VAGINAL INCISION AND DRAINAGE.*

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In presenting this paper to the Fellows of this Association I am aware that I bring nothing new to my hearers, but the procedure herein advocated is of such incalculable value, with clearly defined indications, that I wish to hear you discuss it, and to send it forth on its life-saving mission; for surely if there is any operation which snatches a woman from the very jaws of death this one in many instances does.

Indications.

In those cases of pelvic inflammation in which there is an effusion of serum or collection of pus anywhere in the pelvic tissues outside of the tubes the indication is to *drain*. If the serum, or pus, or blood is confined within the tubes, the only logical thing to do is to remove them. To drain tissues that can be safely and easily removed is folly and mere pretense.

In this connection it should be remembered that it is the sepsis

* Read by title before the Southern Surgical and Gynæcological Association, November 13, 1895.

outside of the Fallopian tubes that causes systemic infection—that kills. I desire to emphasize this. When the tubes become infected, Nature sets to work to seal the fimbriated extremity and to coat over the entire tubes with plastic lymph. If she succeeds in doing this before the infection passes through the tube and reaches the peritonæum, the patient is safe from all immediate danger. We are familiar with the trouble a "leaky pus tube" causes. In support of the assertion that septic matter confined within the tube does not cause systemic infection, I recall a case of double pus tubes complicating a fibroid uterus upon which I operated at the Old Dominion Hospital recently. The right tube was distended with pus to the size of the forefinger. The left tube adhered to the ovary so closely that it was impossible to say where tube stopped and ovary began. They constituted a true tubo-ovarian abscess, containing a half pint of pus. The amount of pus and the nature of the fusion between tube and ovary show that the pus must have existed months and probably years, yet there was no sepsis.

On the other hand, a small amount of septic infiltrate or fluid, whether in peritonæum or cellular tissue, will produce profound sepsis. It is in these cases that vaginal incision and drainage are indicated. We operate not to remove diseased tissues, but to drain away septic poison. The more acute the sepsis, the greater the need for drainage. Also, in those cases in which the patient has "weathered the storm" of the acute symptoms and the case has become more or less chronic, with hectic emaciation, an operation is as urgently demanded.

Per Vaginam *vs.* Per Abdomen.

It may be asked, "Why the vaginal incision in preference to the abdominal?" There are several reasons:

1. Vaginal drainage is ideal drainage. Does the vagina not carry away the waste of each monthly period and puerperium? The very structures of its epithelial lining, many-layered and resistant, makes it specially suitable for a drainage canal. The vaginal incision taps the septic focus at its base. The drainage is down hill. Gravity aids capillarity. There is no coffee-pot-spout arrangement that requires to be sucked out with a long-nozzle syringe at stated intervals.

2. There is less danger of further infection. To drain septic matter through the abdomen is always hazardous, no matter how careful one's aseptic precautions.

3. The operation *per vaginam* is much easier to do.

4. There being little shock attending the operation, it may be done

when the patient is *in extremis*. I have performed this operation when the patient was too feeble to take an anæsthetic. It is truly a life-saving operation.

Dangers.

The dangers, other than those incident to anæsthesia, are twofold:

1. Opening a viscus, or blood-vessel.

This can be avoided by care. I always estimate the thickness of the upper part of the recto-vaginal sæptum by one finger in the rectum and the thumb in the vagina. The median incision just behind the cervix, very short and just deep enough to go through the vaginal wall, will obviate the danger of opening either viscus or vessel.

2. The second danger is that of opening the peritonæum, thereby infecting it.

The same care and thorough asepsis will obviate this danger. Only once have I entered the peritonæum while attempting to open a septic accumulation. In this instance the sac was situated laterally; asepsis prevented any harm.

Technique.—I need scarcely speak of the technique to this audience. I prefer the dorsal position. The vagina is thoroughly cleansed. If there is septic endometritis, the uterus should be curetted and packed, *provided* the patient can stand the additional shock and the uterus is readily accessible, neither of which conditions is always present. The cervix is now pulled forward and steadied with a tenaculum. At this juncture I sometimes employ an aspirating needle to determine positively the presence and location of fluid, but this is not necessary in every case. With a scalpel a very short incision is made in the median line immediately behind the cervix. Of course, if there is evidence of softening or pointing elsewhere, the incision should be made accordingly. As soon as the vaginal wall is incised the forefinger is introduced into the opening and, while the mass is steadied with the other hand on the abdomen, the finger is cautiously bored into the tissues. If a cavity is entered, the finger is withdrawn and the contents allowed to escape. If only sodden tissues are felt, the finger is carefully forced into the infiltrated area, making drainage tracks for the septic infiltrate. It is immaterial as to whether the abscess or infiltrate is *intra-* or *extra*-peritoneal; the procedure is the same. I have palpated with the exploring finger the adherent coils of intestines that formed the upper and back wall of an abscess, and I have palpated the distended tube from between the layers of the broad ligament. Whether free fluid or infiltrate is

found, the parts are flushed with normal salt solution and packed with iodoform gauze. In abscess cases a rubber drainage-tube may be added. When in doubt about the exact location of the effusion I have opened the abdomen and located it; then, with one hand in the abdomen acting as a guide, with the other made the vaginal incision. When this is done, an assistant who has clean hands sews up the abdominal incision.

I append a brief report of two of the worst cases of this kind for which I have operated:

CASE I.—Mrs. W. P., residence Waynesboro, Va. I was called to see this lady in June last by the attending physician, Dr. C. A. Fox. The patient gave the following history: Age thirty-six, married; three children, youngest six years old. Two years and a half ago had a pelvic abscess that broke into the rectum. A year and a half ago she had cervicitis, which Dr. Fox treated and greatly benefited by local applications. On the 30th of March (six weeks prior to my visit) the attending physician was called to see her, and found a tender mass on the left side of the pelvis. She had pelvic pain and fever. This mass has slowly but constantly increased in size till now it nearly fills the entire pelvis. The temperature has ranged from normal to 102°; pulse very frequent and feeble. Recently she has had profuse and exhausting night sweats. She is greatly prostrated, and appears very sick. An examination reveals the mass situated more to the left superiorly, but below it fills the entire pelvis. *Per rectum* the mass is felt pressing low down. The uterus is pushed upward and forward, and the posterior vaginal fornix is bulging. No evidence of pointing can be felt or seen, but the mass has a doughy, œdematous feel.

The patient was so weak that an abdominal section was out of the question, so we determined to operate *per vaginam*.

Under ether the presence of pus was demonstrated by the aspirator; then a short incision was made in the posterior vaginal fornix, when one hundred and twenty cubic centimetres of sero-pus slightly tinged with blood escaped. This was not contained in a well-defined cavity, but was like an infiltrate. The escape of this fluid reduced the mass and greatly relieved the pressure on the rectum. Now, with the forefinger in the opening and up between the layers of the broad ligament, and the other hand on the abdomen, the left tube, distended to half the size of one's wrist, could be easily palpated. The wound was flushed with salt solution and packed with iodoform gauze. I advised the doctor that when she recovered from this operation and gained some strength he should bring her to the hospital, and I

would remove the tube by an abdominal section. I expected this woman to get better after what I did, but to my surprise she made a beautiful and uninterrupted recovery. Her temperature and pulse at once fell to normal, the night sweats stopped, and, in a word, she got well. Recently I wrote Dr. Fox and asked him to examine Mrs. P. and report to me her condition. His reply is so interesting in this connection that I venture to insert most of it:

"WAYNESBORO, VA., *October 31, 1895.*

"*Dr. J. W. Long, Richmond, Va.*

"DEAR DOCTOR: I examined Mrs. P., and find some tenderness in the region of left tube and a broad band which is hard and which I suppose is Nature's wall to protect the cavity when she had the abscess. It is tender only to firm pressure. She is very fat and well. The uterus is tender, due to the lacerated cervix, I suppose. This ought to be operated on, as it keeps up a more or less cervicitis. Would you advise the operation, or would it be better to wait until Nature removes the results of the abscess or this has been removed by operation? She is so well she would not have any operation done unless there is danger of her having another abscess.

"Fraternally yours, A. C. FOX."

CASE II.—This patient—F. H., a mulatto woman—was sent into my service at the Old Dominion Hospital by Dr. B. C. Keister, of South Boston. She entered the hospital in July. She has been married eight years, and been pregnant only once—four years ago—when she was delivered of a stillborn child. She dates her trouble from this time. For more than a year she has been quite sick, and for three months bedridden, suffering a great deal. Her temperature when examined was 104°; pulse 140 and very feeble. The husband said she had had a fever for a month. She was greatly emaciated and prostrated. The abdomen was distended and exquisitely sensitive, especially its lower half. A mass could be felt filling the pelvis and the lower abdomen to near the umbilicus. The cervix was pushed very high in front. I stated to my staff that I would not operate on her, she was so near dead; but I put her on the examining table with the view of making some further observations. After a thorough examination I was so sure she was suffering with sepsis, due to pelvo-abdominal inflammation, that I determined to make an effort to save her. An abdominal section would have killed her undoubtedly—even a general anæsthetic she could not have stood; so, after

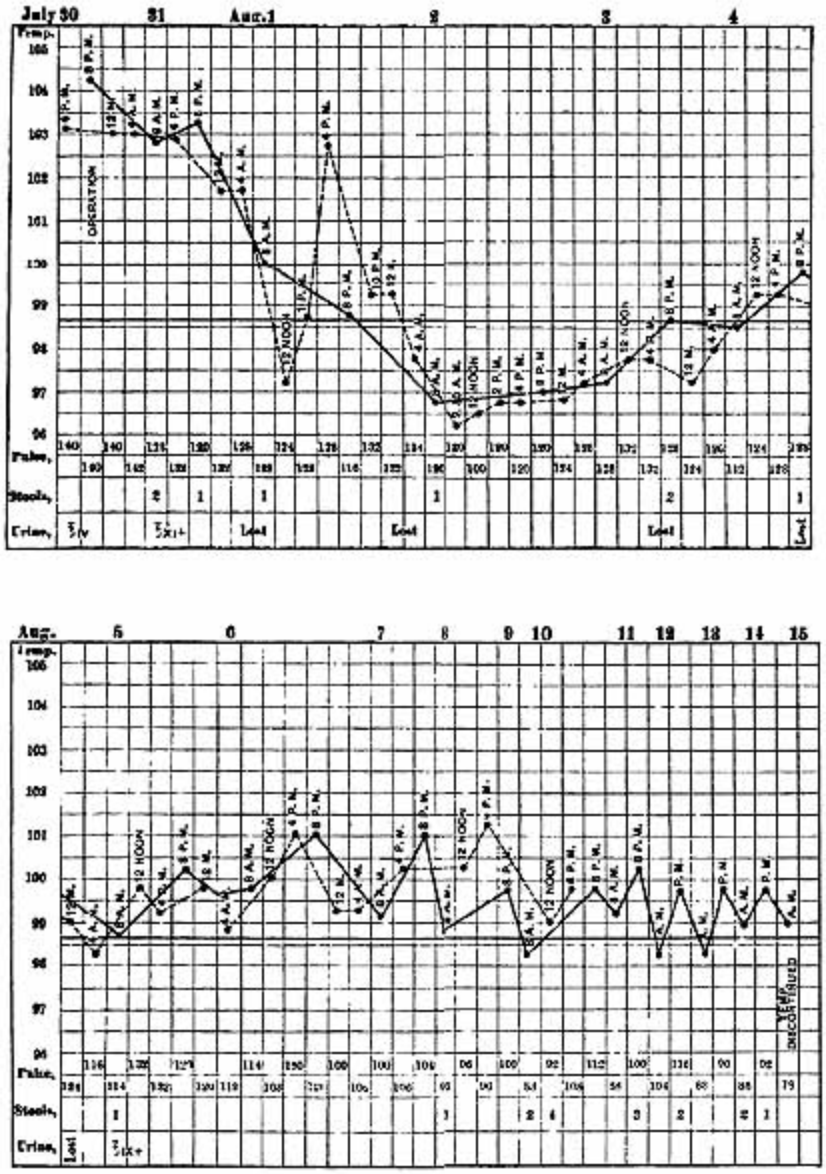

Diagram of Temperature and Pulse.

Black line represents temperature taken twice daily; dotted line represents temperature taken every four hours.

applying cocaine to the posterior vaginal fornix, I made a very short incision and bored the forefinger into the tissues. On withdrawing the finger, about fifty cubic centimetres of pus escaped. I could still feel a large mass, so I cautiously pushed the finger about in the tissues and opened into another deposit of three hundred and fifty cubic centimetres of sero-pus. Even then I could feel a part of the mass that was supposed to be a distended tube. I did not penetrate any farther, but flushed out the wound and packed it with gauze. The manipulations were so painful that I was betrayed into giving her a few whiffs of chloroform, and afterward bitterly regretted it, for her urine became very scant, with albumin and casts. My colleague, Dr. Johnston, was present, and kindly examined this case. This woman's temperature fell to 96.2°, and for two days she was semi-comatose and delirious. On the third day she was a little better and, to my great delight, made a splendid recovery. I saw and examined her last week. She is fat and practically well. The uterus is freely movable; there is little pelvic tenderness. On the left side I can still feel the enlarged tube, but not one fourth the size it seemed to be four months ago. If it ever troubles her I shall remove it, which can be done with safety *now*. To have done so in July, when she first came to the hospital, would have sealed her doom.