

taken up and carried through the vessels, carried by the continuous action of the mucous membrane into the tubes, and we have secondary infection not only of the tubes and ovaries, but we have systemic infection through the absorption into the system. It is important to early render this surface sterile and prevent the development of the disease. In such cases he would advocate, in addition to irrigation, the use of the curette, the scraping away and removal of the infected debris, and, after irrigation with a chemical solution, the introduction of a twist of gauze to the fundus, and in this way make sure that the subsequent drainage was perfect and complete.

Dr. Geo. H. Rohé, of Baltimore.—It is my conviction, based upon observation and some personal experience, that the practitioner who is in doubt about antisepticism in obstetrics will lose nearly as many patients from septic troubles as one who misbelieves in that method. If there is any one thing necessary in practising aseptic obstetrics, it is a firm belief that it is absolutely necessary in every case. Consequently it has been well said that the time to begin treating sepsis in a lying-in woman is before she is septic. But even after the septic condition has been established, a thorough carrying out of the aseptic practice will result in success in a large majority of cases. Any one who has ever seen the interior of the uterus of a woman who has died of septic infection after delivery will appreciate the importance of more than superficial measures—not merely an injection now and then, even thoroughly made, but also the use of some chemical disinfectant which will inhibit the rapid multiplication of the germs.

Dr. J. H. Carstens, of Detroit.—It has been pretty well settled that normal cases had better be let alone; but where symptoms develop it is well to start irrigation very early. There are cases where the temperature rises up to 103° or 104° or 105°, where the irrigation has no effect at all, even if you irrigate every three hours, or two hours, or every hour. There is no debris there, nothing wrong with the uterus, the physician or midwife who attended the wound was aseptic, and still that woman has puerperal fever. These are cases of auto-infection. We know that when women have a latent disease of the tubes, be it tubercular, gonorrhœal, or an ordinary pyosalpinx, the act of parturition will cause it to break out in full force, or will cause a rupture of the tube, which will allow pus to run down into the uterus and there set up a violent septic poisoning. These are the cases which need laparotomy. We ought to have it before our minds that there are cases which are due to a poison being introduced from without, by the physician or nurse, and there are other cases where the cause is within the patient and may have been lying latent for years, simply needing something to cause the explosion.

Dr. Cushing, of Boston, in confirmation of what the last speaker said, reported a case that apparently sprang from tubal infection.

Dr. A. H. Wright, of Toronto.—I indorse the statements expressed in the paper. The subject is of the utmost importance. Nothing in the art of obstetrics has given me more anxious thought than this question of antiseptis. It is my practice in the lying-in hospital and in private practice to use intra-uterine irrigation very seldom. In itself it is

an evil capable of doing a certain amount of harm. When the necessity arises I certainly do not scruple at once to go on with irrigation in the interior of the uterus. As far as I have seen irrigation carried on by general practitioners, I have been sometimes rather horrified at the miserably careless and indifferent way in which it was done. It is one of the most difficult things to teach hospital students how to do this properly.

Dr. J. F. W. Ross, of Toronto.—I do not think ordinary water used as an injection is as good as some antiseptic solution. My experience with intra-uterine irrigation has not been as favorable as I could wish. Two cases of puerperal septic trouble coming under my notice within the last two years have been treated by packing the uterine cavity with iodoform gauze through a speculum, and in this way attempting to subdue the formation of the poisonous ptomaines in the cavity.

Dr. Kellogg, of Battle Creek, said there was another use for irrigation which had not been mentioned. In a case in which the temperature rose to 104½° irrigation was employed, but did no good. By the application of a hot douche, 140°, the uterus was made to contract. The next morning the temperature was normal, and did not rise again. His plan of using the douche is to introduce a large drainage tube, then a small catheter through the drainage tube, and then to use water at a temperature of 130°. Lower temperature is often the reason for failure. Warm water relaxes, hot water contracts. Very hot water is efficient as a germicide. The uterus will bear a still higher temperature.

Dr. McMurtry, closing the discussion.—I feel very grateful to the Fellows for the very cordial manner in which they have received the suggestions I intended to convey. The purpose of the paper was not to discuss the routine use of intra-uterine irrigation after labor, or to deal with the prophylaxis of puerperal sepsis, but simply to emphasize the point that this very valuable method, which we can institute in the very initial stages of sepsis, is not generally appreciated by the great body of the profession; that the golden moment when it can be most efficient is lost by the administration of a hypodermic dose of morphia, under the mistaken idea that the initial stage of sepsis is a little milk fever or malaria, or some little disturbance brought on by the process of labor. Dr. Carstens, of Detroit, has alluded to a class of cases which should not be considered in connection with this treatment at all—that is, the fulminating cases, cases of sapremia, where in a few hours the system is thoroughly saturated with the poison; cases that nothing in the world can resist. Even in the initial stages of these cases this treatment can do no harm. The cases alluded to by Dr. Cushing are scarcely within the scope of the discussion. There is no such thing as auto-infection of a woman after labor. Cases of tubal disease belong to that class where the disease was present before labor began. They may have been mechanically affected by the process of labor and the muscular contractions, so as to complicate the case. They are complications of the puerperal condition. Moreover, the treatment of those cases by laparotomy, evacuation, removal of the disintegrating structures, drainage, and irrigation, is but an application from above of the same principle of treatment.