

recipient's blood grouping. In an extreme emergency this eliminates the necessity of knowing a prospective recipient's blood grouping if a plasma transfusion is needed in a great hurry. . . . As experimental and clinical data continue to be presented to the profession, we shall become convinced of its value in specifically indicated cases. It would be a considerable contribution to medical science if quantities of blood were given voluntarily to provide material to carry on this work." 2 references.

J. C. M. C.

HUBBARD, M. E.: *Discussion of Blood and Plasma Transfusions*. Mil. Surgeon 88: 125-128 (Feb.) 1941.

"The current use of preserved human blood for transfusion has been especially motivated by economic pressure in the United States and by military necessities in Europe. . . . Let us consider the advantages of using blood plasma as compared to whole blood, or 'banked blood.' Using whole blood, there is typing, serological examinations, and cross matching that has to be done; whereas, in plasma, or serum, this is unnecessary due to the laws governing hemo-agglutinations—that opposite sera neutralize each other's agglutinins. Also, consider that the blood pools have at least 35 donors and the plasma, or serum, derived from this pool tends to neutralize one another in vitro, and that in vivo the reaction is accompanied by an absorption of agglutinin by the recipient's tissue. Larger pools would be present in wartime and the agglutination titer would be lower. . . . Dried blood plasma has been used in America and England. It contains all the characteristics of original blood plasma.

"We have between eighty and ninety Veterans' Administration hospitals located in strategic points. These hospi-

tals, with the Army and the Navy hospitals, could be used as blood plasma and serum centers. The administrator and the medical director of the Veterans' Administration hospitals have insisted on high standards and modern equipment, and our hospital in Los Angeles at the present time could assume the duties of making blood plasma and serum, if necessary. The value of preserved bank blood and blood plasma cannot be challenged. Its use in war and peacetime will save many lives and will advance our standard of medicine."

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SILVERMAN, D. N., AND KATZ, R. A.: *Plasma Transfusion (Part I)*. Internat. M. Digest 38: 59-63 (Jan.) 1941.

"At present there are two types of plasma being used, the wet and the dry. Wet plasma is defined as the liquid plasma separated from unclotted blood, and is either modified or diluted with saline or glucose. By dry plasma is meant plasma which has been subjected to various drying procedures and finally put up as a powder for ultimate regeneration with distilled water when needed.

"Wet plasma is prepared at relatively low cost, not requiring expensive apparatus. It is easily dispensed from the same storage bottle, insuring maximum aseptic safety. Another factor of importance is the speed with which it can be made available, as contrasted with dried plasma which must be regenerated with distilled water. Particularly is this of importance in military practice, where swiftly moving mobile units make it necessary to discard procedures which may prove cumbersome.

"The dried plasma has its principle virtue in being concentrated into a very small space, being kept indefinitely in hermetically sealed ampules. But, as has been observed, it is still neces-