III.

Six Cases of Myomectomy During Pregnancy.

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Case I. Mrs. W., æt. 29; married one year. Previous history unimportant. First seen October 23rd, 1901. Menstrual periods regular up to May, 1901; then ceased. Patient believes she is pregnant, and says that she has a "lump" on right side of abdomen, which causes some pain and inconvenience.

On examination. Heart, lungs, etc., normal; uterus pregnant about six months; to the right of the uterus, and high up, is a hard or tense mass, equal in size to a large orange, evidently attached to or near the uterus, movable to some extent but not freely.

Diagnosis. Either a tense ovarian cyst or a uterine fibroid.

Operation, October 28th, 1901. Incision at outer border of right rectus over tumour, which was a pedunculated uterine fibroid attached to the right anterior part of the fundus by a pedicle about an inch and a quarter in diameter. The tumour was removed, two curved incisions being made, one on each side of the pedicle, thus forming two short flaps; vessels picked up and ligatured with fine catgut; edges of flaps joined by continuous catgut sutures; abdomen closed in layers. Patient made an uninterrupted recovery, and at term was delivered, without trouble, of a living child. No stretching of abdominal cicatrix.

Case II. Mrs. S., æt. 39; married twelve years; four children, the last one being 3½ years old; one miscarriage 2½ years after last confinement. Menstruation regular until 3½ months before admission to hospital, on November 27th, 1903. Some frequency of micturition, and pain beforehand. Patient complains of "a lump in her side," noticed about 2½ months before; pain in it during past two months, also a somewhat rapid increase in size.

On examination. Uterus evidently pregnant between three and four months; fundus forward, rather high up and lying to the

right of the middle line; in the pelvis, to the left and behind, was a mass attached to the uterus, moving with it, and about equal in size to the body of the pregnant uterus. The mass could not be lifted out of the pelvis, and would obviously obstruct delivery of fœtus through the pelvic outlet.

Operation, December 1st, 1903. Under ether, incision through left rectus sheath, slightly to the left of the middle line. Fibro-myoma found wedged in pelvis, attached to the lower segment of the uterine body and upper part of the cervix behind and to the left, pushing the uterus upwards, forwards, and to the right. Incision made over tumour, which was shelled out; bleeding controlled by catgut ligatures and two rows of buried catgut sutures, which also closed raw surfaces left by enucleation of tumour; edges of incision brought together by continuous catgut suture; abdomen closed in layers. Patient made an uneventful recovery, and was duly delivered at term of a living child. No stretching of abdominal cicatrix.

Case III. Mrs. J., age 24. Admitted to Prince Alfred Hospital June 3rd, 1904. Married five months; no previous pregnancy. Menstrual periods regular every four weeks, the last one early in March, 1904, nothing since. Shortly before this, *i.e.* February 1904, patient noticed a swelling in the lower abdomen; no pain.

On examination. Uterus enlarged, pushed upwards and to the left, the cervix uteri being on a level with the left pubic spine; the pelvis filled by a soft, smooth tumour, upon which the uterus was lying, and to which it was attached.

Diagnosis. Either a large, soft fibro-myoma or an adherent ovarian cyst; former more probable.

Operation, June 7th, 1904. Under ether; incision through inner margin of right rectus sheath; large fibroid lying between layers of broad ligament on right side; uterus pushed up and to the left; about 3½ months pregnant; incision made through broad ligament, parallel to right round ligament, and between it and right Fallopian tube; tumour shelled out. It was attached to the right posterior part of the cervix uteri, the feeding vessels being in close relationship to the uterine artery and right ureter. The vessels were ligatured with catgut, and the tumour was removed. Two layers of buried catgut suture closed the incision into cervix uteri, and a continuous catgut suture closed the line of incision in the broad ligament. The ovaries and Fallopian tubes were normal,

and were not interfered with. The abdomen was closed in layers. The patient made an uninterrupted recovery, and the pregnancy ended in a normal labour at full time. No yielding of abdominal cicatrix.

Case iv. Mrs. B., æt 40 years; married. No children or miscarriages. Is now, *i.e.* January 20th, 1904, pregnant 6½ months. For about the last four weeks patient had had epigastric pain and discomfort, also tenderness on pressure; these are increasing. Temperature varies from 98·4°F. to 101°F. Menstruation before pregnancy was regular about every four weeks.

On examination. Patient a big, rather stout woman; heart and lungs normal; abdomen showed a large central tumour, reaching quite up to the costal angle; tender on pressure at the upper part. The uterus was pregnant, and there was a tumour which could not be separated from the uterus, and which touched the under surface of the liver.

Diagnosis. Either an intra-mural fibro-myoma of the uterus or a hyatid tumour of the liver, probably the former.

Operation, January 27th, 1904. An abdominal incision above the umbilicus, through sheath of right rectus; tumour found to be a fibro-myoma, which was enucleated through an incision through the fundus and anterior surface of uterus. The deeper portion of the tumour was close down to the uterine cavity. Some vessels were tied, and the uterine wound was closed by layers of catgut sutures. Abdominal incision closed in layers; no drain. The uterus was manipulated as little as possible apart from the incision and the enucleation of the tumour. The ovaries and Fallopian tubes being normal were not interfered with. The patient aborted about 36 hours after operation. Fœtus, placenta, and membranes came away easily. As the uterus did not contract well, and there was a slight rise of temperature, up to 100°F., a curetting, under an anæsthetic, was done on the fifth day. Recovery after this was uneventful. On July 21st, 1904, *i.e.* nearly six months after operation, the patient was examined. Uterus a little larger than the usual normal non-pregnant uterus, freely movable; no pain or tenderness. There has been no menstrual period since the commencement of the pregnancy, *i.e.* July 17th, 1904.

Specimen. A fibro-myoma about equal in size to an ostrich's egg, but somewhat flattened. On section, there were seen in several places signs of commencing cystic degeneration, and the microscope showed necrotic changes to have commenced.

Case v. Mrs. E., æt. 34; married; three children. The patient is rather stupid, and, as a consequence, her previous history is not very trustworthy. Was first seen by me on October 10th, 1904. Says she menstruated 10 days before this, not having previously done so for six weeks; before that, she was "regular."

On examination. Abdomen showed signs of previous pregnancy. There is a central tumour rising out of the pelvis, a little above the pelvic brim. Bi-manual examination showed pelvis to be occupied by a round, firm mass impacted below sacral promontory; could not be lifted; body of uterus apparently pushed upwards and forwards in middle line; somewhat enlarged, but not diagnosed as being pregnant.

Operation, October 11th, 1904. Under anæsthesia a sound was gently passed into uterus, cavity nearly 5 inches; incision made through right rectus sheath; pregnant uterus came into view; fibromyoma filling pelvis and pushing uterus upwards and forwards. With some difficulty the tumour was lifted so far as to allow an incision to be made over it. Bleeding from large venous sinuses was free. The tumour was rapidly enucleated, and the bleeding was controlled by catgut ligatures and sutures in layers. The tumour was attached by its principal vessels to the lower uterine segment, and the upper part of the cervix. The ovaries and Fallopian tubes were left undisturbed, as they were normal.

In this case, as there had been more manipulation required than usual, and the patient was unhealthy-looking and "flabby," a gauze drain was placed from Douglas's pouch into the vagina, so as to allow serum to drain away.

For one week all went well and then certain untoward events occurred. The temperature had been normal, and the patient was apparently making good progress, when on the eighth day the whole abdominal incision opened up, and coils of small gut presented. An anæsthetic was given, and the wound was again closed by through-and-through sutures of silkworm gut. There was no evidence of peritonitis, and the opportunity was taken to examine the line of suture in the uterus, where the myoma had been. This was soundly healed. The edges of the abdominal wound, which came apart, showed scarcely any signs of reparative action, only a few small patches of lymph. Subsequently to the second closure of the abdomen there was an irregular temperature, which has, however, now (November 1st, 1904), *i.e.* just one month after the original

operation, fallen to normal. The abdominal wound is soundly healed and the patient looks well. There has been no abortion.

Case vi. Mrs. F. G., æt. 38 years; nullipara.

History. Up to present illness was unimportant. Patient was seen by Dr. Abbott November 20th, 1904. She was then complaining of pain, tenderness and discomfort in the epigastric region. Temperature varying from 98·6°F. to 101°F. On examination Dr. Abbott found the uterus pregnant between six and seven months. The fœtus was alive. There was a definite tumour to be felt above the umbilicus, and apparently connected with the fundus uteri. It was tender when manipulated. November 24th, 1904, the patient was seen by Dr. Abbott and myself, and we agreed that the condition was one of pregnancy of about the above-mentioned duration complicated by a uterine fibroid, which was not pedunculated, but intra-mural, and was apparently undergoing degenerative changes, most probably necrotic in character.

It was decided to operate with the intention of removing the tumour, and, if possible, not interfering with the pregnancy. The patient was removed to a private hospital.

Operation, November 29th, 1904. Abdominal incision to right of middle line, above umbilicus and over the tumour. The fundus uteri was exposed, and an incision made through the uterine wall down to the tumour, which was placed deeply. The uterus was steadied from the outside, and the tumour was enucleated, the greatest care being taken to handle the uterus as little as possible. At one point the mucous membrane lining the uterine cavity was exposed. The uterine incision was sutured in three layers with chromicised catgut. Abdominal incision closed in layers. No drainage.

The patient made an uninterrupted recovery, and returned home at the end of three and a half weeks.

The confinement took place at "full time" during the first week of March, 1905. It was uneventful, and the patient is now (April 10th, 1905) up and about. The infant was normal and well nourished.

Pathological Report.

By Dr. Smith, *Pathologist to the Prince Alfred Hospital.*

Uterine Tumour submitted by Dr. Thring. The tumour was a hard ovoid fibrous-looking mass about equal in size to a large orange. It gave the typical macroscopic appearance of a fibro-

myoma, but on section the cut surface showed four distinct areas of somewhat darker colour than the surrounding whitish tissue. These areas were discrete, about the average size of a threepenny-piece and of a fairly dark brown colour. They were somewhat softer than the other parts of the cut surface. They gave no macroscopic evidence of a hæmorrhagic origin.

With due precautions cultures were taken from each area, on to agar and blood agar, and into broth, and incubated. No growth whatsoever appeared. Each area was fixed and imbedded in paraffin and sections stained for organisms and with routine stains. No bacteria whatsoever were discovered on exhaustive examination.

Histologically the tumour was found to be a fibro-myoma, the fibrous element very largely predominating, the fibrous intersections being very fine and exceedingly numerous. Scattered throughout the sections were small areas of breaking-down tissue, apparently of necrotic origin. No signs of hæmorrhage were discovered and the sections showed absolutely no evidence of an infective process of any kind whatsoever.

Thus the bacteriological examination with the secondary histological examination gave a definitely negative result as to an infective origin of the patches described. They were apparently of necrotic origin.

The above cases are interesting from several points of view. All except Case V. have been seen or have been heard from recently and are well. There was no mortality. In only one instance (Case IV.) did premature labour result, and it seems scarcely probable that the pregnancy would have gone on to term even if no operation had been performed, as the symptoms of illness, *i.e.* pain, local tenderness and a rise of temperature, were daily becoming more marked.

In Cases I., II., III., and VI., the pregnancies went on to full time, and labour is known to have been normal and uneventful. Had the tumours which occupied the pelvis in Cases II. and III. been then *in situ*, this would not have been possible. Some obstetrical operation would have been required, and even then the tumour would have had to be reckoned with after delivery.

Case VI. is especially interesting, because of the advanced stage of the pregnancy, with which the operation in no way interfered, and also because of the careful bacteriological examination of the specimen. This gave absolutely negative results, and shows that the necrotic changes which had taken place were not due to the

presence of organisms, although accompanied by rise of temperature. Although by no means an advocate for the immediate removal of all uterine fibroids which may be found upon examination, I do believe that in *most* cases removal is the right course to follow, particularly if there are indications of degenerative change or excessive bleeding. But more especially does this seem to hold good where pregnancy occurs, the tumour being impacted in the pelvis and consequently offering an obstruction to delivery *per vias naturales*.

A report of the earlier cases was read before the New South Wales Branch of the British Medical Association, in November, 1904.