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TWO CONDITIONS SIMULATING ECTOPIC GESTATION.¹

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Our constantly extending knowledge of ectopic gestation leads us to believe that most cases of pelvic hæmatoecle are the result of this condition. That this is not invariably the case has been shown, and at times conditions other than hæmatoecle may simulate ectopic gestation. These remarks are suggested by the following cases:

CASE I.—Mrs. —, aged twenty-nine years; good family history; married ten years. Had one miscarriage followed by sepsis, a child at term, a second miscarriage at six months, and a child at term, then five years old. Had always menstruated regularly. Was seen in January, 1900, and at the time when she should have menstruated was exposed to cold and wet, with wet feet, followed by attacks of pain over the left ovary and abdomen, extending to the right upper portion of the abdomen. She made a gradual recovery. At this time there was no shock or evidence of depression from hemorrhage. The day before the patient was seen she had severe pain in the abdomen, for which morphine was given. Her husband, a physician, introduced a sound into the uterus, finding it four inches in length. But little oozing followed the introduction of the sound.

On examination there was tenderness over the left ovary and on the right side over the appendix. The abdomen was soft, not distended. On vaginal examination the cervix was small and long, not softened, and no tumor and exudate could be found. There was no sign of pregnancy. This patient remained in bed for a short time, menstruated after a slight delay, and was seen but a few times. She apparently recovered from the condition present.

Three months after this attack intra-uterine applications were made for some supposed disease of the pelvic viscera. The sphincter of the bowel was stretched to relieve irritation in that region. There was a

¹ Read before the American Gynecological Society, May 27, 1902.

vague history of intermittent attacks of pain at irregular intervals. She was seen the second time nine months after the first visit. She had just recovered from a normal menstrual period. She complained of pain over the left ovary, and this pain, paroxysmal in character, had been treated by hypodermic injections of morphine. Her pulse and temperature were normal. There was vague and indefinite tenderness over the abdomen, which was not rigid or distended. On vaginal examination the womb was almost fixed by a mass of soft material in the pelvis which gave no distinct fluctuation. The size, contour, and consistence of the uterus could not be accurately appreciated because of this mass. There were no symptoms of pregnancy, and the menstruation which had just ended had been typical. The pelvic tumor became softer, and finally gave obscure fluctuation. The pulse and temperature remained almost normal. After the patient had been under observation for some time a request was made to perform abdominal section. This was positively declined, and I left the case. A week afterward I was informed that the patient was at a hospital, awaiting my pleasure. Abdominal section was still declined, but vaginal section was permitted. The general condition had remained about the same.

On incising the posterior cul-de-sac, blood which had been clotted for some time emerged, and the finger passed into a large clot, apparently well shut off from surrounding tissue. The incision was enlarged as much as possible, the clot washed out, and the cavity packed with iodoform gauze. The patient reacted well from the operation, and at the usual time had a discharge, resembling menstruation, from the uterus. The gauze was gradually removed, and ten days after the operation all had been taken away. The patient gradually developed symptoms of septic infection, and was seen in consultation, abdominal section urged, but positively declined. She died with symptoms of acute peritoneal infection, and autopsy was refused. The material obtained after incision of the vagina was examined in the Pathological Laboratories of the Jefferson Medical College, and found to be blood clot. No evidence of decidua or embryonal tissue was present.

During my acquaintance with this case it was at no time possible to obtain from either husband or wife, or both, an accurate and coherent history of the patient's illness. It was impossible to tell how frequently the husband had made intra-uterine applications, or upon what indications this had been done. The husband is an anatomist, and the character of his work would make it difficult for him to remain aseptic.

Experience has shown that irritation of the pelvic peritoneum from various causes may be followed by the formation of hematocele. Kohler¹ has recently reported two cases of retro-uterine hematocele in which a diagnosis of ruptured ectopic gestation was made, and in which abdominal section proved the absence of this condition. The first was that of a multipara, who, after violent interference with the pelvic organs, was taken with pain, hemorrhage, and prostration. Upon examination a semi-elastic tumor was found in Douglas' cul-de-sac,

¹ *Centralblatt f. Gynäkologie*, 1901, No. 32.

characteristic of ruptured ectopic gestation. Upon abdominal section the tubes and ovaries were normal, nor was there any pathological condition in the abdominal or pelvic organs. The posterior cul-de-sac was filled with blood clot, which was readily removed. The peritoneum was pale, and the uterine substance more friable than normal. A small portion of the uterus was excised for microscopic examination, but no abnormality was discovered. The patient made a good recovery.

His second case was that of a multipara, who, after a hard day's work, was taken with pain, sensitiveness in the abdomen, and the gradual development of weakness. An elastic tumor gradually developed behind the uterus. Upon abdominal section the left Fallopian tube was removed, as it contained a tumor the size of a hen's egg. The entire tube was removed by a V-shaped incision into the body of the uterus. The right tube showed its abdominal end entirely obliterated and the lumen of the tube filled with an odorless pus. There were several small abscesses in the right ovary. This was also removed.

The gross examination of the specimens indicated very strongly an ectopic gestation of the left tube. Upon microscopic examination, however, not a trace of evidence pointing to pregnancy could be discovered. The tumor contained serum, and had nothing to do with the pregnant condition.

In both cases the formation of the hæmatocele occurred just before menstruation, when the condition of congestion usual at this time was present. Both cases seemed to have resulted from mechanical violence, followed by the extravasation of blood from tissues altered by anemia or previous inflammation. Experience shows that hemorrhage may occur from pelvic tissues altered by disease without the occurrence of ectopic gestation.

In this connection the possible presence of hæmatoma of the abdominal wall in pregnant women must not be forgotten. Stoeckel¹ reports two cases, and Säger² reports one case in which collections of blood formed in the abdominal wall during the pregnant condition. While such tumors would not obscure vaginal examination, they would interfere with the results of bimanual examination.

CASE II.—Somewhat emaciated, anemic woman, aged twenty years. Some months previously she had an abortion between three and four months, accompanied by very profuse bleeding, which was controlled with great difficulty. She recuperated slowly for three months, and then her general condition and nutrition began to fail. She had not menstruated for several months, and showed signs of pregnancy. Two weeks before she was seen she had intermittent hemorrhages from the womb, with attacks of abdominal pain.

On examination the patient was exceedingly pale, her pulse 120 to

¹ *Centralblatt f. Gynäkologie*, 1901, No. 10.

² *Ibid.*, 1897, No. 16.

144; and upon vaginal examination the cervix was small, not much softened or shortened, and the pelvis was filled with a soft, boggy tumor, completely occupying the posterior cul-de-sac. The body of the womb could not be distinctly outlined, but was somewhat enlarged. A discharge of dark fluid blood was coming from the vagina. The breasts gave the characteristic signs of early gestation. The most probable explanation of the patient's condition seemed to be ruptured tubal ectopic gestation. Her profound anemia and rapid pulse urged the necessity for complete diagnosis and control of the condition.

She was immediately transferred to the Jefferson Maternity and abdominal section performed. Upon opening the abdomen the tubes and ovaries were found to be normal. The uterus was completely retroverted, very soft in consistence, resembling a cyst, and filled the posterior cul-de-sac. There was no evidence of exudate or adhesion about the uterus, and it was raised to its normal position without much difficulty. The abdomen was closed, and the patient received intravenous saline infusion. The vagina was tamponed with gauze, raising the uterus and carrying the cervix backward. The pregnancy continued, and the patient speedily improved in condition until she became well enough to go to her home. She had felt fetal movements, and the uterus had grown larger and harder.

Soon after leaving the Maternity she returned with uterine pains, and was delivered of a six months' fetus, which moved but did not breathe. Upon examining the uterus it was found to be completely lined with a mass of clotted blood which required a blunt curette for its removal. This patient made a somewhat tedious recovery, retarded by pain in the left sciatic nerve, for which no anatomical cause could be found in the pelvis.

Shortly after the case just described came under my observation a second was seen in consultation, upon which section was done and the same condition found to be present. In this case there was more resistance and pain, suggesting pelvic peritonitis, than in the first, and the anatomical conditions found by vaginal examination were typical of ectopic gestation.

In the recent literature of the subject *Ségon*¹ reports the case of a patient who had borne one living child and had suffered from metritis. A diagnosis of ruptured ectopic gestation was made from combined examination, and the patient was operated upon. The uterus was found in early pregnancy, retroflexed, and partially fixed upon the left side of the pelvis. It was brought into normal position and the abdomen closed. The patient recovered from the operation and left the hospital, but aborted at six months. *Routier*² reports a case in which a retroflexed uterus adherent upon the left side of the pelvis was thought to be an ectopic gestation. The uterus was replaced after abdominal section, but abortion followed the operation.

That a retroflexed pregnant uterus may simulate other pelvic tumors

¹ *Compt. Rend. de la Soc. de Obst., de Gynecologie et de Pédicatre de Paris*, 1900, vol. II.

² *Ibid.*, 1904, vol. III.

receives illustration in Varnier's case.¹ He opened the abdomen to remove an ovarian cyst, finding, instead, a retroflexed pregnant womb. The patient went to full term, and was delivered of a living child. Hedd² reported at a recent meeting of the New York Obstetrical Society a case of gonorrhoeal pyosalpinx simulating tubal pregnancy. These examples from the recent literature of the subject illustrate the fact that these cases are not exceedingly rare.

The diagnosis of ectopic gestation is a subject of constant interest, and one which at times presents considerable difficulty. Aside from the anatomical features of the diagnosis, Weimller,³ Veit, Martin, Olshansen, and others have drawn attention to the relation between the occurrence of rupture in ectopic gestation and the character of the menstruation shown by the patient. A farther study of the subject from this standpoint may assist us in diagnosis.

A positive diagnosis can in almost all cases be immediately made by abdominal section. So grave a condition justifies, we believe, abdominal section, if this be necessary for accurate diagnosis. Even if the enlarged tube when removed does not prove to be the site of an ectopic gestation, the patient has suffered in no way from the operation. In cases of retroflexion and retroversion of the pregnant womb simulating ectopic gestation, abdominal section and the replacement of the womb are safer from all standpoints than the continuation of the condition. In good hands pregnancy is prolonged and hemorrhage and septic infection are prevented.

A RAPID REACTION FOR BENCKE-JONES ALBUMOSE.

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DURING the past two years the writer has found opportunity to employ repeatedly the various tests now in use for the recognition of Bencke-Jones albumose when present in the urine. A detailed account of these reactions will not be given, and let it suffice to say that the vast majority of them are caused by the presence of other of the albumoses, as peptone, histon, and globin. Indeed, but few of these tests distinguish clearly between peptones and Bencke-Jones albumose; and these differences are commonly but a variation, in intensity or degree, of one and the same reaction.

The reaction which is probably most reliable is that with lead acetate and caustic soda for the detection of sulphur. Many chemists regard the presence of loosely combined sulphur as a pre-eminent feature

¹ *Compt. Rend. de la Soc. de Obstét., de Gynécologie et de Pédiatrie de Paris*, 1900, vol. II.

² *American Journal of Obstetrics*, April, 1902. ³ *Archiv. f. Gynäk.*, 1900, Bd. Lxi., Heft 3.