

MEDICINE

Concentrated Blood Plasma Most Effective for Shock

Because It Was Available for Immediate Treatment Of Hawaii Casualties, Deaths From Burns Were Low

BLOOD plasma is the most effective means for fighting shock in war wounded soldiers, sailors, or civilians, Dr. Virgil H. Moon, professor of pathology at Jefferson Medical College, declared before the American Society of Clinical Pathologists meeting in Philadelphia.

Even more useful, he added, is plasma which has been concentrated by evaporation to one-half or one-fourth of its original volume.

Blood plasma was available for the immediate treatment of those injured at Pearl Harbor and as a result, Dr. Moon said, the percentage of deaths among seriously wounded and burned victims was the lowest ever reported from similar casualties.

Plasma fights shock by drawing water from the body tissues into the blood, he explained. Ordinarily, the balance between water in the blood and that in the tissues is maintained by the action of the walls of very small blood vessels, called capillaries. These capillary walls are as thin and delicate as the wall of a soap-bubble.

When they get out of order the fluid part of the blood passes into the tissues, the total volume of blood is reduced and much of it becomes stagnant and out of circulation in the dilated capillaries and tiny veins in the organs of the body. As a result, not enough blood is returned to

the heart to keep blood flowing through the body.

The patient becomes weak, pale and restless. Functions of all body organs are decreased. The temperature falls, the pulse becomes feeble and rapid, the blood pressure, sinks and the condition closely resembles that which develops after serious hemorrhage. Dr. Moon quoted one authority as saying "The patient bleeds to death into his own capillaries."

If there has been extensive bleeding accompanied by shock, transfusions of

whole blood are most useful. If the blood is concentrated by loss of its plasma, however, transfusions are not effective and may even be harmful, Dr. Moon declared.

The soap-bubble-thin walls of the capillaries are very susceptible to the effects of various injurious agents and conditions. These include the poisons of bacteria, products of protein cleavage, extracts of normal tissues, abnormal metabolic products, various chemicals and poisons, and even moderate lack of oxygen. When affected by any of these, the capillaries dilate and their walls allow the plasma to leak out into the tissues.

Once a patient has gone into shock, the deficient circulation of blood causes a lack of oxygen which itself damages the capillaries and increases their dilatation and the leakage of plasma. This makes matters worse by keeping up, in a vicious circle, the conditions that lead to death if not promptly counteracted.

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PSYCHOLOGY

Propaganda Should Harmonize With Attitudes of the People

AMERICAN morale can be boosted to the point where victory is possible only if officials issuing government propaganda understand the attitudes of the American people, Dr. S. S. Sargent, of Barnard College, Columbia University, told the meeting of the Eastern Psychological Association in Providence.

Bombing raids, the attack on Pearl Harbor and other war events have a much greater effect on morale than any amount of propaganda, regardless of whether it is so labeled, Dr. Sargent emphasized, but nevertheless propaganda can be effective.

Here are some practical suggestions, based by Dr. Sargent on a poll of a sample population cross-section conducted this month:

1. Americans hate war. Any propaganda glorifying war would be unsuccessful; we should agree that war is a dirty business and we should hurry the victory all we can.

2. Americans do not believe that the end of the war will usher in the millennium. Propaganda which depicts the "parliament of man, the federation of the world" as the outcome of the present conflict is likely to be greeted with "oh, yeah," Dr. Sargent said.

3. Americans do not hate the German, Italian or Japanese people, but they do hate the Fascist-military regimes in power in those nations. Enemy aliens have not been mistreated here, nor have we banned Goethe or burned all our Japanese lanterns.

4. Americans do not believe their allies in this war are angels.

5. Americans doubt that every one is sacrificing alike in this war.

6. Americans do not believe their democracy is perfect.

7. Americans are suspicious of censorship and propaganda in their news. Censorship for military reasons is agreed upon, but omission or distortion of news for any other reason will prove destructive to morale, Dr. Sargent indicated.

The most effective sort of propaganda, he said, is the force of actual facts.

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Two ships a day are being launched by American shipyards.

"Jeeps," the quarter-ton reconnaissance cars of the Army, do good work in plowing, harrowing, and other farm operations, according to reports of a recent Department of Agriculture test.

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