tained hopes which, if they could be with us to-day, they would sorrowfully admit had never been realised. I am sure they would say that they fully expected a large proportion of the insane under the reformed treatment to be permanently cured of their malady, and never for an instant supposed that of those who should recover, a frightful proportion would relapse, and that, seventy years after the opening of the first pauper asylum in Yorkshire, there would be five large county and one borough asylum in addition to that at York. I venture to say that had it been possible for them to have foreseen this, their astonishment and dismay would have been great indeed; and, were they present at this moment, it would seriously temper the satisfaction they might justly experience in witnessing the success of their humane labours. They would find us engaged in endeavouring to explain the apparent increase instead of decrease of insanity, as shown in the tables I have prepared; and, although there are explanations which suffice to show that such an inference is hasty and superficial, our ghostly visitants would find, if they interviewed the Superintendent of the Wakefield Asylum, that his knowledge of the masses from which his patients are derived leads him to form a very unfavourable opinion of the mental status of many who are outside our asylums—that, in fact, there is a large borderland class who are practically insane, although able to adapt themselves fairly well to their environment, usually relatives of patients already inmates of the asylum, and often far more insane at times than the latter. Surely, to the prevention no less than the cure of insanity must our endeavours be bent in the future.

In concluding this Address, which in accordance with the custom of the Association is supposed to be undebatable, I would observe that it would be deprived of much of any value it may possess if it did not lead up to a practical consideration of the lessons which the history of the past should teach us in regard to the future provision for the insane poor in this, or, indeed, in any other county in England. This question I reserve for the paper I am about to read, which, I trust, will elicit the opinion of those whom I address, and to whom I shall appeal for suggestions.

It now only remains to thank you for the patience with which you have listened to my history of a movement which deserves an abler though not a more appreciative historian than myself, and to express my ardent hope that the work of this Section will be second to none of the others in its interest and utility.

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF OBSTETRIC MEDICINE.

At the Annual Meeting of the British Medical Association, held in Leeds, August, 1889.

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SOME FURTHER APPLICATIONS OF ANTISEPTIC PRINCIPLES TO MIDWIFERY PRACTICE.

IN an address, delivered at the opening of St. Thomas's Hospital Medical School in October last, I took the opportunity, as some of you may remember, of calling attention to the marvellous triumphs of antiseptic midwifery. I propose to occupy the short time at my disposal to-day with a few remarks by way of supplement to what I said on that occasion. I wish to show that more is included in the words "antiseptic cleanliness" than the mere use of a chemical disinfectant, absolutely essential though I consider that to be.

Every medical practitioner is familiar with the saucerfuls of Condy's fluid that well-intentioned persons used to place here and there in the sick-room of a fever patient, under the delusion that they were carrying out the principles of disinfection. It is difficult to say how this disinfectant was supposed to act: whether, for example, the infecting micro-organisms were expected to be attracted like flies to a fly-paper, and to rush madly to their own destruction; or whether some wonder-working vapour was supposed to be given off from the surface of the fluid. I am

inclined to think that in most cases the subject was never reasoned out at all, and that those little dishes of pink fluid, to all intents and purposes, took the place of a charm. If it was thus easy to invest Condy's fluid with mysterious virtues, how much easier was it to attribute such virtues to substances which appealed strongly to the sense of smell! People are ever ready to believe in the mystery-man, and antiseptics are still used by many as though they were part of his stock-in-trade. The belief in their miracle-working power finds expression every day. A few drops of an antiseptic solution are poured, without even a pretence of measurement, into a large basinful of water, and lo! the whole is at once transformed into a disinfectant of such unquestioned efficacy, that, if but the tip of one's finger be dipped into it, straightway the whole hand is rendered aseptic, and may be plunged into the most susceptible wound with impunity. No one who has done me the honour to read what I have written on this subject, and especially the address to which I have alluded, will accuse me of want of faith in antiseptics, provided that, like Opie's colours, they are mixed with brains. But the very fact that the use of these substances is an essential part of the antiseptic method carries with it the danger of regarding the part they play in the treatment too exclusively, and of neglecting other means of ensuring antiseptic cleanliness, which, though perhaps subsidiary, are nevertheless of the greatest importance. I desire to call attention to some of these means in connection with antiseptic midwifery. I do not include purely hygienic precautions, thorough ventilation, abundant cubic space, good drainage, pure water supply, &c. All these are beyond the scope of these remarks. The matters to which I am about to refer relate, for the most part, to details connected with the personal care of the mother and child.

First, I should like to speak of the undesirability of frequent vaginal examinations during labour, and especially during the first stage. When the presentation has been diagnosed, and labour found to be progressing favourably, repeated examinations are unnecessary. And seeing that every vaginal examination, whether necessary or unnecessary, and whether antiseptics are used or not, must be regarded as a possible means of infection, it follows that the fewer we make the better. In this connection, I may remind you of the remarkable immunity from puerperal fever of those patients who, at a period when the mortality from puerperal fever in the great lying-in hospital at Vienna was at its height, were admitted into that hospital after delivery, and in whom, therefore, no internal examination was made. It was the observation of this, amongst other facts, that ultimately led Semmelweis to his great discovery. Recent statistics of the Dresden lying-in hospital show that what was true five-and-forty years ago is true to-day. Leopold tells us, in his report for 1886, that there were admitted in that year 78 patients, in whom, from the unusual rapidity of labour or other causes, no internal examination was required. Under such circumstances, all douching, both before, during, and after delivery, was omitted. Yet, out of these 78 cases 77 made an absolutely normal recovery, and left the hospital on the eleventh day, while the remaining one was detained until the third week, solely on account of a labial hæmatoma which developed during labour. In 1887 the number of cases admitted, in whom, for one reason or another, no internal examination was made, was 170, of whom 165 had a normal convalescence and were able to be discharged on the eleventh day. Of the remaining five, two had been delivered of a putrid foetus; one had fever lasting two days and was able to leave the hospital on the thirteenth day; while the other two had foul lochia, with fever of so insignificant a character that they were able to be discharged on the seventeenth day. Neither in 1886 nor 1887 was there amongst these patients a single case of parametritis. The bearing of these facts on the proposition just laid down is too obvious to need pointing out.

A matter of still greater importance is the thorough emptying of the uterus after labour and after abortion. Although I am one of those who hold that retained matters only become septic when pathogenic micro-organisms have obtained access to them from without, I am, nevertheless, fully aware how excellent a soil they furnish for the development of these microbes when once they have effected an entrance. I therefore regard the retention of portions of membrane or placenta, whether after labour or abortion, with as much dread as those who believe in the possibility of self-infection, and I maintain that it is impossible to be too careful to prevent it. If, on examining the placenta and membranes, any portion, however small, be found wanting, the uterus ought, in my opinion, to be at once explored for the missing frag-

ment. I have seen so much evil result from leaving the expulsion to chance that I cannot but regard it as exposing a patient to a very serious and quite unnecessary risk; it is a question between prevention and cure, and there surely cannot be a doubt as to which is preferable.

The third point on which I have a remark or two to make is the custom of strictly insisting on the maintenance of the horizontal posture for several days after a normal delivery. For a long time I have been disposed to agree with Goodell in doubting the wisdom of this. The question is not by any means a new one. More than a hundred years ago, Charles White, of Manchester, a Fellow of the Royal Society, and one of the most distinguished surgeons ever connected with the Manchester Infirmary, published a remarkable book, with which no doubt many of you are familiar, on the management of pregnant and lying-in women. In the chapter on the prevention of puerperal fever, there occur one or two passages on this subject of posture, which are so striking that I will, with your permission, read them to you: "In a few hours after delivery, as soon as the patient has had a little rest, she should sit up in bed with a bedgown thrown over her shoulders. If she propose to suckle the child, it should now be laid to her breast, whether there be signs of milk or no." And, again: "The patient should lie very high with her head and shoulders, and should sit up in bed many times in a day, especially when she takes her food and as often as she suckles her child, and should kneel whenever she has occasion to make water, which should be often done. This frequent upright position is of the utmost consequence, and cannot be too much enforced. It prevents the lochia from stagnating, the stools and urine from being too long retained, and promotes the contraction of the uterus, together with that of the abdominal muscles." How contrary is all this to what is now usually taught! Yet the plan here advocated is merely an application to midwifery practice of the great antiseptic principle of drainage.

Of course, no one would dream of permitting so early an assumption of the sitting posture in the case of patients exhausted either by profuse hæmorrhage or by a greatly protracted or difficult labour, but White is speaking of cases of natural labour only. The singular immunity from puerperal fever that he experienced in his own practice he attributed chiefly to having carried this suggestion into effect in the case of his own patients. After a very extensive midwifery practice of more than forty years, he was able to say that he never lost a patient (whom he had himself attended and whose labour had been normal) "either during her month, or at any time, where there was the least reason to imagine her death was the consequence of her lying-in." I am quite aware that statements of this kind ought, as a rule, to be accepted cautiously; but I feel sure that anyone who will take the pains to read the passage for himself will, in this particular instance, have no misgivings. The statement is made with such evident reluctance and such an entire absence of boastfulness that it cannot, I think, fail to carry conviction. It is to his mind the strongest argument he can use; he therefore feels compelled to refer to it, although, otherwise, it "could scarcely be mentioned without a show of ostentation, which," says he, "I despise."

I have not, in my own practice and teaching, dared to go quite the length that Charles White recommends, but I do allow patients who have had a natural labour to sit up in bed occasionally for a few minutes at a time, on the second or third day, and my teaching on this point is in accordance with my practice. I must now pass to the one or two remaining points of which I desire to speak, and I will allude to them very briefly.

In the matter of perineal lacerations, I believe that, where the tear is at all considerable in extent, it is an important antiseptic precaution to stitch it up at once. If properly done, in a good light, and with the patient on the back, so that the surfaces may be accurately adjusted, immediate suture of the perineum seldom fails. No selfish considerations ought to stand in the way of the performance of this little operation, either at the time, or, at any rate, within a few hours after delivery. An open wound at one of the orifices of the body, and especially in this situation, offers peculiar facilities for septic absorption, especially if the nurse does not happen to be an antiseptic enthusiast, and pay as scrupulous attention to the disinfection of sponges, bed-pan, and macintosh, as to that of her own hands.

And this leads me to my last point, namely, the importance of discarding more generally than has yet been done the traditional linen diaper, and substituting for it some absorbent and anti-

septic material that can be burnt immediately after use. The lochia undergo decomposition very speedily after leaving the body, and to receive them on to an ordinary napkin is to expose the patient both to unnecessary risk and unnecessary discomfort. In the General Lying-in Hospital at Lambeth many different materials have been tried, and none is found to surpass in cleanliness and comfort gauze bags of sublimate wood wool.

Our zeal for the safety and well-being of the recently-delivered mother must not make us wholly unmindful of the newly-born child. Can we usefully apply antiseptic principles to the management of the infant? The answer is that we can, at least in two ways. First, in reference to the prevention of ophthalmia neonatorum, which, it must be remembered, is a question for the obstetrician and not for the ophthalmic surgeon, who only deals with the disease when it has manifested itself, and who has no opportunity of preventing it. Everyone is now alive to the importance of wiping the child's eyelids with a clean dry napkin as soon as the head is born, and, if possible, before the eyes are opened; but it is possible to add a further and still more reliable preventive. The application of a weak solution of corrosive sublimate to the eyes, immediately after the child has been washed and bathed, will almost certainly destroy any virus that may have lodged there. For this purpose a small quantity of the 1 in 1,000 solution of corrosive sublimate should be diluted with twice the quantity of warm water, so as to reduce the strength to 1 in 3,000. The nurse should soak a small piece of clean rag or cotton-wool in this solution, and, holding the eyelids apart with the thumb and finger of one hand, should with the other squeeze the rag or wool first over one eye and then over the other in such a way that the solution may run freely over the eyeball. The application causes little or no smarting, and seldom produces any irritation. Now that solution of corrosive sublimate is in very general use in the lying-in room, it would involve very little trouble to adopt this thorough disinfection of the child's eyes as a routine practice. Should the mother be known to have been suffering from a purulent vaginal discharge before labour, a stronger and more penetrating preventive should be used. The medical attendant should himself, under these circumstances, put into each eye, within a few hours of the child's birth, one drop of a 2 per cent. solution of silver nitrate, as recommended by Crédé. The application causes some irritation; it does not, however, need to be repeated.

There seems no reason to doubt that by these methods ophthalmia neonatorum might be stamped out. Let us try to realise for a moment what that means. In the year 1884, it was ascertained by a Committee of the Ophthalmological Society of Great Britain that in the institutions for the blind in London, York, Belfast, and Hull, 30 to 40 per cent. of the inmates owed their blindness to purulent ophthalmia in infancy. Hence, if we can prevent ophthalmia in the newly-born, it seems not unreasonable to infer from these figures that we shall thereby diminish the amount of blindness at present existing in this country by one-third.

The second point relates to the mode of dressing the remains of the umbilical cord. The division and ligature of the funis in the living child are normally followed by the drying up and shrivelling of the ligatured portion, or, in other words, of the portion of what is now dead tissue still left attached to the living body of the child. This desiccation is a purely physical phenomenon, and depends for its occurrence on a certain temperature being kept up in the neighbouring parts. The living body meanwhile promptly prepares to rid itself of its dead appendage, and, at the end of a varying number of days, the cord falls off, leaving a wounded surface on the umbilicus at the site of separation. This small open wound is to the infant what the placental site on the inner surface of the uterus is to the mother, and should be as rigorously protected from the risk of septic infection. Antiseptic cleanliness of hands and dressings is, therefore, just as necessary in dealing with the newly-born child as with the mother. If it be said all this is mere theory until it is shown that infants are liable to septicæmia during the first few days after birth, I reply that there is abundant evidence to prove that they are liable. I need only refer to the observations of Lorain at the Paris Maternité in 1853. During that year, in which 2,567 deliveries took place and 145 of the mothers died from puerperal fever, no fewer than fifty newly-born children died from diseases, chiefly septic peritonitis, of precisely the same character as those which proved fatal to the mothers, and which are all now included under the general head of septicæmia. In thirty of these cases Lorain gives the details of the *post-mortem* appearances at full length. In ten of them both mother and child succumbed to the same disease, while five

other women, whose infants died from septic peritonitis, were themselves ill, but eventually recovered.¹

The newly-born child having been thus shown to be susceptible to septic influences, it becomes important to ascertain what mode of dressing best secures the normal desiccation of the cord before separation and an aseptic condition of the wound left after the separation. There can be no doubt that the old-fashioned plan of charring the square of linen used to enfold the cord is really an antiseptic precaution, akin to the practice of charring timber in the construction of railways and bridges. It is, however, inefficient. The mode adopted at the General Lying-in Hospital is as follows: After being carefully dried, the navel-string is passed through an aperture in the centre of a six-inch square of antiseptic gauze. It is then dusted very freely with finely-powdered starch, and wrapped in the gauze, the whole being kept in place, as usual, by the flannel roller. The dressing is left undisturbed until the cord separates, care being taken in the meantime to keep it dry. The results of this method have been highly satisfactory. The raw surface left, after the cord has become detached, should be freely dusted with finely-powdered boric acid and covered with a piece of absorbent wool.

Before sitting down I must offer a word of congratulation to this Section on the programme our Secretaries have provided for us. The Sectional Committee took great pains in the selection of subjects for discussion. As usual, one of the two is obstetrical, the other gynaecological. In regard to obstetrics, it was felt that nothing could more usefully engage the attention of the Section than the treatment of placenta prævia. It was believed, too, that the profession would welcome something in the nature of a definite and authoritative statement on this most important practical question. In matters of this kind, where the practitioner is called upon to act promptly, and where he must often accept the sole responsibility, it is well that the profession should arrive at some agreement as to the main lines of treatment. Every obstetrician would then have in his mind the ideal method of dealing with these cases, there being still abundant opportunity for the exercise of individual judgment in deciding what modifications are rendered necessary by the special circumstances of each case. There is no one in the United Kingdom, and probably no one in the world, upon whom the duty of opening this debate could more fitly have devolved than Dr. Braxton Hicks. The suggestions he made many years ago are at length receiving the attention they deserve, with the result that already a diminution has taken place in the mortality from placenta prævia, such as cannot fail to be a source of the highest gratification to him.

The gynaecological topic chosen for debate is corporeal endometritis. So widely divergent are the opinions of leading gynaecologists as to the frequency, pathology, symptomatology, and treatment of this affection, that it seemed desirable to have placed before us what is actually and definitely known about it. The Committee felt that in obtaining Dr. Herman's consent to open the debate, they were securing the services of a painstaking investigator, who, while possessing the necessary amount of scientific scepticism for the conduct of such an inquiry, would, nevertheless, approach it without prejudice, and would be sure to present to us, in a succinct form, the basis of fact on which the various current theories on the subject have been built up.

I trust that each of these discussions will prove a valuable contribution to the advance of our knowledge, and be the means of increasing our usefulness to the community.

Of the various papers that have been promised, it would be invidious to select any for special mention. Some of them touch on questions that are still far from being settled. One of our weekly journals playfully alluded the other day to the startling differences of opinion that exist amongst gynaecologists, and to the strong phraseology in which those differences are apt occasionally to find expression. I am afraid it must be confessed that we are somewhat combative, and sometimes perhaps even a little wanting in forbearance towards those who differ from us. The reason of this is, partly, that the light of scientific inquiry has only recently been brought to bear upon the study of gynaecology, and that we are still almost completely in the dark as to the pathology of some of the most common affections to which women are liable. When our knowledge has a firmer basis, we shall differ less. There will be less room for the exercise of the imagination, more points on which we can all agree. Exactly in the same way is to be explained the bitterness of those who hold one set of

religious beliefs towards those who hold another. It is imperfection of knowledge that lies at the root of it all. Let me in concluding these remarks, quote a passage from a book,² that for many years has been a great favourite of mine, in which this point is put very strikingly, and from which, though the author was referring solely to differences of religious opinion, we, too, may derive some consolation as to the future. "Set a company of beginners in archery shooting at a mark, their arrows will all fly wide of it, some on one side, some on the opposite, and while they are all thus far off, many a dispute will arise as to which of them has come the nearest. But in proportion as they improve in skill, their arrows will fall nearer to the mark and to each other; and when they are fixed in the target, there is much less controversy about them. Now, suppose them to attain to such a pitch of mastery, that every arrow shall go straight to the bull's-eye, they will all coincide. This may help us to understand how the differences of the wise and good, which are often so perplexing and distracting now, will be reconciled hereafter; when.....their faculties are strengthened to see truth, and to strive after it and to reach it." "Only," adds a friendly commentator, "if we would hit the truth, we must indeed aim at it."

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF PHARMACOLOGY AND THERAPEUTICS.

At the Annual Meeting of the British Medical Association, held in Leeds, August, 1889.

By SIR WILLIAM ROBERTS, M.D., F.R.S.

ON SOME PRACTICAL POINTS IN THE USE OF ANTACID REMEDIES IN DYSPEPSIA AND GRAVEL.

GENTLEMEN,—It is not my intention to intervene at any length between you and the important discussion on hypnotics and analgesics which is to be initiated by my friend Dr. Leech. The late period of the year at which the section was organised has made it impossible for me to prepare a statement of the recent advances in our knowledge of the action of remedies and their application to the treatment of disease. Nothing can be more striking than the contrast between the activity of the present day in regard to these matters and the apathy and stagnation of forty years ago, when I first began the study of medicine. At that time the leading minds of the profession seem to have regarded with a sort of despair any hope of seriously influencing the issues of disease by the use of drugs. Some of them even gloried in a course of *laissez aller, laissez faire*, and turned their attention entirely to a study of the natural history of disease and the minutiae of morbid anatomy. Now all this is changed. A more exact investigation of the fundamental action of drugs on the tissues and organs, and the discovery of the remarkable correspondence which has been found to exist between the chemical composition of substances and their physiological effects, have given a new and extraordinary impetus to therapeutical studies. We are evidently entering on a period of important advances in the healing art, and the time seems not very far distant when therapeutics may at last fairly claim a position as one of the exact sciences.

The application of chemical knowledge to the treatment of disease is both new and old. In the course of the discussion which is to be presently opened we shall perhaps hear something of the new and more recondite applications of chemistry to therapeutics. What I am going to say, on the contrary, will only deal with old chemistry and old applications; but I hope, nevertheless, to gather on these ancient paths some useful gleanings of a practical character.

There are, perhaps, in the whole range of therapeutics no simpler problems presented to us than those which have reference to the palliative treatment of acid dyspepsia, and the chemical prophylaxis of uric acid gravel. An excess of acid in the stomach is almost as easily neutralised as if it were contained in a bottle

¹ Lorain (P.), *La Fièvre Puerpérale, chez la Femme, le Fœtus, et le Nouveau-né*. Paris. 1855.

² *Guesses at Truth*.