are the more easily counteracted. Obstruction to free breathing may occur anywhere between the lips or nostrils and the trachea. . . . If the head is turned to one side, then the action of gravity does not tend to approximate the soft tissues forming the anterior and posterior walls of the pharynx. . . . A soft rubber airway of suitable size and shape may be inserted in the mouth. . . . In some very awkwardly shaped faces neither a suitable position of the head nor a suitably shaped artificial airway can be found. A rubber tube introduced in one nostril reaching to below the base of the tongue, but above the epiglottis, may solve the problem. . . . Laryngeal spasm may occur if any spasm-producing stimulus is given while the patient is insufficiently anaesthetized. Such a stimulus may be either local to the larynx, or general. . . . Its prevention is the avoidance of any such stimulus under