

Mr. Paul de Kruif should have placed . . . research in such an unenviable position before the medical profession.'

"Strange as it may seem, the foregoing quotations are from the editor of the *Journal of the American Medical Association*."

Comment: It is most unfortunate that comments made in regard to this technic have raised hopes so high in so wide a circle of prospective recipients of an overstressed pain relief measure before the facts have been properly weighed and attested.

P. M. W.

PRESMAN, D. L.; JANOTA, M.; WESTON, R. E.; LEVINSON, S. O., AND NECHELES, H.: *Intensive Human Serum Treatment of Burn Shock and a Modified Formula for Calculating the Amount of Infusion*. *J. A. M. A.* 122: 924-928 (July 31) 1943.

"The usual serum or plasma therapy of acute extensive burns has been found to be inadequate."

"Serum or plasma therapy must be given from the point of view of restoring a normal blood volume and not by units of fluid."

"Our data and clinical observations definitely indicate the need for much larger doses of serum or plasma in the treatment of burn shock, than are provided by the common formulas. By far the greater part of the fluid should be administered during the first twenty-four hours."

"We suggest in the treatment of extensive burns in adults the immediate administration of 50 cc. of serum (or 60 cc. of plasma) for every per cent of body surface burned and in addition, 20-30 cc. for every percentage point should be administered during the first twenty-four hours and another 20-30 cc. in the first 72 hours, following the burn. Total administration therefore, should be at least 100-110 cc. for each

per cent of body burn. Crystalloids fluids should not be given during the first 24 hours. Fluids and a high protein diet by mouth should begin as soon as possible."

"Simultaneous analyses of blister fluid and of blood plasma have been performed. Blister fluid contains a concentration of proteins equivalent to 70-80 per cent of the plasma proteins. The albumin content of blister fluid was fairly constant, but the globulin content showed decided variations independent of the albumin or globulin values of the blood and of the albumin values of the blister fluid."

V. T.

C. B. H.

NECHELES, H.; LEVINSON, S. O.; JANOTA, M.; WESTON, R. E., AND WEISMAN, V.: *Studies on the Therapy of Hemorrhagic Shock. I. The Effect of Iso-Osmotic and of Concentrated Serum and Plasma in Normal Dogs*. *Surg., Gynec. & Obst.* 77: 337-343 (Oct.) 1943.

"Healthy mongrel dogs were bled under carefully controlled conditions and then treated by infusions of iso-osmotic serum and plasma and concentrated serum and plasma . . . all the animals received comparable amounts of protein, the two types of infusion differing only in the total fluid volume administered. . . ."

". . . Results demonstrated that iso-osmotic plasma protein solutions are more effective in the treatment of post-hemorrhagic shock in normal dogs than are concentrated solutions. The relative clinical improvement, restoration of blood pressure and plasma volume, ability to tolerate further blood loss, and survival times strikingly demonstrate the superiority of iso-osmotic over concentrated material." 23 references.

A. W. F.