A CASE OF RUPTURED UTERUS IN A
MULTIPARA.By J. POLLOCK SIMPSON, M.D.,
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THE following case is the first case of the kind I have met with in an experience of over 2,000 midwifery cases.

A charwoman, a widow, aged 33, whose husband had been dead twelve months, was taken in labour with her fourth child at full term on the morning of May 29th, 1901; none of her neighbours knew she was in the family way, not even her mother or sisters, two of whom she saw frequently, and it was only when she had been in labour several hours that she confided in her next-door neighbour that she was about to give birth to a child, and as she felt very bad, asked her to send for a doctor. This must have been after she had cut the arm off the child and after rupture of the uterus, as the arm was found when the neighbours entered her room. I was out when sent for, and on reaching home I proceeded to her at once and found a midwife already there, who showed me the right forearm of the child lying in a clothes-basket. The patient was *in extremis*, unable to speak, almost pulseless, and gasping occasionally; there was little or no external hæmorrhage. The stump of the right arm was protruding from the vulva, the forearm having been separated with a breakfast knife. The right arm had presented, and, I believe, the poor woman knowing the child could not be born without her relatives and neighbours knowing, in her pain and desperation cut the forearm off just at the epiphysis of the olecranon process of the humerus, and this act, in my opinion, was the cause of her undoing. I tried to deliver as she was gasping her last, but I could not find a foot to lay hold of, and as she was pulseless I desisted from any further attempt at extraction.

A *post-mortem* examination was made two days after death. The body was well nourished. On opening the abdomen the child and placenta was found in the peritoneal cavity, with the exception of the stump of the right arm and the head, which were in the cavity of the uterus. The reason so much of the child had escaped into the abdominal cavity was no doubt the movement in putting the body into the coffin and in bringing it to the mortuary, as only the feet and placenta had escaped into the cavity when I examined her just before death; the peritoneal cavity was filled with blood clot and fluid blood. The rupture, about four inches in length, was on the left side, just at the point where the peritoneum is reflected to form the broad ligament. The edges of the tear were uneven, but the tear did not involve the fundus nor the vaginal portion. The uterine tissue appeared healthy to the naked eye, and no trace of organic disease could be discovered. The other organs of the body were healthy.

My theory as to the cause of the rupture is this: The head of the child—a strong male—was lying in the left ilio-hypogastric region with its back to the outlet of the pelvis; this being so and the body being doubled on itself the feet would be in the region of the left sacro-iliac synchondrosis. When the mother amputated the forearm it produced strong reflex action in the child, causing it to plunge with its feet against the uterine walls, which would be in a relaxed and weakened condition, causing rupture at this point. Thus it escaped with its feet first into the peritoneal cavity, and dragged the placenta with it.

The causes of rupture given in textbooks are many and varied. Obstruction to labour either from narrowed pelvis or tumour, pressure of the head against the sacral promontory or the ileo-pectineal lines, fatty degeneration of the uterine fibres, more than normal, softening and thinning of the uterine walls, disease of the walls—for example, cancer—and obliquity of the uterus. Ergot is said to be responsible for many cases when given injudiciously; blame could not be given to ergot in this case. The frequency of rupture according to Jolly is from 1 in 1,300 to 1 in 3,403 deliveries. Guy's Hospital Charity coincides with Jolly's statistics, as according to Galabin when assistance was given sparingly and forceps cases were in the proportion of 1 in 200 deliveries rupture occurred in the ratio of 1 in 3,371 deliveries subsequently where forceps cases were 1 in 93 the cases of rupture were 1 in

5,098, thus proving that the legitimate and timely use of forceps has considerably reduced the chances of this terrible danger to the parturient woman, and so saving life.

INFECTION BY THE URINE IN CONVALESCENCE
FROM TYPHOID FEVER.By T. CLIFFORD ALLBUTT, M.D., F.R.S.,
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IN the BRITISH MEDICAL JOURNAL for November 24th, 1900, Dr. Walker, of Peterborough, published a very important article on the dangerous quality of the urine of persons convalescent from typhoid fever. Dr. Walker traced an infection of certain wells to the urine of a convalescent trooper from South Africa. These wells, as subsequent investigation showed, had supplied to the inmates of a particular house water contaminated by sewage; but with no apparent ill consequences, until the trooper came thither, who had been discharged from hospital in South Africa convalescent from enteric fever. On the seventeenth day after his arrival at the house 12 persons were laid up with the fever. Dr. Walker urged on sanitary authorities their responsibility in this matter. Seeing that in urotropine we have a ready means of disinfecting the urine of such convalescents* I also would urge medical practitioners to satisfy themselves of the purification of the urine of convalescents from typhoid before allowing them to go at large. That the bacilli may live in the urine for many weeks at least has been impressed upon us by Dr. Horton-Smith; and since the publication of his Goulstonian Lectures a case has been recorded by Dr. Cushing in which the bacilli are said to have lived in the urine for a period of no less than five years! On account of many engagements I was unable at the time of Dr. Walker's communication to try to enforce his lesson, and to arouse professional opinion to a sense of this new duty; but I write now, as the enforcement is still necessary.

The reason why I should myself enter upon this homily is that I have been in the habit for many years of pressing upon my pupils the danger of letting convalescent "typhoids" go free without thorough disinfection of the stools for many weeks after recovery. It now turns out that I bestowed my labour erroneously; my suspicions were justified, but my advice was ill-directed. Many years ago I published the following history, in what journal I do not remember, and it is no matter now. Briefly it was as follows: I had then been called to a large farm in the neighbourhood of Maryport, where the head of the house lay ill of typhoid fever. The very intelligent medical man who met me told me that the case was a test of Budd's law of the specificity of the infection, then attracting attention. This law had been verified by my reports of two outbreaks of the disease, at Bramham College and at the Flounders Institute at Ackworth, in both of which cases the drinking water had been long fouled with sewage, but without engendering enteric fever until in each case, a typhoid patient had been introduced into the area from a distance. In the Bramham College a boy returned to school sickening with the disease; in the other institution a visitor from Wakefield fell ill with it after being but a day or two at Ackworth. In these cases typhoid stools had found their way into the water sources; but my friend assured me that on the Cumberland farm there had been no such importation. The farm, rather a large community, was isolated and remote. The goings of every inmate were well known; no visitor had entered its precincts. Yet on a certain day enteric fever broke out, and as it seemed, "spontaneously."

I was unable to return home the same night, so having some time on my hands I set to work to unravel the coil. After all chat with the family had proved unavailing, I asked to have all the dependents of the place called together, that I might obtain direct information from each. In this way I lighted upon a charwoman from Carlisle who admitted at once that she had had the disease recently, but had been well for some weeks before accepting an engagement to work at

* It is much to be regretted that recent experience has shown that the use of this remedy is not free from certain risks.