Jan. 19, 1895]

## On Antiseptic Midwifery in Private Practice.

## BY SOLOMON C. SMITH, M.D., M.R.C.P.

7HE act of childbirth must be looked on as a 2 great surgical operation, although it is performed by nature alone. During the preceding nine months, the fœtus has been growing from a mere speck to a fully-developed child; and, during the same time, the uterus, or womb, naturally a small thing, only about three inches long, has expanded into a bag large enough to contain the child, the afterbirth, and a varying, but often considerable, quantity of fluid. This expansion of the uterus is also not a simple stretching, but a true growth of muscular tissue, so that it becomes strong enough, not merely to hold its contents but when the time of childbirth arrives, to expel them by main force into the outer world. The child in the womb floats in a watery fluid, contained in a bag, the remains of which are expelled, along with the afterbirth, at the termination of the labour. The one point by which the child is attached to the mother is the cord, a rope of blood-vessels terminating in the afterbirth, a structure intimately connected with the tissues of the uterus. At the end of labour, this intimate connection between mother and placenta is torn down, the afterbirth is stripped off from the interior of the womb and forced out after the child, and where it had been attached there is left a raw surface, analogous to the wound left by a large surgical operation. This, however, is not the only, and not always the most important, wound left by nature's great operation. Till labour commences the mouth of the womb was closed, and during the few hours of its continuance it has stretched to such an extent as to allow the child to be forced through; so also have the other portions of the passages; and in this process, the various structures so dilated are apt to be torn; stretching gives place to splitting and laceration of the tissues, especially about the mouth of the womb and at the outer orifice, and thus wounds are formed which are exposed to just the same risks, and require the same antiseptic precautions as those which are produced by other surgical procedures.

The ordinary antiseptic method of treating wounds, differing in details as it may do at different Hospitals, always has the same objects; firstly, to prevent the access of germs of decomposition (septic organisms) during the operation; secondly, to prevent their setting up decomposition in or around the wound afterwards. In the early days of antiseptic work, although it was certain that suppuration and septic diseases were caused by germs getting into wounds from without, it was by

no means clear by what route they usually gained access; and, therefore, very elaborate precautions were recommended with the object of guarding against their approach in every possible direction. But it has by degrees become more and more apparent that sponges, instruments, and hands, are the chief vehicles of the contagion at the time of the operation, and decomposition in the discharges the chief mode of entry afterwards; and that, if we can but guard against these lines of approach, all will go well. It is this simplification of antiseptic procedure, this truer conception of the antiseptic system as a system for securing surgical cleanliness, that has made it possible to obtain for midwifery the manifold advantages which surgery has so long derived from the acceptance of its principles.

In a perfectly natural labour, not interfered with in any way, nothing enters the patient's body; everything passes outwards; inwards nothing goes; and all we have to do is to prevent decomposition in the discharges afterwards. In a large proportion of cases, doubtless, this can be effected by very simple means, such as the rapid removal of soiled linen, and the free use of soap and water; but even in these simple cases a great additional security is gained by the use of antiseptics. Unfortunately, however, we never can be sure on going to a case that it will be a simple one; examinations may have to be made, operations to be done, instruments to be used-in all which contingencies antiseptics are absolutely necessary to prevent the chance of introducing infection. But there is another consideration more important still. If women are to have efficient help in their confinements, they must have the assistance of doctors and nurses, who of necessity go from case to case, and it is never possible to be absolutely sure, unless antiseptics are used, that they will not carry infection from one case to another. There seems, unfortunately, but little doubt that in a certain proportion of the cases of puerperal fever this is the way in which infection is introduced, and it is abundantly clear that it is only by the use of antiseptics that the skilled help which women ought to have in their hour of need can be prevented from becoming in many cases a curse rather than a blessing. Hence it is the bounden duty of every Nurse who attends confinements to know exactly what precautions to adopt; and, after all, they are very simple. The first thing which is essential is that everything which touches the patient shall be rendered free from infection by thorough washing and by soaking in disinfectants.

The best disinfectants, and those in most general use, are perchloride of mercury and carbolic acid; the first for the cleansing of the patient, the doctor, and the nurse; the second for the cleansing of the instruments. Both are poisonous and must be so labelled, and should be kept carefully separated



