Minor measures, such as curetting and electrical treatment, are, I believe, absolutely useless. As regards the latter, I confess frankly I have had no personal experience, but that conditions I am constantly meeting on the operating table can be cured by electrolysis I absolutely refuse to believe.

We come now to the much-vexed question of oöphorectomy. We used to get fairly good results from it. Even now, given a small fibroid with appendages so inflamed, so diseased as to demand removal, I would remove the appendages and leave the uterus. As a routine treatment of fibroids it is not to be compared with hysterectomy.

1. The operation of oöphorectomy is attended by quite as large, if not a larger, mortality than hysterectomy.

2. It is quite as difficult an operation to perform, and takes very nearly as long.

3. The immediate post-operative condition is much more distressing, there being much more pain after oöphorectomy than after hysterectomy.

4. The general convalescence is longer and much less easy.

5. The ultimate cure cannot, on the face of it, be as certain. Four times have I had to do hysterectomy for fibroids in cases from which the appendages had been previously removed.

One of the good points about abdominal hysterectomy is the easy convalescence, the freedom from pain on the part of the patient, the freedom from anxiety on the part of the surgeon. If you think of the anatomy of the parts, you will realize that when there is a fibroid in the uterus the broad ligaments will be more or less on the stretch. If you remove the appendages there must be a strain on the ligature, a force constantly tending to push it off, and this keeps the surgeon in a condition of anxiety for the first twenty-four hours. If you do a hysterectomy, you reduce rather than increase the stretching of the broad ligaments; in fact, you do away with it altogether. In the Trendelenburg position, with all the bowels and omentum tucked up in the abdomen away from the pelvis, one can fashion the peritoneal flaps, tie the vessels so that the stumps drop under and can be easily buried under the peritoneum. I may say that I never suture the cervix. I simply bring the anterior and posterior flaps of peritoneum together with a continuous fine silk suture. At the end of the operation you can look down into the pelvis, and there is between the bladder in front and the rectum behind nothing but the line of suture visible, lying in the pelvic floor with no strain whatever upon it. If the appendages are not diseased I do not remove them.

In conclusion, I would say that I hope I have not spoken too strongly on this matter, but I want every one to recognize that the sooner these cases are seen to the better. I know perfectly well that others, knowing quite as much, perhaps more than I do, about it, may not agree with all that I have said. No one is free from errors of judgement as well as of practice; and, holding as I do that no man should believe implicitly that he *must* be right, I am open to conviction on many points, but I certainly hold to the opinions I have expressed. I believe in them, for I have come to them from a good many years' experience.

CAESAREAN SECTION IN A CASE OF CONTRACTED PELVIS WITH TWIN PREGNANCY.

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ON March 4th, 1906, I was asked by Dr. Gerald Child of Hythe, Southampton, to see a woman daily expecting confinement, who had consulted him complaining of headache and vomiting. He found that she had albuminuria, and noticing her small size, made a careful examination of the pelvis. As there seemed to be such contraction that delivery would probably entail the sacrifice of the child, he asked me to see the patient, in view of the possibility of Caesarean section. Her circumstances being poor, she was removed the same day to the Royal South Hants and Southampton Hospital.

The patient was 35 years of age, and had been married one year. Her height was 4 ft. 9 in., and she had marked rickety deformity of the thighs and legs. The abdomen was very prominent, with the uterus extending above the ensiform cartilage. The fetal head was felt in the right iliac fossa, the legs apparently above and to the left, with the back to the front; the fetal heart could be heard on the right side about the level of the umbilicus. Twins were not suspected. There was no oedema. The urine contained $\frac{1}{2}$ albumen, granular casts being present. She had a little dyspnoea and cough, but the physical examination of the heart and lungs was negative. My colleague, Dr. Keele, kindly examined her with me under anaesthesia. The promontory was higher than usual, while the diagonal conjugate measured a little under 4 in. The upper part of the sacrum felt convex from side to side, projecting forwards into the pelvic cavity; the side walls of the inlet were contracted, being easily felt by the fingers all round. The greatest diameter of the fetal head could not be made to enter the brim by pressure from above. Though the true conjugate was about 3 $\frac{1}{2}$ in., it was thought that, with the general contraction, the birth of a living child would be improbable; the patient was therefore offered the alternative of Caesarean section. This, after consultation with her husband, she accepted.

Operation.

Labour commenced on March 6th, and when the os was dilated enough to admit two fingers the operation was performed.

The incision, made about 1 in. to the right of the middle line, was some 6 or 7 in. in length, the upper end being about 2 in. above the navel. The fibres of the rectus were separated with the finger, and the posterior sheath and peritoneum divided. A small incision in the uterus was made, the placenta being met with at once on the anterior wall; the opening was rapidly enlarged both upwards and downwards, and the hand introduced at one side of the placenta, which was pushed aside; the child was extracted by the head, and the cord divided between pressure forceps. As the uterus was still large, the hand was again inserted, and a second child found enclosed in a separate bag of membranes; this was removed by the feet; the second placenta was attached to the posterior wall. The two placentae and membranes were peeled off and removed, and the uterus brought outside the abdomen. The uterine wall was closed by deep interrupted sutures of silk, including everything except the mucous membrane; a continuous suture of fine silk closed the peritoneum over the wound. A small piece of Fallopian tube was removed on each side to prevent future conception. The uterus was very flabby for a long time, in spite of compression and hot cloths, and only began to contract properly when the deep sutures were tied. No liquor amnii escaped into the abdomen, and a very little sponging sufficed to remove two or three small clots.

As she was somewhat collapsed the abdomen was closed quickly by interrupted through and through silkworm gut stitches and about two pints of saline fluid injected into a vein in the arm. The elder child was the smaller, and both required some assistance before proper respiration was secured.

After-history.

The patient soon recovered from the collapse, but during the first twelve hours she passed only 6 oz. of chocolate-coloured urine, which was highly albuminous; it seemed as if suppression were taking place; however, during the next twelve hours she passed 32 oz., which was clear, and afterwards about 60 oz. a day. Albumen and casts persisted for about four weeks and then disappeared. At the end of the first week she had some pain in the breasts with a rise of temperature, both babies vomiting after being suckled; breast feeding was therefore stopped and the trouble soon subsided. The wound healed by first intention. At the end of the third week a slight attack of phlebitis occurred in the left leg and necessitated another fortnight in bed. She was discharged perfectly well with her babies on April 19th.

Diagnosis.

No notice was taken of external measurements, these being rarely of any practical value in estimating the size of the brim or room in the cavity of the pelvis. Reliance was placed entirely on examination under anaesthesia. The position of the promontory, the convexity of the sacrum and the contraction of the side walls combined with the signs of rickets, all tended to show that the pelvis was of the small rickety type. It is true that the diagonal conjugate was something under 4 in., making the true conjugate about 3 $\frac{1}{2}$ in. and therefore larger than the size usually considered an indication for Caesarean section. Perhaps the most important fact was that the largest diameter of the fetal head could not be made to enter the brim by pressure in various directions from above. Twins were not suspected, being only found out when the uterus was open, and this must be confessed as an error in diagnosis.

The elder child was small and might have been dragged through by the forceps, but the second was of ordinary size and would have required craniotomy for delivery.

Another thing which complicated matters was the nephritis with threatening of uraemia. If left to instrumental delivery the labour was certain to have been protracted, as, in addition to the pelvic deformity, the vulvar orifice was small and anterior in situation with a long and rigid perineum.

Operation.

The operation was carried out according to the description of Dr. Herman, and as I have seen him do it. No pessary was used for the incision into the uterus. The amount of blood lost was not great. One interesting feature was that the womb would not contract properly till the deep sutures were tied, but remained very flaccid, so that it could be indented easily by the fingers. It seemed as if the uterine muscle was paralysed and incoordinated by the cut, and it was only when this was closed that tone was recovered and hardening secured. The indentation by slight pressure showed how easily an inversion could be started by incautious force in expressing the placenta with a flabby uterus. Sterilization was effected at the wish of the patient.

The stretched abdominal wall retracted considerably during convalescence, and the scar of the incision measured but 4½ in. when the patient left the hospital.

ON THE CAUSE OF ACUTE ILLNESS SUPERVENING DURING MENSTRUATION.

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For some years I have been looking for cases that bear upon the subject forming the heading of my paper, as the ordinary explanation of such cases has not seemed to me to be satisfactory, and the following seem to give me some clue:

CASE I.

I saw, in 1894, a private patient, aged 33, unmarried, who had been taken ill very suddenly during menstruation, the symptoms being frequent vomiting, accompanied by intense pain in the left iliac region. It was, I was informed, her first attack.

Condition on Examination.—Temperature 102°, furred tongue, quickened hard pulse, abdomen slightly distended, moving little with respiration, most rigid over the left iliac region; there was some general tenderness over the whole of the abdomen, much more pronounced over the left iliac region, but no abnormal swelling could be felt. Heart, lungs, and urine were normal, and the breasts and hymeneal orifice were virginal. On rectal examination there was tenderness in the left posterior quadrant of the pelvis, and bimanually this was found to be due to a small, tender swelling occupying the position of the left ovary; menstruation had ceased, and the pain was described as coming on suddenly and becoming of great intensity soon after. There was no sign of urethritis or vaginitis so far as external appearances went.

CASE II.

An unmarried girl, seen in 1895. The symptoms were very similar; she had all the appearances of a virgin.

CASE III.

Seen in 1899; very similar to above.

CASE IV.

Seen in 1894. The patient was virginal as far as could possibly be ascertained, and had been in good health up to the time of being seized with a sudden pain in the right side during her menstrual period; she was at the moment engaged in helping with the family washing. Intense pain then set in in the lower part of the abdomen on the right side.

Condition on Examination.—When I saw her, vomiting was very troublesome indeed; the temperature was 102°, and the pulse above 100, hard and bounding. Menstruation had been quite regular up to the present time. The breasts and vulva were virginal, and there was no sign of any abnormal discharge from the vagina or urethra. The heart and lungs were normal. There was slight distension of the abdomen, which moved little with respiration; there was pain on pressure over the right iliac region, and some slight alteration in note on percussion over the same area. On rectal examination the uterus was found to be small, and in the situation of the right ovary there was marked tenderness, but such pain was caused that further examination was abandoned. There was no pain or swelling over the caecal region, and the lesion was evidently limited to the pelvic cavity. The vomiting was very persistent for several days, the temperature and pulse-rate both remaining high; the temperature then began to subside, and at the end of five days her condition was much better, the

vomiting having stopped; soon after this the temperature fell to practically normal.

A much more satisfactory examination of the abdomen was now possible, and the following state of things was found: Above Poupart's ligament on the right side, and extending upwards into the right iliac fossa, was a soft, doughy, elastic swelling, with a rounded surface, dull on percussion, fixed, and not particularly tender; it was below the caecum, and evidently rising out of the pelvic cavity. On examination by the rectum this swelling was found to be continuous with a soft mass filling up the right half of the recto-uterine fossa and the pouch of Douglas, and bulging into the posterior vaginal fornix; so far as clinical evidence went there was no doubt the swelling was blood clot. Under treatment, after some weeks the swelling all subsided, and the patient quite recovered, and I have heard since she has kept quite well, has married, and borne a child.

In all these cases the patients had been quite well previously, had been taken suddenly ill during apparently a normal menstrual period, and in one case at least had been engaged at the onset of the attack in fairly arduous physical labour. Could the swelling that appeared in Case iv have been of any other nature than blood, and if it were blood how is its appearance explained? These seem to me to be the crucial questions. A swelling of this nature conceivably might be due to a collection of pus, an encysted collection of fluid, "pericystoma," or, lastly, a new growth.

New growth may definitely be put on one side by the after-history of the case, as when I last examined her the swelling had gone; as regards a "pericystoma," the physical characters were unlike this, there was no true fluctuation or thrill in the mass, and no history of preceding obscure abdominal symptoms and feverishness. These points were against it being a collection of pus, as were also the following: It was evidently superficial to the psoas muscle, there were no signs of any spinal or joint disease, or disease of the ilium, and the patient got quite well again, without any discharge of pus from anywhere.

Appendicular trouble, or inflammatory trouble in connexion with the caecum, were also excluded by the consistency of the mass, by the absence of tenderness, by the absence of involvement of the parietes, as well as by the other features mentioned.

If blood, the following sources of origin may occur: the ovary, the tube, the broad ligament, and the vessels. The possibility of some blood condition such as scurvy must also be considered; but this in this case I think could be put out at once by the woman's general condition, as might also the question of a diffusion of blood from a ruptured aneurysm.

All the accompanying features of an extrauterine gestation of any kind were missing, and the suggestion that a clot had been produced by rupture of a varicose vein in a broad ligament seems to be more theoretical than practical; moreover, in that case some effusion into one or other broad ligament would be expected, but this was not present.

There are left for consideration, therefore, the tube considered apart from tubal pregnancy, and the ovary. I was led to the conclusion that the ovary was the source for the following reasons:

1. Normally, during menstruation the ovary is engorged with blood, and after the rupture of a Graafian follicle and the escape of the contents, the cavity left is obliterated by blood clot, produced by haemorrhage into the interior of the follicle.

2. The character of the pain when the tender lump discovered by recto-abdominal examination was pressed upon; it was described as sickening, and increased the nausea of the patient.

3. The discovery of a definite small tumour; so far as I know where efflux of blood through a normal tube has been considered possible the tube has simply acted as a channel of communication, the only abnormality supposed to exist being an abnormally patent ostium abdominale, and a tube under these circumstances would neither be tender nor palpable.

4. I found in the Royal College of Surgeons Museum an ovary somewhat enlarged, filled with blood clot which had infiltrated the stroma, and seemed to have disorganized the gland.

5. A Graafian follicle if ripe and cut into at the time of an operation may give rise to very severe haemorrhage. Granted that the ovary is the source of the haemorrhage, what are the conditions under which this may take place?