

INTRAVENOUS TRANSFUSION OF NORMAL SALT SOLUTION.

THE introduction of what is known as normal salt solution (a seven-tenths of one per cent. solution of sodium chloride in water) into the system in the treatment of disease and for the prevention of certain conditions, has come into such general use, and its value has been so thoroughly tested by its repeated use in those cases, that it has occurred to me, that a few remarks on what little familiarity I have with the subject, and what benefit I have derived from its use, might be of service to others in the profession whose opportunities for doing such work have been limited.

From what I can learn by enquiry, I feel that its use in this district has been too limited, and a few remarks on its usefulness in certain cases, simplicity of apparatus, mode of introduction, etc., would not be out of place.

In regard to the value of normal salt solution on renal secretion we have but to refer to our physiology. Foster has demonstrated an immediate increase in renal secretion, on the transfusion into a vein of so small an amount of salt solution that no general rise of blood pressure was produced. He demonstrates this with all the renal nerves severed, which shows that the effect produced on the kidneys is a specific one on the secreting cells.

Again this has been demonstrated by Dr. Kemp of New York, who, in his experiments with intestinal irrigation, transfused half an ounce of normal salt solution, to which he added a very small amount of potassium ferrocyanide. In from one and a half to two minutes a marked increase in the amount of urine secreted was shown, by counting the urine drops by means of a registering lever and kymograph, and in the same space of time the urine gave the prussian-blue reaction with chloride of iron. The amount transfused in this case was also so small that there was no appreciable effect on the general blood pressure.