

to the extent that at the time of the report the patient was up and about the ward. This experiment of Barrows is not of course entirely new. Other investigators have from time to time attempted to combat blood poisoning by the intravenous injection of antiseptics and germicides. But in almost every instance the injection has not been a success, and the method has been discarded, the reason being that the material which was qualified to destroy the protoplasm of the invading micro-organism was also qualified to destroy the living cells in the blood stream or to act upon the cells of the blood-vessels or the tissues surrounding them in a deleterious manner.

We confess to having some skepticism as to the value of this use of formaldehyde. It is true that Ewing has made experiments in which large quantities of formaldehyde were injected into the blood-vessels of rabbits without untoward results either upon the general system or upon the blood cells, and that as long ago as 1900 Maguire reported in the London *Lancet* the results of experiments which he made upon himself, showing that such injections were apparently harmless in moderate quantity. Thus, he injected as much as 100 cubic centimeters of a 1-to-2000 solution into the vein of his arm, and shortly afterward detected evidence of aldehyde in his urine; and again, on another occasion, an even larger quantity, with the result that he produced, first albuminuria, and then hematuria. Maguire thought that 1-to-200,000 of formaldehyde solution would act as an efficient germicide.

In these days of wonderful scientific discovery it is not safe to condemn any therapeutic procedure on purely theoretical grounds, and therefore we look forward with interest to further experimentation along this line, although we cannot help feeling that it is not founded as yet upon accurate scientific observation. It must be remembered that on the one hand under ordinary circumstances the blood possesses extraordinary power to destroy microorganisms, and that it is only when prolonged disease has exhausted this power that microorganisms can exist in it with impunity. Again, it seems scarcely credible that formaldehyde can restore the bacteriolytic power of the blood, nor can we believe that an agent which is powerful enough to destroy the streptococcus can circulate in the blood without doing any damage to the endothelial cells lining the blood-vessels, and the blood cells themselves. The fact that Maguire's observations of over two years ago have not been followed by the general application of this method to the treatment of septicemic attacks seems to us to prove that the profession in general has had a well-grounded timidity in regard to the employment of so radical a therapeutic measure. An item on this subject will be found in our Progress columns in this issue.