MY RESULTS WITH GONOCOCCIC VACCINE.*

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Doctors are ever on the alert for something that will effect a cure more easily and more quickly than the remedies that are already in use, consequently each new preparation, whose merit is considered worthy, is eagerly seized upon by the profession, and when a few successes have been achieved, it is immediately proclaimed a panacea for all ills and used, not only for diseases for which it is recommended, but often for every known illness, till, finding it useless in many conditions, it is condemned and pronounced worthless in all. In other instances the good results obtained in certain selected cases so enthuse the observers that they become over-enthusiastic in their estimate of its value, and misleading reports are sent broadcast throughout the land. Especially is the latter exemplified in gonococcic vaccine therapy, and to my mind it is clearly a question of the pendulum of professional approbation having swung too far.

I have seen report after report from the pen of well known men heralding their successes with gonococcic vaccine in almost every variety of neisserian infection, and yet those who are constantly treating this class of cases, not only with gonococcic vaccine, but with every other known remedy, are only too cognizant of the absurdity of these claims. My experience with neisserian vaccine therapy has convinced me that there is an element or elements in it that we do not understand and until this unknown factor is eliminated we will meet with only meager success in this new field that Sir A. E. Wright has opened for us.

As far as a case of either acute or chronic anterior or post gonorrhea is concerned, my experience has convinced me that gonococcic

vaccine, as a cure, is *absolutely worthless*. Parke, Davis & Co. and Mulford & Co. both sent me large quantities of the vaccine for experimental purposes. I used it in all doses and at varying intervals, and in no case did I effect a cure or see other than a modicum of improvement. This statement coincides with statements of prominent genito-urinary men in New York who have also experimented extensively with gonococcic vaccine. On the other hand, some of the complications of both acute and chronic gonorrhea sometimes yield promptly and satisfactorily to the administration of the vaccine, and the object of this paper is to point out just where results may be expected, and in the discussion that may be evoked to hope that something may be elicited that will assist us in finding the unknown element that now marks the difference between a favorable and an unfavorable result.

Given two cases of gonorrheal epididymo-orchitis apparently in all respects similar, give to each the same quantity of gonococcic vaccine, and in one case there will be marked improvement and quick subsidence of all symptoms, unaided by other means, while the other may pursue a violent and exceedingly painful course, despite other remedies, such as hot or cold applications, ichthyol or guaiacol ointment, strapping, etc., used in conjunction with the vaccine. Why this is true will never be known till vaccine therapy is thoroughly understood, and then, and not till then, will uniform and satisfactory results be obtained with this method of treatment. The complications in which the vaccine have given the best results in my hands are: Epididymo-orchitis, arthritis and prostatitis.

As to the dosage: In epididymo-orchitis

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and prostatitis, I usually give about 25,000,000 the first injection and increase the dose 25,000,000 to 50,000,000 at each subsequent injection. The interval, between injections, should not be less than four days, as I have often noted quite a pronounced increase in the pain in epididymo-orchitis and arthritis when the injections were given oftener than every four days. The site of the injection is immaterial and I have never seen any untoward results following the use of gonococcic vaccine, even when given in very large doses, other than a slight redness about the region where the injection was given. In arthritis I usually begin with 50,000,000 and increase the dosage 50,000,000 each time till results are obtained. It is indeed gratifying to have this distressing condition respond nicely to this form of treatment.

Another point I desire to bring to your notice as being worthy of consideration, that I have observed and also seen reported by some genito-urinary man, I think Dr. Aromstam, is its value in determining when a given case of gonorrhea is cured. Often it is true that in chronic posterior gonorrhea we can continually find large amounts of pus in the prostatic secretion, long after we have failed to find any gonococci. Frequently in these cases if an injection of 25,000,000 dead gonococci is given, gonococci can be found in the prostatic gland. Failure to find the gonococci after giving the vaccine in these cases is strong presumptive evidence that the case is cured.

In the treatment of gonorrhea in women, I have several times noted cases that seemed to be benefited by the use of the vaccine. Whether this improvement was a coincidence or not, I am unable to say, as other means of treatment were used at the same time, and I do not believe the question will be settled till vaccine therapy is placed on a more rational basis.

I may also state that the administration of gonococcic vaccine is not a prophylactic against the occurrence of complications as I have often seen them develop after the vaccine had been used.

The superiority of anti-gonococcic serum over gonococcic vaccine is a mooted question, but in my hands neither has the advantage. In some cases the vaccine seems to give better results, while in others the serum. If I fail to see any improvement after the administration of the vaccine, I resort to the serum, and vice versa, and in this way have often obtained results that the vaccine, or serum alone, would not give.

This paper is not intended to dampen your ardor in regard to the value of gonococcic vaccine, but, on the contrary, I hope it will prove the means of stimulating further experiments, for only in the careful and unlimited study of the administration of gonococcic vaccine, can we hope to solve the unknown factors that prevent it from being to gonorrhea what diphtheria antitoxin is to diphtheria.