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A Case of Retroflexion of the Full-time Gravid Uterus.

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DR. ANNESLEY FISHER, Skipton, saw the patient for the first time, in place of her ordinary medical attendant, at 6 a.m., June 4th, 1928. He was told that she was aged 25 and in her first pregnancy. Labour was expected in about 10 days; antenatal examinations had not been made; there had not been any pain or other abnormal symptoms during the pregnancy. The membranes had ruptured 16 hours previously, since when liquor amnii had been dribbling away continuously. Labour pains came on during the night, but they were few and far between until about 5 a.m., when they became stronger and less infrequent.

Dr. Fisher noticed that the uterus appeared to be small, its upper limit being only two or three inches above the umbilicus. He made a vaginal examination and felt a limb in the vagina and a swelling in the hollow of the sacrum. The external os could not be felt. He telephoned to me about the case at 7 a.m. and soon afterwards sent the patient in an ambulance to Leeds. I saw her, in consultation with Dr. Fisher, at 9 a.m., shortly after her arrival in the nursing home. From his description of the case I expected the complication to be that of an ovarian cyst obstructing labour. The patient looked very well and had a normal pulse-rate and temperature. The uterus was small. The child lay obliquely, but its outline could not be defined because of the firmness of the uterus. The foetal heart-rate was 120. The patient was anaesthetized and after emptying the bladder, which contained six ounces of urine, and irrigating the vagina a vaginal examination was made and a limb felt (Fig. 1). The limb was an arm; it was swollen and firm to touch. The vagina was displaced forwards and upwards by a large tumour in the hollow of the sacrum. The tumour was rounded in shape, about as large as a seven months' foetal head; it was firm to touch but neither hard nor definitely cystic. The os uteri could not be reached. An oblique lie due to obstruction by an ovarian tumour was diagnosed, and it was decided to open the abdomen, remove the tumour, and then deliver the patient through the natural passages. While the

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skin of the abdominal wall was being cleansed it was remarked that the size of the uterus appeared to be unusually small. When the peritoneal cavity was opened and the uterus exposed, no abnormality was noticed except that the line of reflection of peritoneum from the uterus to the bladder was raised to about a hand's breadth above the symphysis pubis. An attempt to draw the uterus out of the abdomen by gentle traction failed, and deeper anaesthesia was requested. When this was obtained the hand was passed into the abdomen and behind the uterus, which organ was slowly but firmly lifted forwards until it was delivered on to the surface of the abdominal wall (Fig. 2). The uterus did not sag forward as it usually does in such circumstances, but it tended to return into the abdominal cavity. The uterus was markedly retracted, and on palpation the parts of the child could not be clearly made out, but its head was felt below and to the left. The hand was now passed behind the uterus and insinuated between the tumour and the sacrum, and the tumour was cautiously raised on to the surface of the abdomen. It then became evident that the tumour was uterine and not ovarian, for it projected erect from the fundus of the uterus (Fig 3). It was as large as a seven months' foetal head, rounded and firm to touch. Its colour, which gave it a congested appearance, was of a deeper shade than the rest of the uterus. Its attachment to the uterus was broad and only slightly less than the greatest circumference of the tumour. As the tumour appeared to be a fibroid it was decided to turn the child into a vertex presentation and then leave the delivery to nature.

At first the attempt to turn the child failed on account of the arm being prolapsed in the vagina. The prolapsed arm was easily replaced in the following way. After passing the right hand into Douglas's pouch and feeling the child's arm through the vaginal wall, sweeping pressure was made upwards on the child's arm with this hand. Then pressure inwards was made on its head by the left hand through the front of the uterus. By these manipulations the arm was at once restored into the cavity of the uterus and the head placed over the brim in the middle line. External cephalic version was thus completed.

Before closing the abdomen the tumour was again examined. There seemed to be no doubt about its being a fibroid. The only question was whether the tumour should be removed or left *in situ*. Rightly or wrongly it was decided to remove it, because it was thought that it might produce symptoms during the puerperium or afterwards, especially if the patient again became pregnant.

An incision long enough for its enucleation was made over the

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top of the tumour. The incision was a superficial one at first and involved only the peritoneum and a thin layer of muscle. On deepening the incision it became at once obvious that the tissue being divided was placental.

There was no longer any question as to the nature of the "tumour" or the procedure by which the labour should be completed, especially as the amniotic cavity was opened at one end (the left) of the incision. The wound was lengthened to the left (Fig. 4) through normal thick uterine wall, and the child delivered by Caesarean section. After removal of the placenta the uterus appeared to be a perfectly normal one except that the Caesarean incision lay on its *posterior* surface (Fig. 5). It extended from the insertion of the right Fallopian tube obliquely downwards and to the left. The muscle was thin above and to the right, i.e., at the placental site, but of normal thickness to the left and below. After suturing the uterine incision the posterior surface of the uterus was examined for signs of adhesions; none were seen, but there was another interesting lesion, and this was a crack in the peritoneum about two inches long and passing obliquely over the lower uterine segment (a) (Fig. 5). The complete absence of oozing from the crack and its retracted margins were striking features. Its margins were drawn together by a few fine catgut sutures so as to cover the raw surface exposed. Finally the uterus was put back into the abdomen and the operation was completed by closing the abdomen in the usual way.

Recovery was satisfactory and mother and child, both alive and well, went home within three weeks of admission.

The case (Fig. 6), retroflexion of the gravid uterus continuing to full time, is a rare form of obstructed labour. The condition is barely mentioned in the usual textbooks and there are few such cases in the English journals, but Herman, Munro Kerr, Whitridge Williams and De Lee discuss the subject in their books.

In his "Difficult Labour," Herman[1] makes the following statement: "The pregnancy goes on; the anterior wall of the uterus rises in the abdomen and at the end of pregnancy the uterine cavity is partly in the true pelvis, partly in the abdomen, the vaginal portion and os externum being above the symphysis pubis. This is very unusual. Surgeons called to such cases who were not acquainted with the subject have performed various operations to extract the child, with disastrous results. In every such case that has been let alone (and I am glad to say most such cases have been in English practice), natural delivery has taken place."

From the above extract it is reasonable to conclude that Herman was familiar with the condition; but the last sentence is surprising,

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because in the cases reported, both in English and foreign literature, natural delivery has been the rarest of all methods by which labour was completed. However, a case under Herman's care (see p. 9) did have a natural labour. In the last edition of Herman's "Difficult Labour," the treatment suggested is abdominal section if reposition by pressure from below fails. For this opinion the writer (C.O.) is responsible.

This is what Munro Kerr[2] says in his excellent account of retroflexion of the gravid uterus:—"But there is the third group, in which a portion of the uterus is left behind in the pelvis. This is now referred to as partial retroflexion or sacculation of the gravid uterus. It is quite possible in certain cases where, for example, a tumour of the uterus or the ovary exists, that the retro-displacement is really secondary, the tumour preventing the uterus from extending upwards in the abdomen, but in other cases it is certainly the result of adhesions. I once saw a case where a myoma of the uterus prevented the fundus from rising and caused sacculation, while a few years ago a case was sent to me where a broad ligament cyst had a similar effect. Croom, Durhssen, and others have recorded similar cases. As examples of sacculation the result of a portion of the gravid uterus remaining behind, mention may be made of the cases described by Oldham, Merriman, Barnes, Hicks, Reid, and Duhrssen."

It would appear that Munro Kerr has not seen a case of retroflexion of the gravid uterus at full time, apart from adhesions or tumours, but in the case here reported, and in most of the others referred to later, there was not any evidence of adhesions or tumour having caused the retroflexion.

With regard to the name "partial retroflexion or sacculation," the criticism offered is that so far as the writer can ascertain no such condition has been demonstrated by abdominal section. In his case the retroflexion was undoubtedly complete. When the uterus was delivered on to the surface of the abdomen the portion of the uterus which had occupied the pelvic cavity projected from the top of the uterus as a sacculation might be expected to do, but after the uterus had been emptied there was not any sign of sacculation. Moreover, of the cases reported by British obstetricians most, if not all, seem to be of the same kind as this and were similarly named. Even if the term were allowed it would be necessary to call the condition "sacculation of a retroflexed uterus."

Williams[3] states: "In this condition which is known as sacculation, the head of the child may occupy the displaced fundus, while the cervix is so drawn up that the external os lies above

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the upper margin of the symphysis pubis. Consequently at the time of labour the contractions tend to force the child through the most dependent portion of the uterus, while the cervix dilates only partially, so that spontaneous birth is out of the question and rupture of the uterus may occur as in a case reported by Campbell.[4] For these reasons Caesarean section will afford the most conservative method of delivery and, at the same time, make possible the reposition of the organ." (Campbell's patient was only six months pregnant).

This experienced obstetrician has evidently not seen a case and certainly not opened the abdomen and delivered the uterus on the surface, otherwise the name he gives to the condition, his theory of the mode of action of the uterus, and the treatment he suggests would be different.

De Lee[5] does not say he has seen a case, but gives a drawing of one. From the legend attached to the illustration it is reasonable to assume that the case was similar to the one now recorded; if it was, his constructed drawing does not represent accurately the actual condition of the uterus in such cases. In the text he states: "Incomplete restitution may result in a condition known as retroflexio uteri partialis. This term is applied to those cases where part of the fundus is retained in the pelvis, the anterior wall expanding in the abdomen to form the ovum container. Many forms of the uterus are possible. They are due to inveterate adhesions, tumours, or changes in the uterine muscle or serosa at the point of the flexion.

"These cases may terminate normally at term, the deformity and dislocation of the cervix being fully overcome. Abortion or premature labour may occur, or incarceration which demands early interference and, if at term, operation.

"A condition known as sacciform dilatation of the uterus may be confounded with partial restitution. The cervix is found behind or above the pubis; the cul-de-sac is filled with part of the dilated cervix or the lower uterine segment. It is usually a simple matter, by means of a finger or the vulsella, to pull the cervix to the median line and then complete delivery in the natural or ordinary operative method; but Depaul, who wrote a good paper on the subject, was unable, in his case, to find the os, and the patient died undelivered though he had made an opening through the posterior uterine wall."

Here, again, the author calls the condition partial retroflexion or sacculation. The distinction he draws between these two conditions is difficult to follow, and criticisms similar to those already made might be offered on the statements of this writer. An

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exhaustive search of the literature for cases has not been made, but there appear to be no cases recorded in modern times except Herman's[6] (1898), Potocki's[7] (1920), and Szenes's[8] (1930).

In Herman's case the uterus righted itself during labour, then the child presented by the breech and was expelled naturally except for a little traction during the delivery of the head. The child was born dead, but the mother made a good recovery.

Potocki's case was at full time. The uterus was bound down by adhesions. The treatment adopted was Caesarean hysterectomy. The child was dead and the mother lived.

Szenes's patient was a post-mature primigravida. When the patient was nine years of age she was wounded in the abdomen by a knife, and the viscera protruded. She had some urinary symptoms at the sixth month. She was delivered by Caesarean section and mother and child did well. This author refers to cases reported by Pinard, Solowig, Mais and Lange and mentions other cases, but does not give the references.

Pinard's patient was a post-mature primigravida. The head presented and the patient was delivered by Caesarean section. Mother and child did well.

Solowig's patient was pregnant for the third time. The duration of the pregnancy is not given. The child was extracted by the legs; the uterus was ruptured: the mother died: the child lived.

Mais's patient was a primigravida at the eighth month: craniotomy was performed: the uterus was ruptured: the mother died.

The first description of the condition is given by Henry Deventer[9], and in another work Deventer[10] gives the following account:—

"Of a difficult Birth when the womb is pressed too much against the backbone. I have learnt by experience and all practisers of Midwifery, who love the truth, may be taught by the same mistress, that the womb being out of its natural place, may be often too much resupined, or tend with its bottom backwards, being forced against the backbone; so that its mouth or passage is not only raised too high into the belly, but is so obliquely seated that it no longer answers the neck of the womb in the right line; but on the contrary the upper part of the vagina is so bent and crooked that it is rather like the figure of a three-cornered rule, than a direct line varying more or less, as the womb is more or less pressed against the backbone and the loins of the woman are less sinuous."

During the nineteenth century there are recorded in the English

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literature cases by the following: Merriman (two cases), Ramsbotham, MacLeod, Oldham, Fundenberg, and Reid. In 1875 Gustave Veit collected a number of cases, including some of the above, and, with the exception of the British cases and one other, (Vermandois') these cases were not at or near full time. Depaul reported a case in 1876.

Merriman.[11] *First case.* Several days in labour: "delivered by the gradual efforts of nature." The mother lived and the child died. This case was reported by Jackson in 1798.

Second case (1806). Early rupture of the membranes: many days in labour: retroflexion reduced spontaneously: head presentation: craniotomy of dead child. The mother lived.

Ramsbotham[12] (1838). Retention of urine at sixth month with incontinence during the remainder of the pregnancy: labour at the eighth month of pregnancy: early rupture of the membranes. Treatment by laudanum: short labour: spontaneous reposition of the uterus: abdominal presentation: internal version: difficult delivery: child dead. Result to the mother not stated.

MacLeod[13] (1856). Long observation of case during several months. The patient was very ill during most of the time with retention, incontinence and high fever. The patient died, undelivered, at the tenth month of pregnancy. The foetus was the size of a five months' child.

Oldham[14] (1859), Fig. 7. Munro Kerr calls this the classical case. Dr. Osborne diagnosed retroflexion during pregnancy. A few bladder symptoms "not worse than ordinary," first pregnancy: full time.

Abdomen. The uterus differed in size and shape from normal, its front surface was narrowed and reached to a hand's breadth above the umbilicus. Its summit receded instead of projecting and the "womb was less bulky" than normal.

Per vaginam. The tumour filled the pelvis, closing the vaginal walls. Fluid was felt over the head, which was in the pelvis. The patient was in good condition. Under chloroform the hand was forced into the vagina; the external os was at least three inches above the brim and closed. The os was dilated with the fingers, when the scrotum was felt. Oldham could pass his fingers over the "margin of reflexion which comprised a dense firm tissue, and cavity of uterus was perceived to dip downwards." An attempt to raise the uterus by pressure from below failed. Internal version was performed using traction on anus first of all. Then he "rapidly shifted pressure on to head" (in pelvis): the os came

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down, a foot was pulled on and the child was delivered but it was dead. The mother lived.

Fundenberg[15] (1877). The case was complicated by cancer of cervix. The patient was delivered by Caesarean section at full time; the child was dead; the mother lived three months.

Reid[16] (1879) (Fig. 8). In the pelvis was a tumour (containing placenta) the size of a child's head; it projected from the vulva during labour pains. Labour was prolonged and the patient became very ill. The lie was transverse. Chloroform was given and the os dilated manually. Internal version was performed and the tumour was pushed up before delivery of the head. The child lived five or six hours, but the mother died.

Depaul[17] (1875) (Fig. 9). The patient was seven and a half months' pregnant. Labour was long: an incision was made into the uterus through the posterior vaginal wall and part of the child was extracted through the opening. The head was left in the uterus; the mother died. The post-mortem revealed acute retroflexion of the uterus.

Discussion.

It is evident from the scarcity of reported cases that complete retroflexion of a full-time uterus is a very unusual one. The case here described is remarkable in that the patient stated that she had not suffered from any symptoms during pregnancy, urinary or otherwise. The question of diagnosis is not important, because the most likely condition for which retroflexion would be mistaken, namely, that of ovarian cyst blocking the pelvis, should be treated in a similar way to the retroflexion, that is, by abdominal section, if gentle pressure upwards on the obstructing tumour failed to dislodge it.

The method of turning the child adopted in this case, that is, *after opening the abdomen,* might with advantage be employed instead of internal version in certain cases.

Oblique lie, with a living child, in which it is feared that intra-uterine manipulation would be dangerous on account of sepsis or rupture of the uterus, would be such a case.

References.

1. Herman. "Difficult Labour." Sixth edition, 1920, p. 518.
2. Kerr, M. J. "Operative Midwifery." Second edition, p. 274.
3. Williams, W. "Obstetrics." Sixth edition, p. 831.
4. Campbell. *Journ. Obstet. and Gynaecol. Brit. Emp.,* 1908, xiv, 403.
5. De Lee. "Obstetrics." Third edition, p. 420.

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6. Herman. *Lancet*, 1898, i. 1397.
7. Potocki. *Bull. Soc. d'Obst. et de Gynécol. de Paris*, 1920, ix, 99.
8. Szenes. *Wien. Klin. Wochenschr.*, 1931, xliv, 199.
9. Deventer, H. "Operationes Chirigicæ," Part I, 1707.
10. Deventer, H. "The Art of Midwifery," 1716.
11. Merriman. "A Synopsis of Various Kinds of Difficult Parturition," 1820, 232.
12. Ramsbotham. *Med. Times and Gazette.*, 1852, v, 409.
13. MacLeod. *Glasgow Med. Journ.*, 1856-7, iv, 410.
14. Oldham. *Lancet*, 1859, ii, 618.
15. Fundenburg. *Amer. Journ. Obstet.*, 1877, x, 462.
16. Reid. *Edin. Trans. Obstet.*, 1877-1880, 57.
17. Depaul. *Archives de Tocologie*, 1876, 87.

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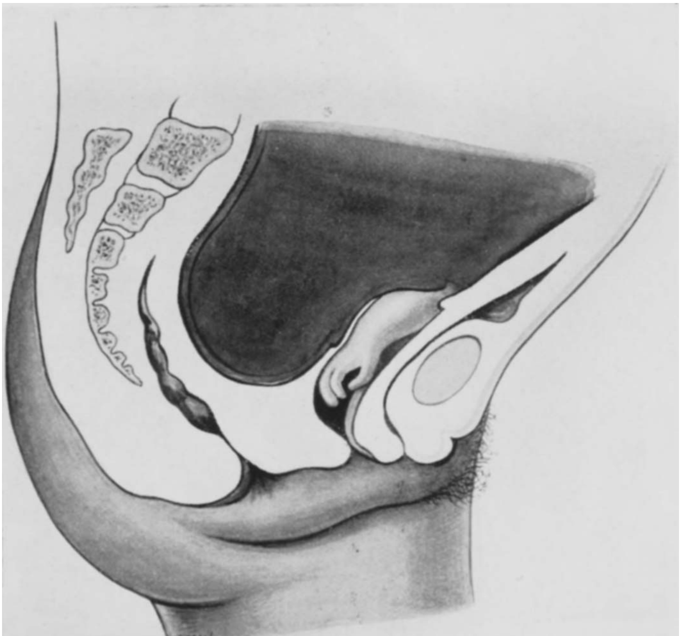

Fig. 1.
"Touch picture" shows prolapsed arm in vagina and large tumour filling the pelvis.

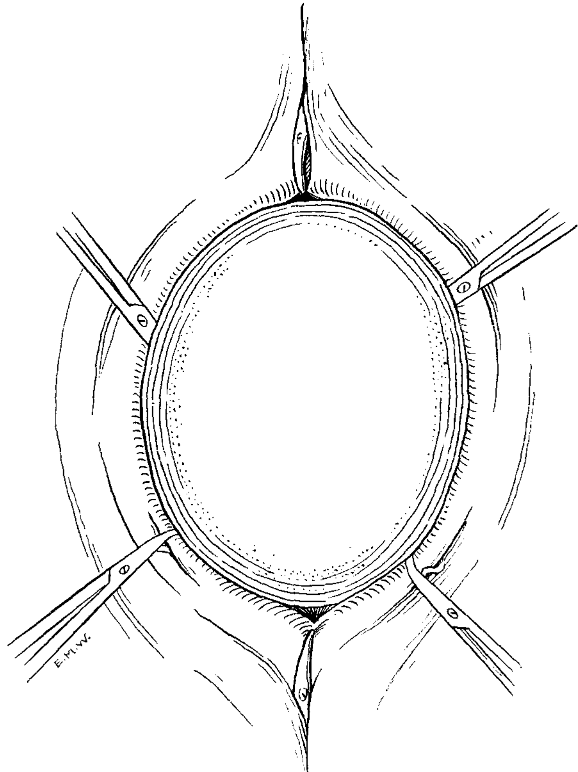

Fig. 2.
Shows uterus lifted on to abdominal wall: it did not sag forward but tended to be drawn back into the abdomen. Empty bladder exposed below.

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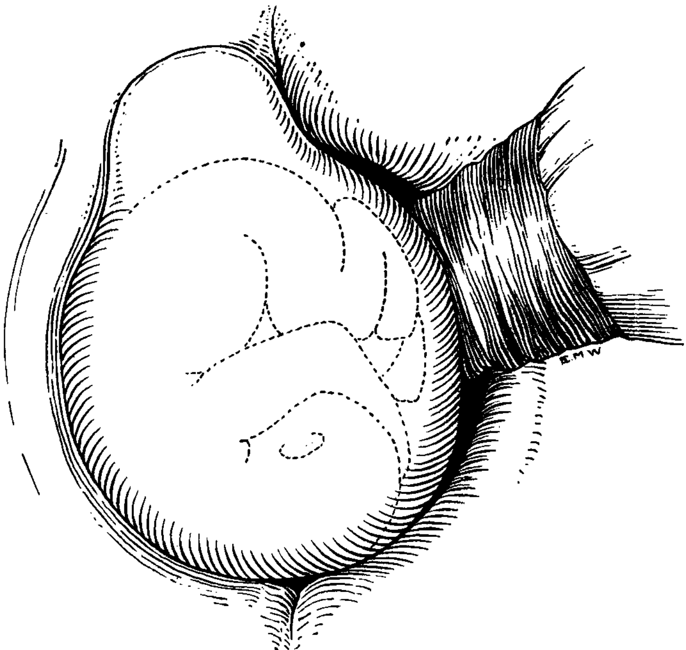

Fig. 3.
Shows tumour projecting from fundus : child lying obliquely.

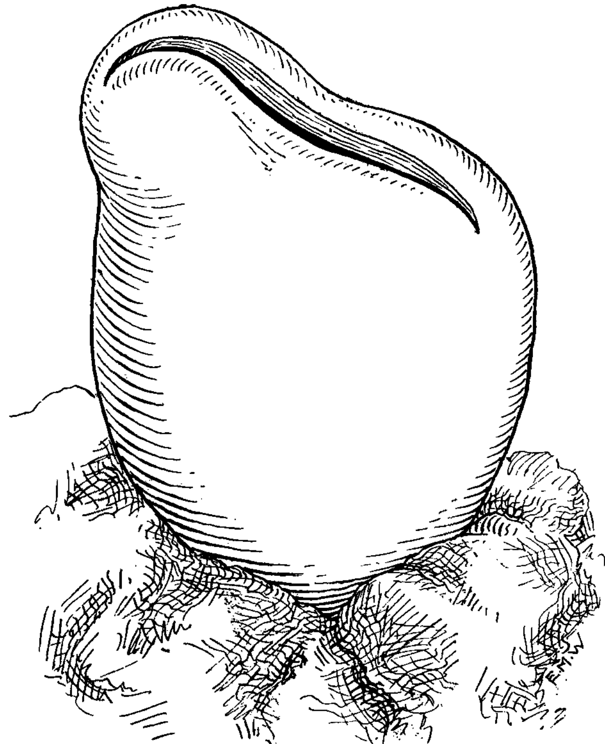

Fig. 4.
Shows incision through uterine wall over top of tumour and extended to left for Caesarean section.

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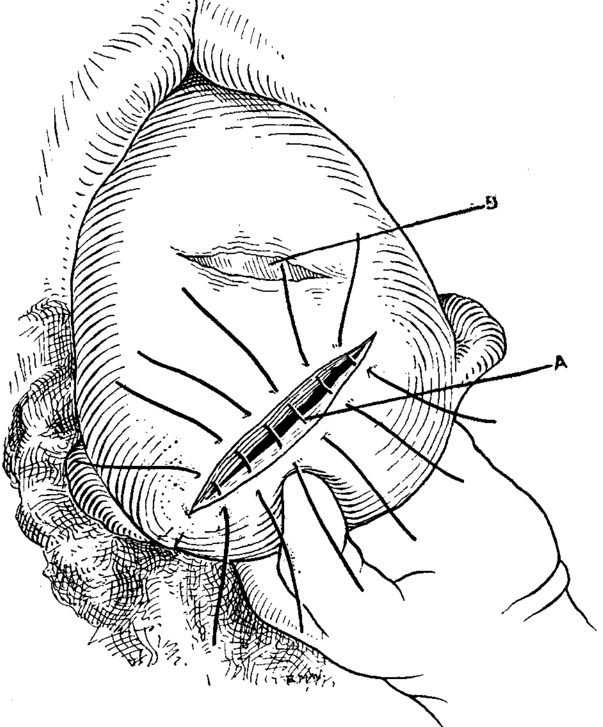

FIG. 5.

Posterior wall of uterus which is dragged forward, showing:—(*a*) Caesarean section wound passing obliquely across posterior surface of uterus; (*b*) crack in peritoneum over lower uterine segment.

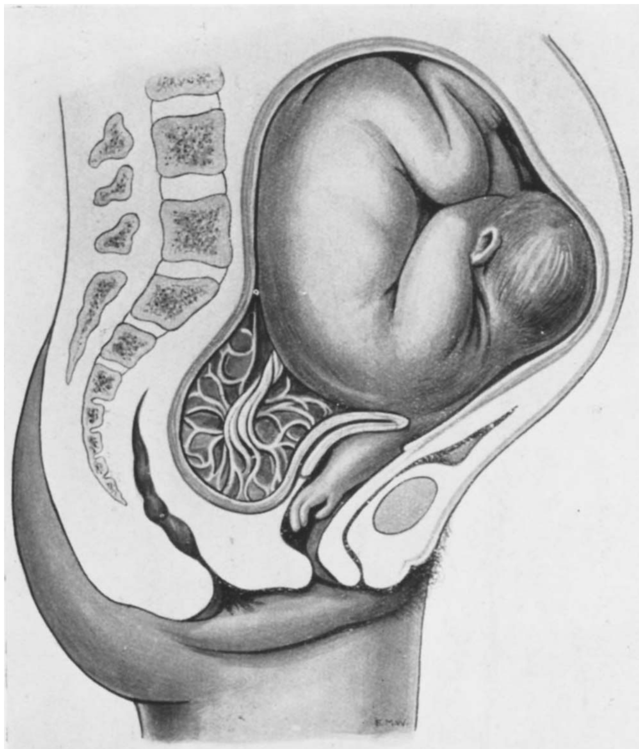

FIG. 6.

Shows complete retroflexion of the full time gravid uterus; the child's arm is prolapsed; the pelvic portion of the uterus is occupied by the placenta. Compare this drawing with Fig. 1.

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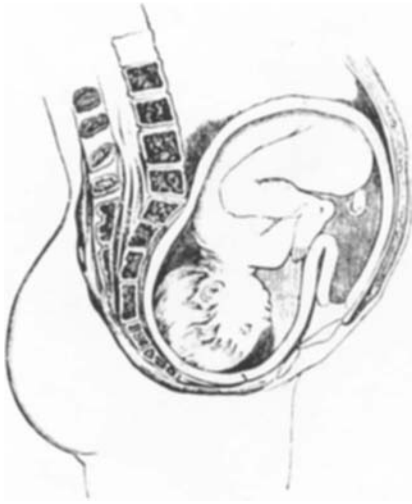

FIG. 7.
Oldham's case.

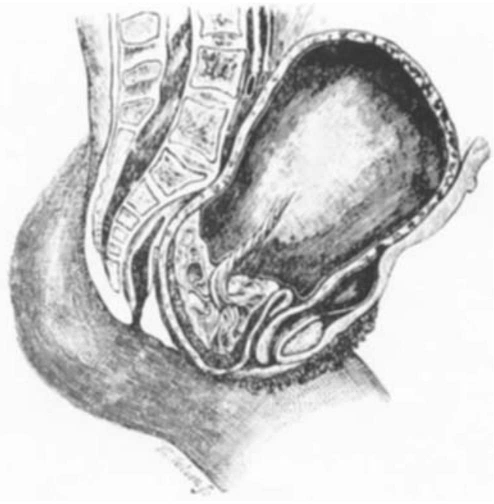

FIG. 8.
Reid's case.

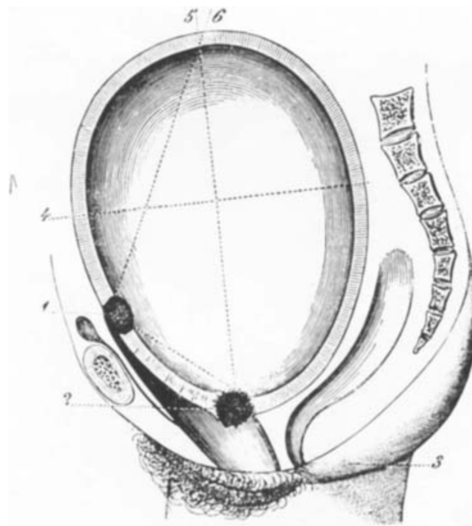

FIG. 9.
Depaul's case.

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