

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.

FRUIN, R. L., AND McLAUGHLIN, C. W., JR.: *Adult Circumcision; Report of 854 Operations on Naval Recruits*. U. S. Nav. M. Bull. 45: 42-46 (July) 1945.

"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 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.

ROBERTS, F. W.: *Anaesthesia for General Practitioners*. Clin. J. 74: 64-68 (Mar.-Apr.) 1945.

"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

inadequate anaesthesia, and its treatment—when it does occur—is to stop the stimulus, keep the rest of the airway clear, give pure oxygen so that when the next breath is taken it will most quickly rectify the resultant anoxia, and then to deepen the anaesthesia sufficiently before allowing the stimulus to recur. Vomiting during anaesthesia is another source of obstruction. . . . Vomiting can be largely prevented by avoiding general anaesthesia on a full stomach. . . . When vomiting does occur the operation should be temporarily suspended, the pharynx and mouth and nose cleared of vomitus by swabbing or suction, or both. When the airway has been restored the anaesthesia is deepened to the requisite level before the operation is continued. . . .

“Nitrous oxide is generally assumed to be the safest of anaesthetics. Two points are not realized as fully as they should be: First, it is safe only if enough oxygen is given with it. Second, when enough oxygen is given with it, it is a poor anaesthetic agent. . . . Notwithstanding all the criticisms raised against it, by the protagonists of ultramodern anaesthesia, ether is probably the safest stand-by of the general practitioner anaesthetist. . . . Chloroform . . . should never be used to obtain profound muscular relaxation, nor for any prolonged operation. Ethyl chloride . . . should be used with the greatest care—only as an induction or for very short anaesthesia—and the strictest attention paid to the clear airway. . . . I do not think sufficient trial has been made of [trilene] . . . to recommend its use by the non-specialist anaesthetist. . . . Always try to find out what operation the surgeon is going to do, what position he will want the patient in, the depth and probable duration of the anaesthesia, and whether the diathermy or cautery is to be used. These simple data will

help you considerably in deciding what anaesthetic agent or agents to use, how to maintain a perfectly unobstructed airway, and whether you are likely to need prophylactic or resuscitative intravenous saline, blood or plasma. . . . The patient's general health must, of course, always be taken into account in deciding what anaesthetic to give. . . . There is no such thing as fool-proof anaesthesia, but fools should not attempt to give anaesthetics.” 1 reference.

J. C. M. C.

SIDDONS, A. H. M.: *Sympathetic Block in Vascular Injuries*. *Lancet* 2: 77 (July 21) 1945.

“In the last few years a number of papers have appeared recommending sympathetic nerve block by injections of local anesthesia for limbs in which arterial injuries have endangered the blood-supply. . . . In the absence of clinical proof of the value of sympathetic block in traumatic lesions of major vessels its physiological basis merits careful consideration. . . . Experimental work in human beings, in which the blood-flow to the skin and muscles of the limbs is measured with a plethysmograph or by skin and muscle temperature readings, has shown that while sympathetic paralysis causes vasodilatation in the superficial vessels it usually constricts the muscle vessels. . . . In wounded limbs with an endangered blood-supply, muscle ischaemia is usually more extensive than skin ischaemia, and sympathetic block is then contra-indicated. . . . In traumatic arterial spasm sympathetic block does not always relieve the condition and may do harm.” 19 references.

J. C. M. C.

KARP, MARY: *Anesthesia for the Urological Patient: a Review of 973 Cases*. *J. Urol.* 53: 740-748 (May) 1945.