

symptoms; frequently a tonsil may be covered with spots like a follicular tonsillitis, and one of the spots be true diphtheria and the case treated for an ordinary tonsillitis, when in reality a true case of diphtheria is developing in a medium that will prove a regular hot-bed for the development of the Klebs-Loeffler bacilli.

All cases suffering from sore throat should receive the benefit of the doubt as to whether the case be one of simple or diphtheritic sore throat by a bacteriologic examination, and the earlier such an examination is made the greater the chance of saving our patient.

Our Detroit Board of Health has furnished test tubes for the making of cultures from suspected sore throats, and I believe that if they were used more often, the epidemics in our city would be reduced.

The dose to be administered at first is a question of importance. I think it is best to overdose at first, than to give a lesser curative serum. The bulk is the same, whether 500, 1,000, 1,500 or 2,000 units are used, and as the inserting of the needle is always painful, it is better to give a full dose early, rather than to have to repeat the injection.

The amount to be used depends upon the length of time the patient has been sick, the extent over which the membrane has spread and the thickness of the membrane.

As to the antitoxin to use, having tried five or six different, makes in the past two years, I have found that which has been manufactured by Parke, Davis & Co. most efficacious. Apart from the potency of this brand, I must commend the ingenious manner in which it is marketed, viz., in hermetically sealed glass bulbs, which exclude the air and keep the serum strictly aseptic.

From the charts I exhibit, you will see that when a dose was given of sufficient strength, the action on the toxin producing the constitutional symptoms, namely, fever, high pulse and great prostration, was prompt and effective; the fever being reduced rapidly. Laryngeal cases recovered slowly, but showed marked improvement after each injection.

Strange as it may seem, the serum varies in strength, different manufacturers furnishing the same number of units in various bulks, and many brands containing a less number of curative units than claimed.* Such brands are to be avoided. The most concentrated serum is, I think, the best to use, as there are rarely any bad results from its injection. It has been noted in several cases that an erythema or urticaria develops around the point of injection. None of the severe symptoms as noted by some have been noticed by me, though several hundred injections have been given under my