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Obstetric Emergencies

BY

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Prospective entrants to the Government service must often wonder what sort of cases they are likely to meet with in the African. Whilst the bulk of the work consists of treating deficiency diseases, diseases due to worms and parasites of various kinds as well as the ordinary diseases such as are met with the world over, one is bound to meet many cases of unusual and absorbing interest, and this is especially true of many obstetric cases.

There is always a spice of adventure about surgical emergencies here. Whilst local hospitals are usually very well equipped, it is unusual for the surgeon in a young country to have more than one assistant at an operation—the theatre sister—unlike his colleagues in the older countries, where two or three assistants are the rule!

In the smaller stations there is often no European staff, so that the G.M.O. surgeon must rely on African orderlies not only for assistance at operations, but for the administration of the anaesthetic.

Such a prospect need cause the prospective G.M.O. no alarm. I had an orderly 20 years ago, first taken on untrained at the terrific salary of 15s. a month. He soon qualified as a trained orderly and gave such good anaesthetics that he had only one anaesthetic death in ten years, and that was in a dog with a large skin cancer! The poor man was really distressed about that case and took no end of comforting. He really felt that the dog's death was a lasting disgrace to him!

The G.M.O. certainly has to be a "Jack of all trades," though it is to be hoped that he never falls into the category of "Master of none"!

The following short account of some of the more unusual obstetric emergencies met with in Gatooma during the last nine years may not be without interest to the reader.

Case 1: A Case of Double Uterus.—This case is perhaps not really an "emergency," though it was certainly most intriguing and indeed baffling when first seen.

The patient, a young African woman, gave a history that she was at term and that she had been in labour for two days. She stated that she had had a seven month miscarriage in 1950, one year previously.

The presentation was a left occipito anterior vertex presentation, and the impression was gained that the uterus and foetus were lying to the left of the mid line and that the uterus could not easily be centralised.

On attempted vaginal examination it was seen that she had a *completely* imperforate hymen! One was inclined to think that the story of the previous miscarriage was a product of the imagination, but more careful examination of the perineum, with the patient in the lithotomy position, showed the true state of affairs.

The illustration below shows diagrammatically the position when the patient was first seen.

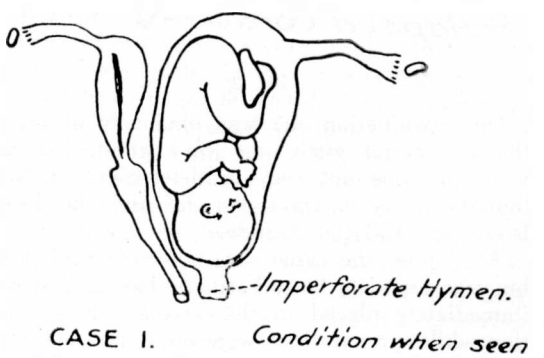

Fig. 1.

There was a second vagina to the right of the one now containing the foetal head. The hymen on the right was missing and it was through the right sided vagina that the first foetus had been born a year previously!

Division of the imperforate hymen permitted easy delivery of a live baby. Examination after delivery showed that the woman had completely separate right and left uteri and vaginae.

Presumably conception must have taken place via the patent vagina and uterus, thence across the pelvis to enter the left tube and uterus.

I am unable to explain what happened to the menstrual blood on the left side. Probably only the right uterus had menstruated, so that this was really a pregnancy in a rudimentary horn!

Case 2 is another example of pregnancy complicated by a developmental abnormality in the mother. This patient, aged about 45 years, had a *septate uterus* and was admitted to hospital at 11.30 a.m. on 6th January, 1950.

She was in labour and gave a history that she had had eight previous deliveries, all of whom, if I remember aright, had survived.

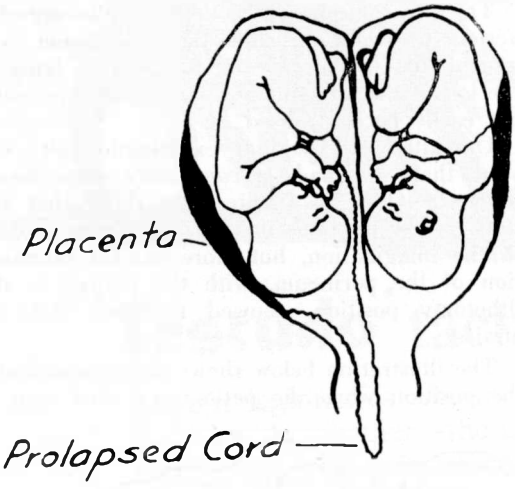

Fig. 2.

On examination she was obviously at term; the abdominal girth was very great, but the foetal lie was not easy to determine. It was thought to be a transverse lie and the foetal heart was 138 per minute.

At 7 p.m. the same day the cord prolapsed, but was found to be pulsating. The patient was immediately placed in the Trendelenberg position whilst preparations were made for caesarian section; the os was only about two fingers dilated and no presenting part could be felt, apart from the prolapsed cord.

At operation we were very surprised to remove only a small baby from the uterus, as we had expected at least a "nine pounder"! The uterus, moreover, looked little smaller than before. Passing a hand into the cavity revealed the true state of affairs. Near the bottom of the uterus on the right side was a hole about two fingers in diameter through which one could feel another foetal head!

The condition was therefore an almost complete septate uterus, with one twin on either side of the septum. The septum was incised and the second twin delivered. The usual teaching is that the septum should not be repaired, but in this case such furious bleeding resulted from its division that it had to be restored more or less to the *status quo*.

Both babies were born alive, though unfortunately the first twin died a few days later.

The condition found at operation is shown in diagram 2. There was an interesting though sad sequel to this case two years later.

The same woman was re-admitted to hospital, once again pregnant and at term. An X-ray showed that this time there was only one foetus, lying in the transverse position. The foetal heart was heard. External version was found to be impossible and, knowing the lady and her peculiar anatomy, I decided upon another caesarian section. The operation was carried out on 3rd June, 1952. The old scar was excised and the uterus opened in the usual manner.

Extraction of the child proved somewhat difficult, as his head was lying to one side of the septum and his body on the other! The neck had been so drawn out and compressed by the lower edge of the septum that it was almost severed. The child made no attempt to breathe and was completely stillborn.

The condition found is illustrated by sketch 3.

It was arranged that this woman should return for sterilisation at a later date, but, being an African, she has never done so.

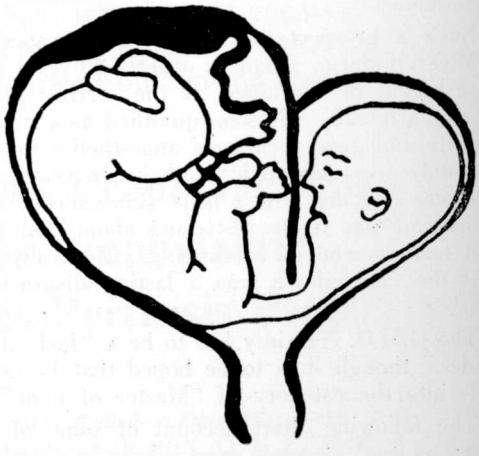

Fig. 3.

Case 3: *Congenital Vaginal Septum.*—Vaginal septa resulting from vaginal injuries caused by previous deliveries are not uncommonly met with, but this case is the only one I have seen in which the septum was congenital in origin.

The woman, a young African, was admitted from Hartley clinic on 2nd November, 1949. She was 36 weeks pregnant, vertex, R.O.A., the foetal heart was heard. It was her first pregnancy.

On vaginal examination no cervix could be felt. The vagina was short—about 2 inches deep—and at the bottom of this cavity a "pin hole" orifice could be felt.

The patient went into spontaneous labour two weeks later, and after four hours of strong labour examination revealed that the foetal head was at the level of the vulva, but that the "pin hole" in the vaginal septum was behind and at least two inches *above* the head.

The foetal head had thus "bypassed" the lower vagina and was distening the fourchette. The condition found is illustrated in sketch 4.

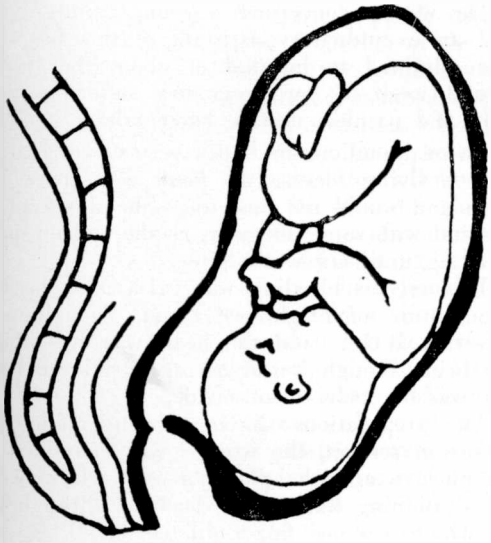

Fig. 4.
Condition found in Case 3.

A healthy though slightly premature infant was delivered by caesarian section and both did well.

On discharge it was found that the septum was complete except for a pin hole. It was a thick and vascular structure and operation was not advised so soon after delivery in view of the dangers involved. The patient was advised to return later, but has not been seen to date.

Case 4.—This case ended in tragedy, but was most interesting because of the bizarre appearance of the unfortunate patient, the difficulty in diagnosis and the unusual condition found at operation.

The patient, an African woman who had had no previous pregnancies, had been in labour at her kraal for several days. From the condition subsequently discovered, it is probable that she had had a good deal of "help" from local friends and "Gamps."

The abdomen was enormously distended and gave the impression that she was about to give birth to quads at least! Her general condition was very poor. A photograph showing the woman's appearance is shown below.

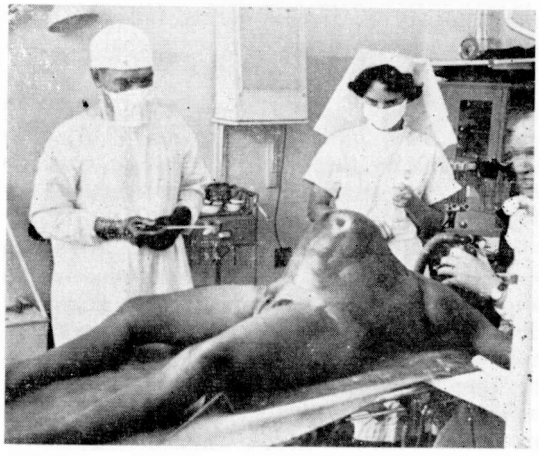

Fig. 5.—Note the enormous distension of the abdomen.

X-ray showed the presence of only one foetus.

Vaginal examination revealed considerable oedema of the vulva, a cervix fully dilated and the head above the brim. It was thought that a foetal heart could be heard, though on examination of the macerated foetus after delivery it was obvious that this was a mistake.

The abdomen was opened with a view to performing caesarian section, but as soon as the parietes had been divided the whole uterus with its contained foetus bulged forward through the incision. The cause of this was immediately obvious—the whole of the retroperitoneal tissues were blown up with gas.

In view of the gross infection of these tissues the uterus was not opened; instead, an assistant performed craniotomy and delivered a macerated foetus. The abdomen was kept open until delivery was complete in case perforation of the uterus had occurred; it was subsequently closed in the usual manner.

In spite of the usual shock treatment, the patient died—of toxaemia resulting from gas gangrene of the retroperitoneal tissues—a few hours later.

Case 5.—Obstructed labour caused by twins, one of whom was an acardiac monster.

The patient was an African multiparous woman. She was admitted in strong labour, but no foetal parts could be identified. She was larger than normal and appeared to be at term.

On vaginal examination it was found that the presenting part—a soft tissue structure, probably the breech, though not definitely identifiable—was impacted at the pelvic brim.

A diagnosis of "locked twins" was made and caesarian section carried out.

The uterus contained a normal full term foetus and a monster so unusual in shape that a special description is given below.

The foetus and mother made good recoveries.

I am greatly indebted to Professor J. A. Keen, of Durban, for the following description of the monster. It is now in the museum at that medical school.

"The body form is recognisable; there are two well-formed lower limbs and some of the abdominal viscera can be identified, as you no doubt saw. The lumbar part of the vertebral column is there, but nothing above the level of the diaphragm. In teratology it would be called a *hemi-acardius* of the acephalic variety. These monsters usually occur with uni-ovular twins, but there can be two separate placentae, provided there was a link up in the two placental circulations. At an early stage of development one twin becomes dominant and the circulation in the other is reversed. As a consequence, the heart and circulation never get established. The upper part of the trunk does not grow and the lower part (nourished in reverse by the umbilical arteries) grows partially."

Amongst other foetal abnormalities, we have had a baby born with intra-uterine amputation of the arm, a baby who had perfect feet stuck on to rudimentary thighs, a baby with eyelids but no trace of eyes (who fortunately succumbed about a week after birth), and two cases of intra-uterine fracture, one of a femur and one of a tibia.

Cases of rupture of the uterus are not infrequently met with, due invariably to long labours too patiently borne at the kraals, but only one case was seen where such rupture followed a caesarian section, and in that case the operation had been done elsewhere.

Placenta praevia is a not uncommon complication of pregnancy; all but one have been in multiparae and in most cases the women had had over five previous pregnancies. The invariable rule, where spontaneous and painless haemorrhage has occurred in the last three months of pregnancy, is to admit the woman to hospital and keep her there until she is delivered. The wisdom and necessity of this have been demonstrated on many occasions. I can recall many cases where a haemorrhage has occurred at about the thirty-sixth week of gestation and the case has then had no further bleeding until a sudden and often furious haemorrhage at about term has heralded the onset of labour. Many of such cases would have died before the patient could have been brought back to hospital, even if they had been living in one of the local townships.

Case 6 illustrates the necessity of admitting all cases of late ante-partum haemorrhage to hospital and keeping them there, in spite of their insistence that they are quite all right and want to go home for a few weeks.

The woman concerned, a young primigravida and an ex-midwifery assistant of this hospital, was admitted to hospital at about the thirty-second week of her pregnancy suffering from mild and painless uterine haemorrhage.

On examination she had a vertex presentation with a living foetus; the head was above the brim and would not push in. She was kept in hospital with some difficulty, as she had no more bleeding until six weeks later.

This second bleeding was brisk and she lost about 4 oz. of bright red blood. The lie was a vertex R.O.A. and the head was still above the brim, though it did not seem a large head nor was her pelvis contracted.

All preparations having been made for caesarian section, the woman was examined in the theatre and the placenta was felt between the examining finger and the head through the os, which was one finger dilated.

Classical caesarian section was carried out, a live baby was delivered and it was seen that the woman had a large centrally situated placenta praevia. She made a good recovery.

From twenty years of experience of midwifery in Rhodesia, nearly all amongst Africans, I would strongly advise young doctors of the danger of forceps and the comparatively few indications for their use amongst such patients. Where one meets with pelvic contraction in an African one frequently finds that the pelvis tends to be "funnel" in type, so that the obstruc-

tion becomes more acute the further the head descends. I can remember with bitter feelings two cases of mid cavity arrest where the application of forceps promised easy delivery, only to be faced with the "failed forceps" dilemma owing to this characteristic funnel pelvis. Fortunately in both cases subsequent lower segment caesarian section resulted in a live baby and recovery of the mother, though such success was more than I deserved.

I am sure it cannot be too strongly stressed that the application of forceps should not be considered by the non-specialist unless:

(1) The head is on the perineum—and one must be certain that it *is* the head itself on the perineum and not caput!

(2) There is no undue narrowing of the subpubic angle nor narrowing of the transverse diameter.

Foetal distress in the first stage of labour is very commonly seen in African women. The reason for this is the common practice taught by the older women of pushing right from the onset of labour, with consequent rupture of the membranes with the os only partly dilated and consequent slowing of dilatation of the os uteri. Although one is taught that foetal distress cannot occur with unruptured membrances, I have seen it on innumerable occasions. Possibly this is due to paucity of liquor, but it certainly does occur and must be looked for whenever labour is unduly prolonged. On several such occasions when I have carried out a caesarian section for foetal distress, shown by slowing and irregularity of the foetal heart, I have found a marked caput and meconium-stained liquor with a partially dilated os and intact membranes!

A practice of this hospital, which I commend to all medical officers in charge of small hospitals, is to keep a "caesar" drum always sterile. This drum contains gowns, towels and all the instruments essential for a caesarean operation, so that when the operation is called for in a hurry, as it so often is, the theatre can be ready in about ten minutes.

In urgent cases, where there is marked foetal distress so that intra-uterine foetal death is feared at any moment, we have found it good practice to carry out what we call the "blitz operation." To do this it is essential, however, to have a highly skilled, independent and qualified anaesthetist. The method is as follows: The surgeon and theatre sister "scrub up" before the patient arrives in the theatre. Sister then prepares her first row of catgut sutures for the uterus. These are of No. 3 or No. 4 chromic catgut and each is long enough for one stitch. Four or five can be made from each tube of catgut, and about 12 should be threaded in readiness on to large curved cutting needles.

The patient, having arrived in the theatre, is suitably calmed and then cleaned up and towelled ready for operation.

Surgeon and sister being all ready to start and in their places on either side of the table, the anaesthetist injects a moderate dose of intravenous pentothal. As soon as unconsciousness supervenes the surgeon makes his incision—a "classical" one—and extracts the child—a matter of a few seconds only. The baby is out before any appreciable amount of pentothal has time to reach him and he is almost invariably born crying lustily! This is a great consideration when a hospital is busy and it is difficult to spare a skilled person to spend a long while resuscitating the baby.

Another great advantage is that the first row of uterine sutures can be inserted and tied before any appreciable amount of bleeding takes place, so that the method saves a lot of maternal blood. This latter consideration is probably of no importance in older countries where adequate blood transfusion facilities are available, but is immensely important here, where it is so difficult to find donors!

The child extracted, the anaesthetist continues the anaesthesia with oxygen, trilene and, if necessary, ether with a Boyle's machine.

Lest anyone should be tempted to try the method under clinic conditions, I would stress that it *should only be tried where a very skilled anaesthetist* is available and where there are all facilities for rapid surgery and, if necessary, intubation.

With regard to the "rapid surgery," a word of caution to the younger men is needed. In African women it is not unusual, in cases of obstructed labour, to find a considerable amount of intestine *in front of the uterus*. This is due to obstruction of the pelvic colon by the foetal head. It is therefore always necessary to carry out a caesarian incision carefully and to avoid unexpected opening of the peritoneum.

Acknowledgments

My thanks are due to Dr. W. Murray, Acting Director of Medical Services, Southern Rhodesia, for permission to publish this paper and to the many doctors and nurses who have helped me with the various cases. Especial thanks are due to Professor Keen for his description of the acardiac monster.