CASE OF EXTRAUTERINE GESTATION RUPTURED AT MID-TERM TREATED BY ABDOMINAL SECTION.

By J. B. HELLIER, M.D.,

Obstetric Physician to the Leeds General Infirmary; Lecturer on Diseases of Women and Children, Yorkshire College; President of the North of England Obstetrical and Gynaecological Society.

History.

On March 29th, a young married woman, aged 22, came to the Leeds Infirmary as companion to a friend who was attending as gynaecological out-patient, she herself being, so far as she knew, in perfect health, but believing herself to be about three months pregnant. Whilst sitting in the waiting-hall she felt some abdominal pain; she went to pass urine, but was unable to do so; she then felt dizzy and fell on the floor, striking her forehead. Her pulse was so weak, and she seemed so ill, that she was admitted an in-patient for the night.

Next morning the patient was no better. She was very pallid; the pulse was 135 and exceedingly weak, and it seemed evident that she was suffering from internal hæmorrhage. She was well-developed and healthy in her general aspect, and had had no serious illness. She had menstruated regularly up to Christmas, and had had no dysmenorrhœa. She became pregnant at Christmas, but could not give the date of her last period. She had no discomfort except some degree of abdominal pain on lying down at night, and she had no suspicion that anything was wrong.

On physical examination the abdomen was a little full in the lower part, the flanks were resonant, but there was some dulness above the pubes in the central line reaching nearly to the umbilicus. The abdomen here was tender, but no distinct lump was felt and no fluctuation was made out, and no auscultatory sounds were perceptible. The dulness did not vary much with the position of the body. The mammae showed the usual signs of early pregnancy. On vaginal examination, there was a cyanotic tinge of the vaginal mucous membrane, and the cervix was soft; a swelling which resembled the body of an enlarged uterus could be felt in the *cul-de-sac* behind, on the right side, and to some extent in front of the cervix. The pelvi-abdominal swelling was somewhat indefinite in outline, and was larger than a three or four-month pregnancy would account for. The sound was not passed. There was no vaginal discharge.

It seemed clear that there were (1) pregnancy, (2) internal hæmorrhage. The pregnancy did not seem to be advanced

enough for concealed intrauterine hæmorrhage to account for the condition present, to say nothing of the rarity of such complete concealment. Hence the diagnosis seemed to lie between ruptured extrauterine gestation and intrauterine gestation with abdominal hæmorrhage from a pelvic vein. Dr. Braithwaite kindly came down to see the case with me, and we decided that abdominal section afforded the only chance of saving the patient's life.

Operation.

On March 30th, at 8 P.M., ether was administered by Mr. Nicholson, anæsthetist to the hospital, and I performed abdominal section, assisted by my resident obstetric officer, Mr. Mosley, Dr. Braithwaite being present also. A median incision exposed a large quantity—about a quart—of dark blood clot lying in the pelvis and hypogastrium. Just above the

pubes was a dead fetus, 8 inches long, free in the abdominal cavity. The umbilical cord could be traced to the floor of the pelvis, where the placenta was lying. It was not, however, adherent here, but could be easily lifted up, and then it was found that the placenta and sac were attached on the right side of the uterus, and that this attachment constituted a fairly narrow pedicle. When this was ligatured and divided, and the blood clot removed from the pelvis, it was found that hæmorrhage was well controlled, and that the pelvis could be sponged dry. The abdomen was not irrigated, but a Bantock's tube was inserted, and the operation was terminated as rapidly as possible by the closure of the wound by continuous suture of the peritoneal edge by catgut, and interrupted silkworm-gut sutures through the remaining layers.

At the commencement of operation the patient was almost pulseless; 10 minims of liquor strychninæ were given by hypodermic injection, and this was repeated three times during the operation. Four pints of normal saline solution

were transfused into the vein by Mr. Dobson, the resident surgical officer, during the operation, and brandy 3 ss was injected into the cellular tissue. During the operation hardly any fresh blood was lost.

After-History.

The after-course was very satisfactory. The shock of the operation was well stood. The Bantock's tube was removed in 36 hours, about 7 ounces of blood and serum having drained away; a rubber drainage tube was inserted for two days longer. There was no abdominal distension, no sign of sepsis or inflammation, and no suppuration in the wound. The temperature rose to 101° on the third night but was normal on the fifth day. Menstrual discharge was present from April 6th to 9th, and was moderate in amount, and she has continued to make satisfactory progress up to date.

Description of Parts Removed.

The photograph on p. 77 shows the parts removed. The foetus, a male, measures 8 ins. long and weighs $4\frac{1}{2}$ ozs. The umbilical cord is $9\frac{1}{2}$ ins. long, the placenta and sac weigh $5\frac{1}{2}$ ozs. The period of gestation may be estimated at about four and a half calendar months, or mid-term.

The photograph shows a rounded conical portion (A), terminating in a cut surface (B) on the one aspect and in a ragged fringe of tissue and membrane on the other. This conical portion is the uterine end of the sac, which seems to consist of expanded oviduct and the layers of the broad ligament containing the central portion of the placenta, and some portion of uterine tissue. The ragged fringe is the distal portion of the sac ruptured, and consists of placental tissue (P P), torn peritoneum, and torn foetal membranes (M). At the upper part of the uterine end of the sac just above the cut surface is seen the stump of the round ligament (C). Hence the gestation should probably be described as tubal gestation, becoming intraligamentous by primary rupture, and ending in abdominal pregnancy by secondary rupture, with intraperitoneal hæmorrhage, at mid-term.

Remarks.

The speedy recovery of this patient from one of the most serious of obstetric accidents was contributed to, first, by the singular circumstance that she was already in the hospital when her first symptoms occurred; secondly, by the fact that the placenta was so attached that it could be removed at once and completely, a single ligature sufficing to control all hæmorrhage. The free employment of strychnine and saline transfusion did much to enable an almost pulseless patient to survive the operation.

The question arises whether this specimen may not be an example of pregnancy in a rudimentary horn of a bicornate uterus. If the insertion of the round ligament marks the point where the uterine cornu ends and the oviduct begins, then it seems plain that in this case the sac lies on the distal or tubal side of this point, and that it is a specimen of tubaligamentary pregnancy, but situated in the closest proximity to the uterus. During operation the fundus uteri seemed to be normal, but my anxiety to terminate the operation speedily prevented me from making a very detailed examination of the relations of the parts.

THE NATURE AND TREATMENT OF PUERPERAL INFECTION.

By THOMAS E. MITCHELL, M.B.,
Old Hill, Staffs.

I THINK that those who have seen much of puerperal fever will agree with Dr. Edge,¹ that antistreptococcus serum can be of little value in the late stages of puerperal infection to which he refers. It seems, however, that an early and energetic use of the older therapeutic means should in a very large proportion of cases prevent the development of large septic thrombi, and the necessity for such heroic measures as hysterectomy and dissection out of thrombosed ovarian veins.

The slighter cases of septic intoxication (often with very high temperature) are very amenable to treatment, and what I have to say refers to well-defined cases of septic infection of more or less prolonged duration. From time to time general practitioners are admonished and to some extent accounted responsible for the large puerperal death-rate, and this is held to be due to their not scrubbing themselves or their patients; to their not pinning their faith on lysol, or finding their only salvation in corrosive sublimate. Those whose experience of midwifery is confined to the wards of lying-in hospitals where they have their patients under complete control, or to the homes of the well-to-do where efficient nursing is available, are often quite convinced that a large number of cases of infection arise from contagion conveyed by the accoucheur.

As one in general practice who has had a large experience of midwifery extending over some years, I should like to take exception to this view. Some of the worst cases of puerperal fever I have seen have occurred after perfectly natural labours, where no digital examination or manipulation at all had occurred. The majority of cases which I have seen have

seemed to me to have originated in the impossibility of inducing many working-class patients to observe the ordinary rules of *post-partum* cleanliness. The bugbear of catching cold leads them to neglect change of clothing and ordinary lavage.

Quinine in large doses has long had a high reputation in the treatment of puerperal septicæmia, and I think that those who find it ineffective owe their disappointment to their failure to push it boldly and combine its use with attention to other details.

In a well-marked case of septicæmia, my routine is to administer a preliminary dose (gr. xij) of quinine sulphate. This is followed by douching of the vagina, and digital exploration of the uterus for any retained secundines. The uterus is then washed out with a weak solution of corrosive sublimate, and an Ehrendorfer's pencil of iodoform (larger than the size usually sold) is introduced into the uterus. This is followed up by a mixture containing in 8 ozs. gr. xl of quinine sulphate and $\mathfrak{m}\times$ of carbolic acid, with bismuth, bicarbonate of soda, and carminatives. In cases of prolonged diarrhoea tincture of opium is added. The introduction of iodoform pencils is repeated if necessary, and in suitable cases repeated vaginal douching is employed. So far from finding such large doses of quinine depressing, it has always been my endeavour to produce cinchonism.

In many cases the tendency to hyperpyrexia directly tends to hasten a fatal issue, and in such cases I have always found the ice cap and cold sponging, repeated when the temperature exceeds 103° , have an excellent effect alike on pulse and temperature. In event of sickness, iced champagne, brandy, and peptonised foods can generally be retained.

Such a course of treatment I have almost always found sufficient to secure recovery, and that in cases marked by rapid pulse (140 to 160), as well as in cases of very high temperature. The addition of carbolic acid I have found especially valuable in cases complicated by diarrhoea, vomiting, and tympanites. The "dressing" of the uterine cavity with a slowly dissolving iodoform ointment, the prevention of waste and deterioration of the cardiac muscle by excessive pyrexia, and the creation of a resistant condition by saturation with quinine, certainly seems to give time for the system to organise its natural method of defence, and what might otherwise become a general blood poisoning results only in a localised inflammatory process.

In the last seven years I have seen only two cases of puerperal septicæmia go on to pyæmia with secondary abscess. One of these eventually recovered more or less, with the loss of an eye and the development of abscesses, which still (five years after) occasionally break out again. The other lived for a considerable number of weeks.

The difficulty of diagnosing the extent of secondary septic thrombosis must surely limit the applicability of operative procedure, even if the general condition of such patients offered a fair chance of recovery. The evidence of the *post-mortem* room, although doubtless an aid to scientific pathology, has surely tended to produce a scepticism unwarranted by the results of therapeutics, for deductions as to the efficacy or otherwise of remedial treatment can only be drawn from those cases in which treatment has undoubtedly failed.

Prevention is doubtless better than cure, and no one would hesitate to avail themselves of the help of antiseptics in midwifery, but in general practice, especially amongst ignorant people, where after-treatment cannot be entirely controlled, cases of sepsis must from time to time arise.

REFERENCE.

¹ BRITISH MEDICAL JOURNAL, March 3rd, p. 546.

A MEDICAL MISSIONARY FOR CHINESE LEPERS.—Father L. L. Conrady, who worked for eight years among the lepers in Molokai, where he succeeded the heroic Father Damien, has recently taken the degree of Doctor of Medicine in the University of Oregon. His medical studies are said to have been undertaken solely for the purpose of making himself more capable of alleviating the sufferings of lepers. Although 60 years of age, and worn by a life among savage and semi-civilised people, his intention was to proceed to the largest leper colony in China, situated in the province of Canton, where, according to the American papers, he will be the pioneer white man.