diet of solid food, and was quite free from discomfort. After his return home he continued well for ten days; there was then a gradual return of the vomiting and afterwards of the pain. His condition became steadily worse, and he died on November 10th.

Post mortem only the abdominal cavity was opened, and the parts, as now shown, removed. It was found that the cancerous mass had increased greatly from the date of the operation. The induration almost involved the margin of the artificial opening, which, however, remained patent so as to admit the forefinger. The adhesion between stomach and jejunum was quite firm, and the outline of the omental graft could still be traced. The Senn's plates had altogether disappeared, but the silk threads which had secured the plates remained in position. They were blackened, and each, where it traversed the gastric or intestinal wall, was surrounded by a sloughy ring of tissue. This persistence of silk sutures when employed in fixing Senn's plates, and when, therefore, the threads lie partly in the cavity of stomach and intestine, and cannot remain aseptic, has been already repeatedly noted, and indicates a disadvantage and possible danger in their use. Mr. Jessett appears to have shown that catgut is sufficiently durable for the purpose.

In estimating the gain and loss by interference in this case, it is fair to note that the patient did not suffer at all from the operation. He was free from pain or discomfort from the first, and was very shortly taking as much food as he had previously been doing. The month's improvement and immunity from suffering which followed were undoubtedly the direct result of the operation. I fear it cannot be claimed that life was lengthened by it. The patient at the time of his admission certainly seemed good for at least two months. Neither probably did the operation in any way shorten life. The return of symptoms and the speedy fatal ending were apparently due to natural progress of the disease.

A CASE OF CÆSAREAN SECTION.

By H. St. CLAIR GRAY, M.D., F.F.P.S.,

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THE operation of Cæsaean section is one which has lately been much performed in Glasgow, especially by Dr. Murdoch Cameron. I have been present at all his cases, and have assisted him in quite a number, and have been astonished at the small amount of bleeding occurring at the operation. Never have I seen more hæmorrhage than what one expects at an ordinary confinement, and certainly never sufficient to warrant the application of an elastic ligature around the lower segment of the uterus. The operation in itself is simple, as the operator knows what to expect at each step, and can therefore prepare for it, which is a very different matter from operating on some obscure abdominal tumour, where adhesions and other complications may exist in any number.

On March 31st I was called in consultation by my assistant, Dr. Lindsay, to the case of Mrs. W., aged 27, in labour with her first child. She had been in labour for about twenty-four hours, with the membranes ruptured for over twelve. On examination I made out that the os was about three-fourths dilated, that the foetal head was free above the brim, and that the pelvis was flattened and generally contracted, the conjugate at the brim measuring $2\frac{1}{2}$ inches. The abdominal walls being thin, the foetal head was distinctly felt to be large and hard, and the foetal heart and movements were easily made out. The patient and her friends being Roman Catholics, I explained to them that I was unable to deliver the child alive, except by the operation of Cæsaean section, as to the dangers of which I informed them, and they at once requested me to perform it. According to I had her removed to a private hospital and operated at once.

The Operation.—The patient being well bathed in carbolic acid, and her bowels and bladder emptied, ether was administered by Dr. Brown Henderson, the patient taking it well. After the abdominal surface was well rubbed with turpentine and shaved, an incision, extending from about an inch above the pubes to a couple of inches beyond the umbilicus, was made right down to the uterus, which on being examined was found to be twisted on its own axis, with the left Fallopian tube almost immediately below the abdominal incision. This was rectified, and the uterus steadied by my assistant. Dr. Murdoch Cameron's straightened pessary was used to control the hæmorrhage, and acted admirably. A button-hole incision was made through the uterine walls, and it was then seen that the placenta was inserted anteriorly immediately below the uterine incision. On discovering this I at once increased in length the incision, and, passing my hand round the placenta, seized the child's head, and sweeping it out delivered. The uterus was immediately grasped, and the hæmorrhage controlled. After separating the child I peeled off the placenta and kneaded the uterus, until firm contraction took place. The

uterine wound was now closed with chromic acid catgut stitches, and the abdominal cavity carefully sponged out and closed with silk ligatures. Iodoform was applied to the wound, with a dressing of perchloride of mercury, and a firm flannel bandage over all. The operation lasted exactly twenty-eight minutes.

Progress of the Case.—The patient slept well for about six hours during the first night, her temperature being 101° . For the following four days all went well, the patient being and feeling extremely well, but on the fifth day she took an epileptic fit, which on inquiry I found she had been subject to. She never properly recovered consciousness, and, taking another, died at midnight.

Post-mortem Examination.—On opening the abdomen the uterine wound was found to be closed, no sign whatever of any inflammatory action being present. The pelvis was removed, and the former measurements found to be correct. The child was a large one, weighing $9\frac{1}{2}$ lbs., with a large, hard head. At present, six months after the operation, it is alive and well.

My reason for publishing this case, although unsuccessful, is that I consider all operators should publish their failures as well as their successes, so that a true estimate, for or against any given operation, may be arrived at. In my own opinion, it is a much more simple matter to perform a Cæsaean section than to perform a craniotomy on a large child through a small pelvis, and that the danger of the one operation to the mother is about the same as the other operation; and in the one case you are likely to have a living child, in the other you must have a mutilated dead one.

THE ACTION OF SOME OF THE RECENT HYPNOTICS ON PANCREATIC DIGESTION.

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THE observations regarding some features of gastric disturbances that followed the exhibition of a few of the recently-introduced hypnotics, and which initiated the series of experiments which were published in the *BRITISH MEDICAL JOURNAL* of July 15th, 1891, induced me to continue further experiments on their influence on pancreatic digestion.

No attempt is made in this contribution to study more than one side of the question of pancreatic digestion, namely, that by which this digestive fluid acts on starch, converting it into maltose and dextrin. The actions which take place on fats and proteids are not entered into in the meantime. Nor does this paper propose to consider at all the action of these hypnotics on the secretory, muscular, or nervous mechanism, which no doubt are potent factors in all interferences that drugs make on the digestive processes.

METHOD OF EXPERIMENT.

The methods employed to ascertain the influence of the various hypnotics on the pancreatic digestion of starch were to prepare a standard solution of pancreatic juice, the strength of which had been observed by its action on a mucilage of starch of definite strength. The result of a large number of observations showed that the pancreatic solution employed was able to convert the whole of the starch into maltose and dextrin in ten minutes. The temperature of the fluids during the experiments was 98.6° F. A weak solution of iodine was used as the colorimetric indicator, to show when digestion was complete by the discharge of the blue colour. The strength of the mucilage of starch was 1 gramme in 100 c.c. of water. Six glass beakers were taken. No. 1 formed the control beaker, and contained 80 c.c. mucilage of starch and 0.75 c.c. of pancreatic solution. The other five beakers contained, in addition to the above, regulated quantities of the several hypnotics employed in the specific experiment.

The pancreatic solution which was used was carefully made for me by Mr. James Clark, pharmaceutical chemist, Aberdeen, and was fixed and reliable in its strength and action.

Numerous series of experiments were made with the various substances in weak and strong solutions, and, to insure brevity, the results are given in as condensed a form as possible.

SULPHONAL.

Five beakers contained, in addition to the ingredients in the control beaker, 0.75 c.c., 1.5 c.c., 3 c.c., 5 c.c., and 7 c.c. of a saturated solution of sulphonol. The result of numerous experiments indicated that the smallest quantities of the sulphonol, viz., 0.75 and 1.5 c.c., most delayed the pancreatic digestion, viz., three to five minutes. The stronger solutions had no appreciable effect.

PARALDEHYDE.

When to the mucilage of starch and the pancreatic solution