chronic metritis and salpingitis. Operation, vaginal hysterectomy, March 14, 1895, with the removal of left ovary and tubes, Sept. 11, 1895. Dismissed, Oct. 31, 1895, cured. A recent letter from this patient tells me she has not had such good health for many years.

Case 16.—Miss L. P., Boulder, Colo.; age 28 years; admitted to Chicago Baptist Hospital Sept. 28, 1895. Began to menstruate at 13 years of age and since that period has never had good health. Great disturbance of nervous system. Complaints were confined to the left side of the lumbar region. Had the left ovary removed four years ago and the uterus curedt twice in Kansas City. Suffers now from constant pain in the region of the right ovary. Menstruation regular but immediately after it came, there was an increased discharge of yellow, offensive, Leucorrhea yellow and offensive. Diagnosis, chronic metritis with salpingitis. Operation, vaginal hysterectomy with the removal of the right ovary and tubes, Oct. 2, 1895. Patient still in hospital and the nervous system slowly but gradually improving.

Case 17.—Mrs. M. L., Chicago; age 46 years; admitted to St. Mary's Polish Hospital Sept. 11, 1895. Had no children. For a number of weeks she has had an almost constant flow; much pain. Had curettage and local treatment by family physician which failed to give relief. The uterus was found enlarged and covered with a fungus, purulent growth and had every appearance of condromas or sarcoma. Operation advised. Vaginal hysterectomy was performed Sept. 28, 1895. Recovery was rapid. Dismissed, Nov. 11, 1895, apparently cured.

Case 18.—Miss D. M. K., Feb. 31, 1895; admitted to Chicago Baptist Hospital Oct. 14, 1895. Two years ago she had two operations in which the uterus was dilated for stenosis and displacement. Excruciating pain with menstruation. Operation, vaginal hysterectomy, Nov. 16, 1895. Dismissed, Nov. 15, 1895, cured, with wonderful improvement of health and strength.

Case 19.—Mrs. J. T., Chicago; age 22 years; admitted to St. Mary's Polish Hospital Nov. 3, 1895. Two children. Menstrual, but painful. Suffered from muco-purulent discharge for the last year and a half. Examination revealed bilateral laceration of the cervix, ovaries prolapsed and cystic. Diagnosis, chronic metritis with cystic ovaries. Operation, vaginal hysterectomy, Nov. 24, 1895. On removing the clamps in forty-eight hours the wound was found apparently in good condition. After administering the douche the vagina was slightly tamponed with iodiform gauze and the patient placed in bed. In a few minutes it was discovered that the dressings were saturated with fresh blood. She was immediately placed on the operating table, the dressings removed and a severe hemorrhage ensued from the uterus. Distending the vagina with the retractors the clots were washed away and the bleeding vessel grasped with two clamps. The dressing was renewed and the clamps left in position for an additional hour. The uterus was then sutured and the clamps removed without recurrence of hemorrhage. Slight parotiditis at the end of two weeks. From this time she made rapid recovery and was dismissed, Dec. 18, 1895, cured.

Case 20.—Miss M. W., Chicago; age 35 years; admitted to Chicago Baptist Hospital Nov. 24, 1895. During four years she has suffered constant pain in the back and region of the ovaries. Bearing down with painful micturition. Examination revealed an enlarged condition of the uterus with painful swellings on either side in the region of the fallopian tubes. Diagnosis, uterine fibroma with pyosalpinx. Operation, vaginal hysterectomy, Nov. 27, 1895. Diagnosis was confirmed by a large quantity of pus, at least a pint, was removed from the tubes. The patient made favorable and rapid progress. Dismissed, Jan. 12, 1906, cured.

Case 21.—Mrs. M. G., Chicago; age 41 years; admitted to Chicago Baptist Hospital Dec. 2, 1895; married eleven years, widowed two years. Has had two children, the youngest 7 years of age. No miscarriages. Has not been well since the birth of last child. Menstruation very painful; leucorrhoea profuse and offensive; constant pain and bearing down sensation in the pelvic region; exceedingly nervous; uterus enlarged; entire vaginal vault painful to the touch. Diagnosis, metritis, salpingitis, vaginal and rectal erosion. Operation, laparotomy, Nov. 14, 1895. The patient made rapid progress and in ten days all nervous and digestive symptoms had disappeared. Dismissed, Jan. 6, 1896, cured.

Not a drop of alcoholic beverage was given to any of these patients neither before, during nor after the operation. Morphin was seldom administered and then only in one-eighth grain doses with atropin hypodermically. The clamps were always removed promptly at the expiration of forty-eight hours. Only once did hemorrhage follow this maneuver. This occurred in Case 21 and was easily controlled. Again, there was slight hemorrhage in Case 5 at the end of the second week. This was only slight, and it pressed out from the vaginal walls while dressing the wound. One case, 19, developed slight pyosalpinx at the end of the second week but it subsided in a day or two. The temperature seldom reached above 101°. Once, in Case 18, it ascended rapidly on the third day to 105°, accompanied by great restlessness and delirium. After a vaginal douche of warm, sterilized water it soon resumed its normal course. At the usual time of menstruation the "menstrual storm" invariably made its appearance with a slight rise of temperature, but in no case were the symptoms very marked, and in no instance was there any appearance of menstrual flow.

My experience in vaginal hysterectomy leads me to believe that it has a much wider field for triumph in the future than was at first anticipated. I believe it will not only yield more satisfactory results to the honest surgeon, but that it will also spare many lives that might otherwise have been sacrificed to the more dangerous abdominal method.

230 Wabash Avenue.

HYSTERECTOMY, ITS LEGITIMACY, WHEN AND HOW.

REPORT OF A CASE INCLUDING REMOVAL OF FIBRO-CYSTIC MASS OF TUMORS, UTERUS, OVARIES, TUBES, PRECEDED BY LIGATION OF UTERINE ARTERIES.

BY R. E. HAUGHTON, M.D.

RICHMOND, IND.

Mrs. B., age 35 years, consulted me in regard to an abdominal growth and bad health as a result. So much so, it seemed that if she were not relieved soon she would not live long. It had been diagnosed an ovarian tumor and she was then as large as a large orange. Her backache was said to be of long standing and was of a nervous nature. She had not menstruated for a year, and if she did it was not beyond the pale of 3 days. I examined her very carefully, took all the history and decided it was a cystic or fibro-cystic tumor and ought to be removed. The operation was a laparotomy and did not at first involve the idea of a hysterectomy. Hence, the patient was at first not ready to have the operation. The patient was examined by Dr. C. V. B. Moore, and her condition was diagnosed as a fibro-cystic tumor of the ovary. She had a general idea of the condition of the tumor and its relation to the uterus, but I was not able by any means of diagnosis at that time. I adopted the opinion that it had been lifted out of the pelvis, and so it was found in the operation which took place for removal of the growth. The tumor was both pedunculated and abdominal. It had been put up out of the pelvis into the abdomen above the plane of the superior strait. She and her husband were fully advised as to its probable nature and the danger and risk of removal fully stated. They agreed to have the operation. The report of the case is as follows: It was decided to remove the abdominal tumor. They returned home saying that they would decide as to the removal or not after it was removed. Some days later, I was called to give them to her home and make the operation for removal.

The operation was an exploratory one. The operation disclosed a large development of fibro-cystic tumors of various sizes from that of a child's head down to that of a small apple, growing out from about the neck of the uterus as a center at the uterine fundus, pressing the nature that the usual examination failed to find it or determine where it was except that it was above. It had but a trace
HYSTERECTOMY; ITS LEGITIMACY.

left, in outline, yet sufficient to determine its structure and position. There were also almost universal adhesions to viscera and walls of abdomen, yet they could be readily detected as the operation progressed. Only about one-eighth to one-fourth of an inch of uterine structure in thickness remained. The tumor was movable and could be lifted up. The broad liga-
mements and uterine arteries on either side were ligated close to the organ to secure them and thus prevent hemorrhage in the continuation of the operation. The broad ligaments were turned back Finally, on each side like a cuff, after ligation of vessels and then after I had lifted up and forward the womb and tumor mass these lateral surfaces were united by suture, making an extra peritoneal finish of the operation. The operation of the vasa, contained within the broad ligaments, was divided after the ovary and Fallopian tubes were also removed, as these appendages were shrunken or atrophied. Thus we had a removal of tumor, the uterus and its appendages included and well forced to this operation, but not do seem possible that all have removed the tumor, except by the supra public method. By ligation of uterine and ovarian arteries no hemorrhage occurred during the process, and the patient was placed in bed in a comfortable position with some depression; no bleeding at any joint. She rallied well and took some nourishment in the fol-
lowing morning, pulse fair, reaction good, doing fairly well, quite comfortable, the morning of the second day. The exter-
nal wound was covered by a bed of cotton impregnated with
antiseptic compress and bandage. She began to show little depression second day in the evening, more rapid pulse, growing paleness of surface and death occurring on the third day, in the afternoons from exhaustion as she was quite feeble and did not nourish well.

HISTORY OF FIBRO-CYSTIC TUMORS.

Whether the result could have been different in this case and others similar can only be determined by

the study of the results of cases gone before, and also taking into consideration the late period of the operation in this case. Baker Brown says, he knows of no distinguishing signs between utero-fibro-cyst and ovarian cystoma. These have been recognized as a distinct class of tumors, and were first described by Cruveilhier. They have been frequently mistaken by the ovariotomist for ovarian cysts. Where the growth has been rapid and fluctuation is very evident an error may readily occur. To make a more cer-
tain diagnosis an exploratory incision may be made, yet in this case it did not throw any light upon the conditions, as even the hand in the abdominal cavity will not enable the operator to determine a fibro-
cyst from an adherent ovarian cyst. Koehler says that the differential diagnosis ought to be clearly made, and Wells says that a darker and less pearly blue color of the tumor would be sufficient to put the surgeon on his guard against mistaking it for an ovarian cyst. Dr. Atlee admits the difficulty of diagnosis, and says that errors are frequent in hard fibroid tumors, but are much more common in fibro-cystic tumors. He says further: "I believe

that a positive diagnosis can be made only by tap-
ing and testing the fluid by heat." "A fluid coagu-
labile to air is, however, said to be the most reliable test." We find that so far medical men have not been able to make this differential diagnosis unless it be by this method of tapping and examination of the fluid, which enabled Atlee to determine correctly when others quite as celebrated as he had failed, as, for instance, Wells in a case presented to him for the purpose of diagnosis. For various rea-
sons which seemed good this test was not made, as it did not seem so much a question of the kind of tumor as the more important question: Shall it be removed? Yet if there be a question of doubt at all in the comprehension of any or all questions coming before the surgeon it is right and best to use the means of skilful diagnosis, so that nothing be left undone which might cast a ray of light upon the clouded

sky of such a patient and reveal the true nature of her trouble. The question of the true nature of the tumor was raised in this case and fears entertained of its being a fibro-cystic tumor. Yet it was sup-
pored that an exploratory incision would reveal its character rather than subject the patient to what has often proved a dangerous and fatal method of diag-
nosis, viz: tapping.

ESTIMATION.

I report this case because the conditions required a removal of the uterus and accessory organs, which were all involved in the widespread pathologic con-
dition and because function was suspended, uterus and ovaries atrophied, menstruation stopped and the woman could not be more unsexed by removal than before, and finally, because it was apparent that if she could not be saved by an operation it could not be done at all. The tumor was a multilocular, fibro-
cystic, of many and various sizes, from that of the size of an apple to a child's head of six months. Some of them contained fluid and some of them were solid fibroid tumors. They were arranged around the uterus as a center, springing out about the neck and body of the same, similar to a bunch of grapes or a cluster of hydratids which I once saw expelled from the uterus of large size, amid alarming hemor-
hrage. The entire weight after removal was forty-
five pounds. Lastly, it was finally fatal on the third day, as I have stated from prostration, as I believe growing out of a long continued impaired nutri-
tion during the history of the pathologic changes described in its development. Most likely the oper-
ative procedure added its modicum of influence as ultimate cause, but that the operation was correct in itself and successfully accomplished is a fact never-
theless now rendered certain. Lastly because it was a removal of uterus and accessory organs together with a large abdominal and pelvic growth somewhat unusual and out of the line of such cases, viz., atrophy of uterus and ovaries with consecutive arrest of function, where the removal of the growth necessarily required excision of all the organs in-
volved.

HISTORY OF UTERINE REMOVAL.

Dr. Choppin, New Orleans (February, 1861), re-

moved the uterus entire with one ovary and Fallo-

pian tube and a portion of the other tube, leaving the

other ovary. The woman recovered, being able to sit up on the third day. (New Orleans Medical News

and Hospital Gazette.) Dr. Munde's (January, 1879.

American Journal of Obstetrics) operation is described

by Freund, of Breslau, with an illustrative cut, and

which he calls a new method, an operation for com-
plete removal of the uterus, in which the chief con-
ideration is the prevention of hemorrhage and closure of the peritoneal defect. He does this by

uniting the free peritoneal borders with the corre-

sponding lateral portion of abdominal wound, there-

by preventing the detachment of the anterior pelvic

or abdominal peritoneum. His operations were

made for cancer, of which at above date had made ten operations; of this number only five have been published and five of the ten reported died (50

per cent.). I have referred to the modification pro-

posed by Schroeder in Freund's operation, but as it is

made (or carried out of the body of the organ, and also

involving the neck or mouth, one can thus make an incision which may cut clear of cancerous tissue
and by this means not complicate a possible recovery. In a case such as I have described, viz., the supravaginal incision is the only one that can or should be adopted if by that means the whole growth can be removed (I mean now a fibro-cystic or other tumor) by adopting it. In a paper on the surgical treatment of Fibroid Tumors of the Uterus, of any variety involving the removal of the uterus recently, I discussed this matter more fully in comparison with others, showing that one of two methods may be resorted to, viz., laparotomy with the supravaginal section or the intra-vaginal method, if the tumor is not found too large; but if so found then the superior abdominal operation is the only one to be adopted if, provided, any operation is required and urgently demanded, as in the case here reported.

HEMORRHAGE AND ITS CONTROL.

This is one of the most important questions in such cases and up to the time of Martin's ligation of uterine vessels this method was not done, either for this purpose or for the limitation of blood supply to fibroid growths; and if one-sided ligation is not sufficient for such limitation of growth then double ligation may be done. In this operation of removal the double ligation may be used, securing control of hemorrhage in the after-steps of the operation. This ligation of vessels was done in case described, and when it had been made we had nothing but a vascular condition of tissue in which some bleeding occurred and this was easily controlled. One case is reported by Trenholme in which he used the cauterise, and attributed the fatal result to it. This is a question of which depends largely upon the conditions and circumstances which complicate the case, and the judgment of the surgeon.

Hysterectomy, Its Legitimacy.

Formerly, ten or twenty years ago, no question most likely would be raised in view of the case which were reported as successful. Now, outside of exceptional cases, a halt may be called and the question comes back, what percentage of mortality occurs in the cases reported as a sum total. Moreover does the percentage of recovery justify such an operation, or to use a stronger term, mutilation? Before I proceed to give what seems to my mind legitimate indications for such an operation, I wish to go upon record as holding the opinion, carefully reached, that the tendency of surgical endeavor has been in the direction of too much surgery, too much cutting, and the mutilations, which I think express the idea, have occurred too often, and men have endeavored to carve their way to fame and distinction without the careful estimate which should be placed upon a human life standing in the social relations of wife, sister or mother. While I record this view, I am fully aware there are cases where there seems to be no alternative but an operation or death, and this alternative should be accepted before it is too late, when vital force and power are almost gone and no resources are left for recovery. This is a critical question and it requires a knowledge of all the resources of surgical means as well as a comprehension of all the sources of vitality left to the patient. In such cases as I am now describing the question of the sexual position of the patient does not enter; yet there are such cases as these where it becomes, as I regard it, a very important consideration. These questions come before surgeons at this juncture with more force than ever before, because of the considerations which arise along the line of treatment of many disorders peculiar to women, which have been more fully developed and outlined by Apostoli of Paris. Others had preceded him, marking the way, but he has assumed a more commanding position. I refer to gynecologic electro-therapeutics. The difficulty has been that men have not comprehended the remedial power of the electric current, and have only applied it as a last resort, hoping it might do something more than had been done. In amenorrhea, dysmenorrhea, or pain so agonizing that it seems it might kill; endometritis and the discussion of fibroid tumors by electrolysis, also in hemorrhage, "where it has probably no equal in treatment," as Apostoli says. He uses the faradic current with the bipolar electrode in inflammation of the uterine and peri-uterine tissues, as metritis, para-metritis, salpingitis, and salpingo-ovaritis, and in early acute stage of disease does not contra-indicate employment of the current. Also the most severe local pain is much relieved either by the intra-uterine, bipolar electrode or the intra-vaginal, when the acute history has been passed. Apostoli assumes that 95 per cent. of his cases were improved and symptoms removed, while a fibroid tumor was not removed but rendered quiescent or latent. Dr. Thomas Keith, of London, in a paper June 8, 1889, says in regard to fibroids: "The only treatment not surgical worth consideration and free from danger is that of Apostoli." And after giving a history of the professional management by operation proceeds to say: "That hysterectomy, then, at best would appear to be a doubtful remedy for a certain class of cases, and these not the worst class of cases," viz., hemorrhagic cases. "The old spirit that at one time would have no abdominal surgery still lingers," and when other means than operative, "in the form of electrical currents are to be set aside as arrant quackery, and simply because they know nothing of its value." Another idea of those who operate most is this, that other surgeons who have made just as careful study and estimation as the specialist in surgery should not attempt an operation because he does not operate every day on some case, and hence is not so well advised. Away with the idea that one man may not minister at the altar of hygeia as well as another. "Hysterectomy, which is performed every day for a disease that rarely of itself shortens life except by hemorrhage, kills every fourth or fifth woman subjected to it." This mortality is too much and should stop. "It is not surgery, it is humanity." Keith says: "I would give something to have back again those sixty-four women that I did 'hysterectomy' for, that I might make a trial of Apostoli's treatment upon them beside the wear and tear of flesh and spirit which those operations cost me, for in scarcely one of them was the operation simple." (British Medical Journal.) This operation may be performed when all other legitimate treatment has been used, as in cancer of the uterus, in sarcoma as well, when the disease has not invaded the organ, which would insure its recurrence if the patient survived the operation for removal; in fibroid and fibro-cystic tumors.
when by growth they have become distressing through
pressure, pain and the consequences arising upon
vital, thoracic or abdominal organs. Or when there
is such a constant peritoneal irritation as to produce
pain or adhesions; or when by hemorrhage likely
be sacrificed. One case in which I removed the
tumor in time to prevent another hemorrhage and
which must have caused death if the operation had
not been performed, recovered well in about thirty
days.

Dr Muller says, "that while ovariotomy has been
brought to a high degree of perfection, the operation
of hysterectomy has not yet passed the first stages
of its development." Not only has the legitimacy of
this operation been doubted and denied by experienced
gynecologists, and while this question is being closely
canvassed, the indications and contra-indications
for a resort to it are gradually becoming settled.
Nevertheless so much has been done, it is now claim-
ing a place among the very grave surgical operations,
which are not easily determined and may require a
very careful exploratory incision and investigation
before deciding that it shall be done and when it
must be done in the careful judgment of the surgeon
or surgeons, carefully weighing all the conditions;
then they are not justly chargeable with temerity or
cruelty in offering such relief, as only remains in
this operation, with a percentage at best of mortality
of one in five, or 20 per cent. This is the estimate
of Thomas Keith, of London, and the adhesion of Sir
Spencer Wells and Keith to Apostolli's methods of
treatment, being among the world's most influential
gynecologic surgeons, arrested the attention of all
progressive and yet conscientious surgeons. While
this is true, there are two factions of men, and all are
not yet convinced of the efficacy of the galvanic
operation so ably defended by Apostoli, when he
says that 95 per cent. of his cases were benefited,
when not cured. I have written but suggestively,
and here rest the subject for the present, hoping it
may be like "a pebble cast into the ocean, its tiny
wave may reach either shore" of professional opinion
upon this subject.

CRIMINAL ABORTION.

BY WILLIAM McCOLLOM, M.D.
BROOKLYN, N. Y.

I use the words in their legal sense, viz, the effect-
ing of the unlawful expulsion of the contents of the
womb at any time after conception before the term
of gestation is complete. The very old English law made
a distinction between the crime perpetrated before and
after quickening. The rulings of the supreme court
of several of the American States corresponded with
the old English law which was abolished a half
century, more or less, ago. The Pennsylvania court
was one of the first to discard the old doctrine and the
courts of many of the other States have progressively
fallen into line, and have ruled that it is a
crime to destroy embryo life after gestation has
begun. Judge Coucher, of Pennsylvania, ruled that
"it is not the murder of a living child which consti-
tutes the offence, but the destruction of gestation.

An attempt by a physician or other person to procure
an abortion is a crime, though the abort fail and the
abortion is not produced, and it renders the party crim-
inally guilty. When a physician prescribes medicine
or gives advice and allows the patient or party to be
lieve, or gives her reason for believing that it is given
for the destruction of embryo life, though he does not
intend such destruction, is little better than a crim-
inal. I have heard physicians confess to such decep-
tion without seeming to realize that they were
seriously compromising honesty and integrity and
contaminating sin and crime.

Criminal abortion is frightfully prevalent and the
practice is apparently on the increase among pro-
essed Christian women. It should be and it is the
duty of the physician to enlighten applicants for re-
lief from pregnancy who have no adequate idea of the
criminality of the act. The women of the Church of
Rome are better instructed and made to keenly feel
the great sin of murdering unborn human life. I
might raise the question whether the clergy are doing
their duty in the matter or not, but I am addressing
medical men only. Let us do our duty, if our spiritual
advisers neglect to do theirs, in denouncing this
common crime and great sin. It is evident that
women of the lower class have no adequate idea of
the criminality of the act and I do not see the law
applied to the physician and to the druggist for medi-
cine to abort pregnancy, or, in other words, to bring
about the monthly sickness. Great ignorance of the
criminality of the practice is manifested by educated
women, but it is not ignorance alone but a down-
right lack of moral sense as well, which greatly needs
educating. The common law at the present day
does not make the destruction of an unborn child mur-
der. I quote Blackstone on English law: "Though
to kill the fetus in utero is as such by common
law no murder, yet if it be born alive and die sub-
sequently to birth from wounds received in the
womb, or from the means used to expel it, the of-
fence becomes murder in those who cause or employ
them." I also quote from another distinguished jurist,
Wharton, "Law of Homicide," 98: "If a per-
son intending to procure an abortion, does an act
which causes the child to be born earlier than its
natural time, and therefore in a state much less
capable of living and it afterward die in conse-
quence of such premature exposure, the person who by
this misconduct brings the child into the world, and
puts it into a situation in which it can not live, is guilty
of murder, though no direct injury to the child is
proved; and the mere existence of a possibility that
something might have been done to prevent death,
does not lessen the crime." We are inclined to the
belief that such law is not good common sense; to
kill the child in utero according to Blackstone is
not murder or infanticide, but to inflict such injury
upon it that though it is born alive and dies in
consequence of the injury it is murder.

Some years ago I attended a woman, the wife of an
attorney-at-law, seven months or more advanced
in pregnancy, the child stillborn; the brain had been
punctured through the eye from some instrument; this
was not technically murder under common law, but
I bluntly charged the mother with murder in the
presence of her husband and friends, pointing out the
evidence of it, and there was no denial. I have re-
peatedly been shocked at the manifest lack of moral
sense in intelligent women in applying for medicine
to establish the menstrual function when it was
evident that they believed the absence of the menses
due to pregnancy. The woman sometimes at-
tempts to justify the act because she does not positively
know that conception has taken place. The physi-

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