

Progress of Medical Science.

MIDWIFERY AND GYNÆCOLOGY.

THE PREVENTION AND TREATMENT OF POST-PARTUM HEMORRHAGE.

In a discussion on this important subject at the late meeting of the British Medical Association (*British Med. Journal*), Dr. THOMAS MORE MADDEN, of Dublin, discussed *seriatim* the causes of *post-partum* hemorrhage, and the treatment required by each of these. Having dwelt on the constitutional conditions predisposing to flooding, and the preventive measures by which this might be waded off, even in those who had been habitually subject to this accident on former occasions, he considered the causes of flooding and the management of labour, so as to prevent subsequent inertia or irregular contraction of the uterus. The ill effect, in this respect, of the premature application of the forceps before the full dilatation of the os uteri, and also the production of hemorrhage as the result of undue delay in the second stage, were next referred to. During labour, when there was any reason to anticipate flooding, the preventive measures recommended by the author were: the rupture of the membranes in the first stage; the use of stimulating enemata of a strong infusion of ergot, or the hypodermic injection of ergotine, in the second stage; and a firm unremitting manual pressure over the fundus uteri, from the time the child's head escaped from the vulva until the completion of the third stage, which should never be hastened by traction on the cord, and the permanent contraction of the uterus was secured. In nineteen cases of flooding, the solution of perchloride of iron was resorted to; in eighteen of these the hemorrhage was thus arrested, and in one instance it failed. Dr. Madden, however, considered that the ordinary mode of using this styptic—*viz.*, by a syringe passed up to the fundus uteri—was a very hazardous proceeding, and exposed the patient to great and needless twofold danger of death from embolism or from peritonitis. He, therefore, recommended, instead, the direct application of the strong liquor ferri perchloridi to the bleeding vessels by a sponge soaked in this fluid, and carried up by the hand into the uterus, and retained there until a firm contraction was produced. Some cases were referred to in which hemorrhage, that had resisted all other treatment, was thus arrested; and Dr. Madden, therefore, regarded this as the most effectual method of treating flooding. At the same time, he admitted that it was not free from danger, or even to be adopted without grave necessity. Some of the other remedies employed in the treatment of *post-partum* hemorrhage, including the hypodermic use of ergotine, galvanism, and cold and hot injections, were referred to.

Dr. William Walter, of Manchester, said

that since the method of treating *post-partum* hemorrhage by the injection of hot water was brought under notice by Dr. Atthill early in 1878, he had treated in this way eleven cases in the Manchester and Salford Lying-in Hospital. The temperature of the water used ranged from 110° to 120° Fahr.; and the utmost care was taken that the tube (Hayes's) reached well up to the fundus; and that there was afterwards no impediment to the escape of the water from the uterus. The results in the eleven cases—particulars of which were given—led Dr. Walter to the conclusion that the hot-water treatment offered some advantages, in being generally accessible and not disagreeable to the patient; but that, as a means of contracting the uterus, it was, in his experience, not to be relied on. Nevertheless, he hoped to continue the method; and he advised that the temperature of the water should be ascertained by the thermometer in every case. The recent researches of Dr. Max Runge tended to show that, if success was to follow the hot-water treatment of *post-partum* hemorrhage, the temperature of the water must not be so high as it was in his (Dr. Walter's) cases. In all the cases but one, the injection was followed by relaxation and dilatation of the entire uterus; if contraction occurred, it was but temporary; but, when the temperature of the water did not exceed 104° F., the uterus contracted without being afterwards paralyzed. No appreciable effect was produced on the pulse and general condition of the system. After the failure of the injection, the application of the induced current was successful in several of the cases.

Dr. Atthill, of Dublin, confined his remarks to the use of the four principal agents used for the arrest of *post-partum* hemorrhage; namely, ergot, cold water, warm water, and the perchloride of iron. Ergot was most unreliable: it took time to act, and, though valuable if administered to anticipate hemorrhage, was nearly useless at the time, even if injected under the skin. Cold was perhaps the most efficient of all agents, if used in the proper cases and at the right time; that is, while the patient was warm, and reaction consequently followed. If its use were prolonged, or the patient were cold and exhausted, it was worse than useless. It was at this stage that hot water came in with advantage, not to supersede the use of cold. Dr. Walter recorded cases in which it failed, or did actual harm; but he used it too hot, namely, at 120° instead of 100°; and the experiments referred to at the conclusion of his paper showed that hot water was efficient in causing contraction of the uterine muscular tissue. If used at the proper temperature, hot water was far from being an absolutely efficient agent, but it was valuable; it would not replace the use of perchloride of iron, but it must sometimes render it unnecessary. Perchloride of iron was in some cases absolutely demanded, and was the most certain means of checking *post-partum* hemorrhage. It had, in Dr. Atthill's hands, saved several lives; but, like all other remedies, it was not absolutely