RAPID DELIVERY IN ECLAMPSIA.

BY

ROBERT JARDINE, M.D., F.R.F.P.S.G.,

PROFESSOR OF MIDWIFERY, ST. MUNGO'S COLLEGE, GLASGOW.

In your issue of December 27th, 1913 (p. 1625), Dr. R. Carmichael Worsley states that during upwards of twenty years of general practice he has treated several cases of eclampsia, and that he has now discarded such temporary measures as chloral and bromide, venesection and transfusion, etc., in favour of prompt emptying of the uterus. He advises the administration of a full dose of morphine, and if more than one fit has occurred, immediate dilatation of the cervix by means of a screw dilator, and delivery, even when the external os will only admit the finger.

In contradistinction to Dr. Worsley's experience, allow me to give mine. During upwards of twenty years of practice I have treated not several but several hundreds of cases of eclampsia, and I now never advise or practise immediate delivery in ordinary cases, unless the labour is well advanced. I have treated scores of cases by immediate delivery, but I have given up this method in favour of a waiting policy, and the results have been much better.

At the present moment we have eight cases under treatment in the maternity hospital, four under my care and four under the care of my colleague. In all, the waiting policy has been adopted, and the patients are doing well. The following are short notes of my cases:

Case 1.—Multipara; seven months pregnant; four fits before admission and three during the time she was being cleansed; not in labour. Given 1 c.cm. veratrone and $\frac{1}{2}$ grain morphine; purged and sweated; no more fits; the albumin in the urine rapidly disappeared. Two weeks later delivery of a premature live child occurred naturally. The child weighed 3½ lb. and lived for a week. The mother is now quite well.

Case 2.—A multipara, six months pregnant, had two fits before admission. Treated with veratrone, purging, and sweating. No more fits; the albumin has not quite disappeared from the urine, but the patient is quite well and the pregnancy is going on.

Case 3.—A primipara at full time, in labour, had had four fits before admission. As the head was on the perineum delivery was effected by forceps, and bleeding was encouraged. Two pints of my saline solution were given into the abdominal wall. As the pulse had become soft I did not use veratrone. After some hours the fits recurred, and as the pulse had become rapid and tense 1 c.cm. of veratrone was given. The fits now ceased. She had ten in all after delivery, and at the time the veratrone was given they were recurring every few minutes. The veratrone caused so much depression that $\frac{1}{30}$ grain of strychnine was given. For two days the patient was insane. At the end of that time her mental condition became normal, and she is now quite well; her child is also quite well.

Case 4.—A primipara, full time, admitted after having had five fits. She was not in labour. She was given 1 c.cm. veratrone and a purge, and she was sweated. The labour commenced shortly after admission but the fits continued. By the time the head was on the perineum she had had eight more fits. She was then delivered of a live child by forceps and allowed to bleed freely. Two pints of the ordinary saline solution were given under the breasts. No more fits occurred, and the mother and child are now quite well.

I might instance many other similar cases, but these should be sufficient, on the standard which Dr. Worsley has adopted. I am not going to lay down any lines as to the proper treatment of eclampsia on the strength of my experience of several hundred cases, but I would like to draw attention to the use of veratrone in these cases. Many years ago I tried *veratrum viride*, but gave it up, as I found the effect was very uncertain, but, on the issue of its active principle, veratrone, I again began to use it, with very good results. When the pulse-rate and tension are high, it has a most remarkable effect. In the cases which I have quoted the pulse-rates were reduced from 130 or 140 to from 60 to 70 within half an hour. In Case 3 the reduction of something like 60 beats was followed by such alarming depression that $\frac{1}{30}$ grain of strychnine was given hypodermically, and the patient quickly rallied. Morphine is said to be an antidote to veratrone, but in Case 1 the two drugs were given together, and the reduction of the pulse-rate and tension occurred, just as if veratrone alone had been given. The drug has a very powerful effect, and when it is used after delivery the depression may be alarming. In one case the patient looked as if she were dying, but a hypodermic of $\frac{1}{30}$ grain

of strychnine quickly rallied her. In Case 3 we had a somewhat similar experience.

The treatment of eclampsia is very unsatisfactory, and it will remain so until we find out the real cause of the condition.

The veratrone used was that supplied by Parke, Davis, and Co. The full hypodermic dose (1 c.cm.) equals 20 m. of tincture of *veratrum viride* (B.P. 1885) which was of the strength of 1 in 5.

Since the above was written I have had another striking instance of the value of the drug. A primipara was admitted in a very restless and violent condition. It took three nurses to keep her in bed. Within half an hour of the administration of veratrone she had become quite quiet, and her pulse had fallen from 132 to 72. She had had six fits before admission and two more occurred, shortly afterwards. Next day she was delivered of a live child by low forceps. No fits occurred after the veratrone was given. The mother and child are doing well.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

THE INDUCTION OF ARTIFICIAL PNEUMOTHORAX.

THE article in the JOURNAL for December 13th, 1913, by Drs. Carleton and Evans, commenting on the paper published by Dr. Woodcock on October 25th, 1913, contains certain statements which it seems to me would be dangerous to allow to pass unchallenged.

In their fifth comment Drs. Carleton and Evans say: "We consider that the local anaesthetic is unnecessary." During the production of an artificial pneumothorax several fatalities have been recorded, and in the majority of these cases death has been due to the production either of a pulmonary embolism or of a pleural reflex. Both these dangers can be avoided by taking suitable precautions, and as one of the exciting causes of pleural reflex is the stimulation of the parietal pleura during the passage of the needle, it is surely necessary that this membrane should be anaesthetized before it is traversed by the needle. Drs. Carleton and Evans have been fortunate in not witnessing a pleural reflex from this cause, and though the danger is rare it seems to me essential that it should be guarded against on every occasion.

The anaesthetization of the track of the needle, including the parietal pleura (so far as we know the visceral pleura contains no sensory nerves), occupies at the most one minute. From their concluding sentence in comment 5, it would appear that Drs. Carleton and Evans regard this as a waste of time; but though when doing a nitrogen displacement (artificial pneumothorax) or an oxygen replacement I have punctured the pleura nearly a hundred times, and have always anaesthetized the track of the needle, I have never regarded the time occupied in injecting the novocain as wasted.

When Drs. Carleton and Evans entered the needle "with a sudden stab" they must run the additional risk, especially if the ribs are close together, of striking the bone with the point of the needle, thereby causing further pain to the patient and turning the point of the needle. The needle must then either be driven on with its battered point or withdrawn, and a fresh "sudden stab" made.

Dr. Woodcock advocates the administration of morphine before the injection of nitrogen. This, I am sure, is a wise precaution, which I always take before the first injection and before the subsequent injections in nervous and excitable people.

I agree that the site chosen for the puncture should be, as far as possible, over healthy lung, but would point out that in the space between the anterior border of the latissimus dorsi and the inferior border of the pectoralis major the intercostal spaces are most easily determined, and, other conditions being equal, offer the most suitable site for puncture.

Iodine painted over the skin is sufficient preparation. If the skin is scrubbed and washed with a watery solution immediately before the application of the iodine, the efficacy of the latter is very greatly impaired.

London.

H. MORRISTON DAVIES.