CASE IV.

Mrs. D., aged 35, a most nervous and hysterical patient, had been in labour some hours before I saw her, the membranes having ruptured early. The os was dilated to the size of a shilling and the vertex was pressing on the lower uterine segment. The patient complained of great pain and the uterine contractions were of little or no use as regards further dilatation.

I administered chloroform to a slight extent and waited for three hours. The condition did not improve, and as the patient was worn out and in an exceedingly nervous state I pushed the chloroform, gradually dilated the os and, applying forceps, delivered her with difficulty of a large stillborn child. The patient made a splendid recovery.

A CASE OF TUBAL GESTATION:

PRIMARY INTRAPERITONEAL RUPTURE: OPERATION: RECOVERY.

By BRENNAN DYBALL, M.B., B.S., F.R.C.S.,
Exeter.

ON November 18th, 1903, I received a message from Dr. Arthur Bird, of Sidmouth, asking me to come over at once to see a patient with him with a view to operation. On arrival I found the case to be as follows:

The patient, Mrs. M. M., was aged 42.

Family History.—No bearing on the case.

Previous History.—She had had three children and two miscarriages. Was strong and healthy up to 1897, when her second miscarriage occurred (at Pietermaritzburg), and was followed by a slight attack of peritonitis, and apparently by some endometritis, as the uterus was soon afterwards curetted. Her youngest child was 14 years old.

Present Illness.—On November 17th, while at lunch, she was seized with sudden sharp abdominal pain, which speedily became very severe, was most marked in the lower half of the abdomen, and seemed to her like labour pains. She went to bed, and as the pain continued sent for Dr. Bird, who found her rather pale, with normal temperature, and a pulse of 120. She complained of feeling sick and faint, but there had been no vomiting. Later in the evening Dr. Bird saw her again, and made a vaginal examination, without detecting anything abnormal, but with a speculum a little blood-stained mucus was seen to be coming from the os. The patient complained of bearing-down pains, and again said she felt as if in labour. It was then found that her last period had occurred seven weeks previously. She was put on fluid diet, hot opium and belladonna fomentations were applied to the abdomen, and a quarter of a grain injection of morphine was given on account of the pain. She passed a fair night, but the following day was found to be much worse: very blanched, with small rapid pulse which could hardly be counted; the abdomen much distended, tympanitic above the umbilicus, dull below and in the flanks. She was given an injection of one-twentieth of a grain of strychnine, and shortly afterwards one-quarter of a grain of morphine, and was then removed to the private ward of the Cottage Hospital. Dr. Bird having diagnosed internal hæmorrhage probably due to a ruptured tubal pregnancy. (The above notes were kindly furnished me by Dr. Bird.)

Operation.—When I saw the patient at 4.30 p.m. her condition was much as described above. There could be no doubt as to the correctness of the diagnosis, but the patient's condition was so bad that one feared she would not be able to stand an operation. Her lips were almost colourless, and her pulse could only just be felt, but not counted, at the wrist. In the carotid it was made out to be 130. It was therefore determined to see if infusion would improve her condition, and two pints of normal saline, with liq. strychn. mv and brandy 3ss were thrown into the right median basilic vein, effecting an immediate and marked improvement, the pulse at the wrist being easily felt and counted afterwards, and its rate diminished somewhat. The patient's limbs were then enveloped in cotton wool, and she was taken to the operating theatre, where A.C.E. was administered by Dr. Leon. With Dr. Bird assisting me, I opened the abdomen below the umbilicus by a median incision large enough to admit a hand, and found the lower left quadrant of the peritoneal cavity occupied by blood-clot, which was scooped out in handfuls. While doing this the uterus could be felt pushed over well to the right of the midline. After removing all clots it was found that the innermost inch of the left Fallopian tube was enlarged, and was ruptured nearly across close to the uterus. There was no bleeding at the seat of rupture. The left ovary contained a corpus luteum of pregnancy $\frac{1}{2}$ in. in diameter. Silk ligatures were placed round the tube and ovarian artery on each side of the rupture, and the distal portion and the ovary were ligatured off and removed. A few small clots which had slipped down from among the intestines were removed. The pelvis was sponged out, the abdominal wound closed in layers, and a dressing of cyanide gauze and wool applied. No drainage was employed. There was no sign of old peritonitis on the tube removed; the abdominal ostium was patent, and a probe could be passed down it to within a $\frac{1}{2}$ in. of the situation of the pregnancy.

After-history.—The patient's condition during the operation (which occupied a little over half an hour) necessitated injections of strychnine (one-tenth of a grain in all). She was quickly put back into bed, the foot of which was raised on blocks, but her pulse was so bad that it was thought wise to give another infusion of one pint of normal saline with half an ounce of brandy. This again had a most excellent result, and on seeing her a couple of hours later the pulse at the wrist was 100, and

very fair in quality. She passed a good night, and the next morning her pulse was 90, and her general condition most satisfactory. Her recovery, thanks to the care of Dr. Bird, was uninterrupted; the incision healed by first intention; she was able to get up a month after the operation, and has now quite regained her usual good health.

TREATMENT OF PUERPERAL ECLAMPSIA BY A COMBINED METHOD.

By JOHN LITHGOW, M.D.,
Cleland.

SOME time ago I had occasion to report two cases of puerperal eclampsia, in both of which the fits ceased after the delivery of the child, the women recovering, and in one of which the child also was saved. In that article I commented on the evident good results obtained by delivery of the child, and had resolved that my next case should at once be subjected to that treatment.¹

On January 6th I had another and most severe case of this dreadful condition, which I venture to put on record for the following reasons—namely, the large number of fits which the girl suffered from; the method used to dilate the os in the operation of *accouchement forcé*; treatment adopted; and the presence of urea being demonstrated in the blood.

An unmarried woman, aged 19½ years, sent for me by telephone message about 4 p.m. on January 6th. Being out visiting I did not see her till nearly 6 p.m., and was then informed she had taken six fits. I waited for a few minutes in order to ascertain the nature of the fits; another seizure soon confirmed my suspicion that they were eclampsia. I found she was about full term, the cervix being obliterated and the head presenting. The os was felt as a depression, and as there were no labour pains I proceeded to perform *accouchement forcé*. With difficulty I passed my forefinger through the os, and ruptured the membranes with a wire, but was unable to make further progress with my fingers. During this time she had another fit. I drove home for my midwifery bag, etc., and on my return found that she had had four more fits. Before proceeding to sterilize my instruments, I pressed a piece of lint saturated with a solution of cocaine through the os. The cocaine solution was made up by sprinkling a few grains of cocaine powder on the lint which was wet. I then tried to make out the fetal heart sounds and movements, but could get neither. The patient was put under chloroform, which was administered by a neighbour woman, then with a two-pronged dilator (Stevenson's?), with the greatest ease, I stretched the os that I could apply the forceps. The forceps applied, a few minutes sufficed to bring the head through the os. There was more difficulty from this stage till the child was delivered, a fairly strong pull being required; altogether about thirty minutes elapsed from the time I introduced the cocaine till the child was delivered, and during that time the patient had three fits, which, owing to the administration of chloroform, were not severe. The child—a full-term, well-formed male—was stillborn. There was no laceration of perineum or of os requiring attention. Before I left the house at 8.30 she had 3 more seizures, and from this time till my return again at 12 she had 16; altogether from the commencement at 4 p.m. till 12 p.m. she had 34 fits; 12 before, 3 during, and 19 after delivery. It was evident that in this case something more than delivery of the child was required if the patient was to be saved. She had been unconscious for several hours. I thought that if there was any abnormal ingredient in the blood which was acting as a poison, the treatment now would be to remove that poison, and, if necessary, the blood. Fortunately I had my pocket case with me, which contained a saline injection needle, and having obtained permission, opened a vein in her arm, from which I allowed blood to flow till it ceased spontaneously; the quantity removed I did not measure, but it was considerable. Then with a Higginson's syringe I injected into the cellular tissue underneath the breast over two pints of normal saline solution. During the time I was there—till 1.30 a.m.—she had six fits. From this till 8 a.m., when they ceased, she had twenty-nine seizures. She remained unconscious for two days. Owing to incontinence of urine, I was unable to obtain a specimen for testing till the second day, when I drew off some with a catheter; this showed presence of albumen, and also gave 9 gr. of urea to the oz. I tested a portion of the serum from the blood withdrawn, and found it contained 2½ gr. of urea in the oz. For several days she complained of severe headache, ultimately making a good recovery, and is now quite well.

In discussing this case I would desire to draw attention to:

1. The survival of the patient after the extraordinary large number of eclamptic fits; altogether she had sixty-nine severe seizures. There was every condition present in this case to make the prognosis extremely grave. The fits appeared before labour had commenced, were violent, with short intervals, and the patient was unconscious. As to the number of fits, it is said as a rule the occurrence of ten fits constitutes a severe case. In a recent article by Dr. Munro Kerr, when discussing the effect of dilators, he mentions that in one of his cases where death had followed the dilators

were not in the slightest degree to be blamed for the unfortunate termination as the patient had had forty fits.² I take it from this that as Dr. Munro Kerr is an authority after having forty eclamptic fits the patient is not expected to recover.

2. I had previously practised forced delivery on three occasions. The first on a multipara who was dying from heart disease; in that I introduced through the undilated os a piece of lint saturated with cocaine solution, and by the time my instruments were prepared the os was so dilated that I could immediately apply them without any previous manipulations; this patient was at full time. The second was multipara suffering from accidental haemorrhage about full term, and where I was able to pass my hand into the uterus, turn, and deliver. The third case was one of eclampsia in a full-term multipara, in whom there was no difficulty in introducing my hand into the uterus through an easily-dilated os and effecting delivery by turning. These three cases being multiparae I had no difficulty in dilating the os. In the first case, in which the cocaine solution was used, there was no manipulation by the hand required. Forceful dilatation in *accouchement forcé* is generally carried out by means of metal dilators, or by the more tedious method of dilating by the hand. I might put it that, as a rule, forcible dilatation in multiparae can be carried out by the hand, whereas in primiparae this method is either too tedious or fatiguing to be practical, and metal dilators have to be resorted to. In the case recorded above dilatation by the hand was attempted, but failed owing to the rigidity of the os. This was evidently a case where an efficient dilator was necessary. Judging from the contributions and discussions at a recent meeting of the Glasgow Obstetrical and Gynaecological Society on the subject of *accouchement forcé*, it is evident that the dilators which find favour with gynaecologists are those of Bossi and Frommer.³

It is admitted that the use of these instruments is not without danger, and several cases are reported with varying success. Not that there could be any doubt of these instruments being able to allow the operator to attain the object in view, that is, to get into the uterus, but the extent of preservation of the cervix from lacerations seem to vary. Dr. Alex. Duke, in a letter to the BRITISH MEDICAL JOURNAL on the subject of *accouchement forcé*, remarks that Bossi's dilator at first sight appears "more like a veterinary surgeon's instrument," and suggests the local application of cocaine "before using the brutal-looking dilator."⁴ I had previously used the solution of cocaine as recommended by Dr. Farrar, of Gainsborough,⁵ in rigid os of primipara in labour, and also, as already stated, in *accouchement forcé* performed for heart disease with the most gratifying result. In this case I think we may discount any aid received from the use of the dilator employed, as upon the slightest resistance the blades of which possess so much spring that the handles can be approximated without separating the points, and I am certain that an equally good result would have been attained by using the hand after the application of the lint saturated with cocaine solution. I would therefore venture to suggest that in the primary step of *accouchement forcé*, dilatation of the os, a solution of cocaine should be applied on lint to the part. The time occupied I find is about equal to that of dilating by Bossi or Frommer's dilators—about thirty minutes. The dangers of lacerations are avoided, and the results in the two cases I have tried it satisfactory. I may mention that in both cases the cervix was obliterated.

3. Authorities seem to be well agreed that eclampsia is due to the retention of some deleterious matter in the blood. It has also been proved that saline solution can replace (at the moment) blood lost. When the fits continued after the delivery of the child I considered the most rational treatment would be to get rid of the deleterious matter as soon as possible, and there was evidently no time to eliminate it by the natural outlets. If the deleterious matter was to be removed from her system the blood also must be taken. The quantity of blood removed was not measured, the bleeding was allowed to cease of its own accord, by which time the girl was well drained. The infusion needle was not placed in the vein I had opened as I was afraid that in her struggles the artery might be injured.

I am aware that venesection has often been employed as means of treatment of eclampsia. Oftener, perhaps, with the object of removing tension, than with the object of deliberately removing from the system a large quantity of toxin-laden blood, replacing that lost afterwards by normal saline solution. I am also aware that normal saline solution is often

used to produce diuresis or dilute the poison. The combined method of venesection for removing blood laden with deleterious matter and replacing blood lost by normal saline solution is mentioned by Fehling.⁶

4. The subsequent testing of the liquor sanguinis, which gave $2\frac{1}{2}$ gr. of urea to the ounce may be of some importance.

REFERENCES.

- ¹ BRITISH MEDICAL JOURNAL, 1903, p. 1211. ² Ibid, 1904, p. 67. ³ Ibid, 1904, p. 78. ⁴ Ibid, 1904, p. 228. ⁵ Ibid, 1898, p. 795. ⁶ Fehling, Eclampsia, its Pathogenesis and Treatment in the Light of Present Opinions, Halle Med. Soc., Feb. 8th, 1899.

ABSTRACTS OF

The Hunterian Lectures

ON THE

PATHOLOGY AND SURGERY OF CERTAIN DISEASES OF THE PANCREAS.

Delivered before the Royal College of Surgeons of England.

By A. W. MAYO ROBSON, F.R.C.S.,
Hunterian Professor.

LECTURE II.—INFLAMMATORY AFFECTIONS OF THE PANCREAS.

PANCREATIC inflammations may be catarrhal, the inflammatory trouble being in the ducts, or parenchymatous, the substance of the pancreas being involved.

CATARRHAL INFLAMMATIONS.

- (a) Simple catarrh, acute and chronic.
(b) Suppurative catarrh.

PARENCHYMATOUS INFLAMMATIONS.

Acute.

- (a) Haemorrhagic pancreatitis.
1. Ultra-acute, in which the haemorrhage precedes the inflammation, the bleeding being profuse and both within and outside the gland.
2. Acute, in which inflammation precedes the haemorrhage which is less profuse and is distributed in patches through the gland.
(b) Gangrenous pancreatitis.
(c) Suppurative pancreatitis (diffuse suppuration).

Subacute.

Abscess of the pancreas (not diffuse suppuration).

Chronic.

- (a) Interstitial pancreatitis.
1. Interlobular.
2. Interacinar.
(b) Cirrhosis of pancreas.

ETIOLOGY.

The etiology of pancreatitis may be classified under predisposing and exciting causes.

PREDISPOSING CAUSES.

- (a) Obstruction in the ducts, the result of gall stones, duodenal catarrh, pancreatic calculi, cancer of the papilla or of the head of the pancreas, ulcer of the duodenum, followed by cicatricial stenosis of the papilla, ascariides, and lumbrici.
(b) Injury either from a bruise, as by manipulation in operating, or from a crush as by a blow in the epigastrium, or from wounding by a sharp instrument.
(c) Haemorrhage into the gland.
(d) General ailments, such as typhoid fever, influenza, mumps.
(e) Certain anatomical peculiarities in the pancreas or its ducts.
(f) Atheroma or fatty degeneration of blood vessels.

EXCITING CAUSES.

1. Infection, conveyed either
(a) From the blood, as in syphilis or pyaemia.
(b) From the duodenum as in gall-stone obstruction or gastrointestinal catarrh.
(c) By extension inwards from adjoining organs as in gastric ulcer or cancer eroding the pancreas.
2. Irritation, as in alcoholism (?).

Gall stones in the common duct are a frequent, in fact by far the most frequent cause of the various forms of pancreatitis, but acute pancreatitis may occur apart from cholelithiasis. Any gall-stone or stones impacted in the pancreatic portion of the duct or even filling the ampulla of Vater may be efficient causes of the trouble. It may be asked why should not every case of common duct cholelithiasis be complicated by pancreatic inflammation? This is readily explained by the fact that in a certain percentage of cases the common bile duct and the pancreatic duct open by certain orifices into the duodenum, while in another percentage the duct of Santorini