

Another point to be noted in these cases is that under the antitoxin treatment not only were the constitutional symptoms lessened in severity, but the spread of the membrane appeared to be checked, and what had already formed was more quickly dissolved and removed. Possibly the explanation of this is to be found in the fact that, as the poison in the system is neutralised by the antitoxin, the various tissues of the body retain their vitality to a greater extent, and thus have a greater power to resist the invasion of the bacilli. It may, I think, be accepted as an axiom that the lower the vitality of the tissues the more liable to infection the organism, and, conversely, the greater the vitality of the tissues the greater the power of resistance, and the less the liability to infection. If this be true, and if antitoxin has, as I believe it has, the power of overcoming the evil effects of the diphtheritic poison upon the organism, then the action of antitoxin is directly constitutional and indirectly local.

I would mention a few points regarding the injection of antitoxin and its effects. With us the injection is always made into either groin, and we prefer to inject the full amount at one time, using a syringe which holds 1,000 units. Usually within a few hours after the injection the temperature was found to rise slightly—never more than 1° F. Frequently there appeared around the point of injection a rash closely resembling that of scarlet fever. This rash would cover a circular space of 3 or 4 inches in diameter. The only inconvenience occasioned by it was that the patient would complain of it being itchy. In four of these cases this rash extended over the whole body, and then presented an appearance somewhat between that of scarlet fever and that of measles. I am of the opinion that this rash is occasioned by some impurity in the antitoxin solution. Latterly we have not had this rash in our cases.

It might well be asked is this antitoxin curative, or, in other words, has it the power of neutralising the poison absorbed from the seat of infection? Here we have a record 100 successive cases without a death. I am well aware that this number is too small to decide the question. But be it remembered, as stated above, that the local treatment differed according as the patient was treated by one or another of thirteen physicians. The in-