

tainer to soak up enough water to put it into solution; it can then be administered to the patient. If necessity demands, the cellophane container can be placed in ordinary tap water, as its wall is impermeable to bacteria. This last point is of great importance, as it is of little avail to prepare dried plasma for easy transport to the front lines and then to have to ship along an extra load of sterile distilled water for dilution purposes. . . .

"The treatment of shock . . . includes: first, beginning treatment before the condition has progressed irrevocably; second, correcting the oligemia and preventing further loss of fluid, and third, maintaining adequate oxygenation of the tissues until the patient's own improved blood volume and circulation cause the anoxia to disappear spontaneously." 49 references.

J. C. M. C.

KELLOGG, J. F.; PHILLIPS, R. B., AND SAHLER, LEROY: *Cyclopropane Anesthesia in Military Surgery*. Mil. Surgeon 89: 177-182 (Aug.) 1941.

"One may say that the explosiveness of cyclopropane forbids its use in military surgery. . . . Professor Horton of Massachusetts Institute of Technology states that statistics available do not indicate that any one anesthetic gas is more explosive than the others. . . . In military surgery especially, we must have anesthesia which is instantly available to the patient, and for wounded men, especially those with chest wounds, there is no better anesthesia than that given by cyclopropane." 11 references.

J. C. M. C.

ADAMS, R. C.: *Shock, Blood Transfusion and Supportive Treatment*. Mil. Surgeon 89 34-41 (July) 1941.

"Shock, one of the real emergencies, is an acute physiologic disturbance, the onset of which may be sudden or

gradual. Essentially, it is a condition of circulatory imbalance, which, if severe and untreated, may result in death. It can occur with or without physical trauma. Clinically, the most common causes are traumatic injuries, burns, surgical operations, intoxications (as from drugs or from metabolic or bacterial diseases), serum disease, and acute abdominal phenomena such as obstructions, perforations, peritonitis and pancreatitis. Psychic shock occurs without physical trauma and is common in war time. . . . That shock is a vicious cycle has been recognized by many and Cannon noted this phenomenon in seriously wounded soldiers. . . . Circulatory deficiency produces a variety of side effects which together tend to produce the vicious cycle. These include a deficiency of the metabolic processes, which results in lowered oxidation and heat production and capillary atony, which leads to transudation of plasma from the blood, increasing its concentration and viscosity. These factors lead to stagnation of the blood in the capillary regions, resulting in diminished arterial blood flow and venous return. Lack of oxygen in the tissues also is an important factor in that it increases the capillary permeability and hastens the onset of stasis. . . . Loss of blood by hemorrhage may produce deficient oxygen content in the tissues by reducing the blood volume, thereby causing capillary atony. . . . The direct loss of blood and tissue fluid is a contributing factor to the production of shock since the blood volume is lowered and oxygenation of the tissues thus becomes defective. . . . The diagnosis of shock is largely clinical but hemoconcentration is a valuable diagnostic sign. Some of the tests employed as diagnostic aids are the specific gravity of whole blood, specific gravity of the plasma and the hematocrit reading. The pathology of shock may be summed