

ciple, therefore, vesical exploration and operations should involve as little cutting as possible. This is wise even where stones are to be extracted.

Once the technique of suprapubic section has been mastered, the surgeon need not dread perineal section without a guide. There can be no justification, moreover, for a prolonged and dangerous perineal search for a lost urethra. In intensely septic cases, through and through drainage is advisable.

The rationale of the stone formation in the foregoing case is simple. Decomposing residual urine in an old peri-urethral pus cavity explains it. The false passage was probably of "surgical" origin, and had deluded several surgeons into the belief that they were successfully dilating the stricture. Such errors are by no means rare.

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### PERINEAL OPERATION FOR PERFORATIVE APPENDICITIS WITH ABSCESS IN THE CUL-DE-SAC.

Read before the Peoria Medical Society, May 3, 1898.

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PEORIA, ILL.

The literature on the surgical treatment of appendicitis is replete, and it is the consensus of opinion that, for ordinary cases of perforative appendicitis with abscess formation the incision over McBurney's point, or the extra-peritoneal operation from the side, reaching the abscess without entering the peritoneal cavity, with simple evacuation and drainage, only removing the appendix when possible to do so without causing general infection, are the best methods of procedure.

In looking over the reports of cases it has not come to my knowledge that an operation reaching the appendix abscess, when located back of the bladder, below the small intestine, and in front of the rectum, has been operated on from the perineum. The difficulties of draining these cases through the abdominal incision and the avoidance of soiling the peritoneum are barriers which render the operation useless and fatal when attempted above, except when the operation is made before perforation or before any large quantity of pus has formed.

When the appendix lies externally or behind the caput coli the operation for appendicitis becomes quite simple, and those are the cases which encourage the physician to become a surgeon. But when the appendix lies internal to the caput coli, above the mesentery of the small intestine, the most skilled operators may have grave fears of the result. When the appendix lies below the mesentery of the small intestine, internal to the caput coli and perforation occurs, abscess forms, pressing on the rectum or the bladder. When the small intestine forms the upper wall of the abscess and the tendency of the case is toward rupture into the bladder or rectum, or both, with long-continued illness, never closing abscess sac or sinus, in some cases recovery may take place, or in others, death may follow from general peritonitis. It is not the diagnosis of appendicitis alone, which every skilled physician should be able to make, but the locating of the appendix, which marks the skilled surgeon, as upon this point the success of any given operation may depend.

By the following I wish to point to the possibilities of diagnosing the appendix perforation with

abscess formation, in the somewhat unusual place, the pelvic cavity of the male, and also the advantage of reaching the same extra-peritoneally, from the perineum.

Mr. F. A., age 35, locomotive fireman, stout build, perfect health, on the evening of March 16, after drinking a glass of milk and eating a light lunch in a restaurant, was suddenly seized with pain that was referred to every place over the entire abdomen. Returning home, a distance of ninety-three miles, a physician was sent for and gave him the proper treatment for appendicitis. The pain, locating itself along the lower part of the abdomen, over the symphysis, was continuous and extreme. The bowels responded to saline cathartic. The pulse was 100, temperature 100 to 102 degrees. March 19, third day of the attack, examination of the patient revealed a tumefaction high up in the median line and to the right of the rectum. There was scanty urine, bowels responding to the use of salines, but greatly distended. There was profuse perspiration, pulse 96 to 100, temperature 100.

Having had sad results from operations for appendicitis through the median line for this class of cases when seen late, I counseled delay, as perforation had taken place, and, with distension so great, the removal of the septic debris would undoubtedly end fatally if done in the usual manner while the pathologic condition seemed to be limited. Delay with hope of the abscess discharging per rectum was warranted. The usual line of treatment for appendicitis was instituted, the patient going to the second week, when the symptoms of obstruction, extreme pain, vomiting and great distension developed, with a serious septic condition. I evacuated the abscess through the rectum, high up, puncturing the anterior wall into the cul-de-sac with a small trocar. This I knew to be unsurgical, but the symptoms were desperate and demanded instant relief. Twenty-two ounces of foul pus were removed in this manner, its pressure having caused retention of urine and obstruction of the bowels. It was followed by an amelioration of the symptoms for two days, when, after a good night's sleep, the patient awoke with the most intense suffering, severe septic symptoms and complete retention of urine, the abscess having refilled and the symptoms decidedly worse. Pulse was 120, temperature 97 to 98 degrees, tongue dry and cracked.

An operation was performed through the perineum, to drain the abscess in that manner, making the horseshoe incision of Kocher, beginning at a point midway between the tuber ischii and the anus, extending to the bulbous portion of the urethra and from there to a similar point on the opposite side, separating the fat of the ischial fossa, pushing the external hemorrhoidal nerve and artery back, the transversus perinei, with the bulbous portion of the urethra and the superficial transverse perineal muscles forward. The transverse incision of the fibers of the external sphincter at junction with bulbo-cavernus muscles was made and the division of the deep fascia transversely where it dips down to join the pelvic fascia, separating the levator ani muscles, reaching the prostate and continuing the dissection up back to the cul-de-sac. The abscess cavity was opened and nearly a quart of foul pus mixed with the liquid feces escaped. Washing with sterilized water and exploring with the finger, I found this

extensive cavity covered above by the intestines matted together, forming the upper abscess wall, with fundus at the caput coli. A drainage tube was inserted, and ordinary tamponing with iodoform gauze used. The pulse and temperature became normal, bowels moved six hours after the operation and patient's pain ceased immediately.

*Subsequent history:* Drainage was perfect, no further discharge after fourth day, no fever, no difficulty of bowel movements or bladder action. Temperature and pulse were normal five hours after the operation and distension disappeared immediately. Drainage tube was removed on the twelfth day. Wound granulated nicely. Patient fully recovered; out in third week.

In regard to the perineal operation for abscess of the appendix in this locality, the result was so satisfactory in this case that I have no hesitancy in advising the operation in case perforation and abscess formation takes place within the pelvis of the male, at the point described. In the female it is quite easy to reach an abscess of this kind requiring incision through the posterior cul-de-sac or between folds of broad ligaments, but in the male it is not so easily accomplished, yet can be done with perfect safety, and the great danger of causing general septic peritonitis and death by the usual operation can be avoided. The drainage being at the lowest point of the abscess, the intra-abdominal pressure completely evacuates it and the surgeon remains extra-peritoneal in all his procedures. The appendix could only be removed through the same incision if presenting and it would be impossible to take away more than the gangrenous portion. It is otherwise left to nature. The operator should have care not to break down the adhesions formed by the coils of the intestines forming the upper wall of the cavity, either by rough exploring or by too great force in washing it out.

The remarkable feature was the prompt closing of the perforation and healing of abscess, no fecal matter appearing after operation.

It might be asked if there was bulging of the perineum in this case that led me to incise here? While it was plain that fluctuation could be obtained by one finger high up in the rectum with counter pressure on the abdomen, not a sign of the collection could be obtained through the perineum and it seemed to those present that the proper method would be incision through the abdomen.

## SURGICAL CLINIC IN GYNECOLOGY AT THE POST-GRADUATE SCHOOL OF CHICAGO, MARCH 7, 1898.

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ASSISTED BY F. A. BESLEY, M.D.,

INSTRUCTOR IN GYNECOLOGY.

CHICAGO, ILL.

[Stenographic report.]

*Case 1.*—The first case I have to present is one diagnosed fibro-myoma of the uterus. The patient is 45 years of age. She has borne no children. For several years there has been a menorrhagia developing, which lately has become excessive. Two suspicious symptoms about the case is the disproportionate loss of flesh in the last six months compared to the blood loss, and the almost universal fixation of the lower part of the tumor as I palpate it through the abdominal walls. It extends to just beneath the umbilicus. I should estimate the size of the tumor, including the uterus of which it seems a part, as eight inches in its long diameter, corresponding to the long

diameter of the patient, and the transverse diameter at the largest portion at four inches.

*Exploratory Laparotomy.*—I will make an exploratory laparotomy with the idea of removing the tumor if that course seems practicable. The assistants have thoroughly scrubbed the skin of the abdomen, first with soap and water with a soft flesh brush (the skin having been previously prepared by the nurses), then have washed it thoroughly with 95 per cent. alcohol, then with 1 to 1000 bichlorid solution, and finally rinsed with hot sterilized solution. Sterilized towels are placed around the field of the operation.

We make an incision from two inches below the umbilicus to an inch above the pubes. On opening the peritoneum with an incision about three inches in length we find a large tumor of the uterus presenting, resembling a fibroid, covered in different areas of its free surface with papillomatous growths. This form of growth extends into both broad ligaments, and on both sides in the region of the broad ligament, the space between the uterine tumor proper and the sides of the pelvis is filled with this peculiar wart-like growth. It is obvious that it would be impracticable for any one to attempt to remove this uterine tumor with the complete fixation which exists as a result of this material. The papillæ extend onto the intestines, the mesentery and the omentum; they vary in size from that of an English walnut to that of a grain of mustard. The smaller ones resemble miliary tubercles. Without the microscope I will venture a diagnosis of adeno-carcinoma of the ovary with extensive direct continuity to the broad ligament and the fibroid uterus. The small piece of tissue that I secured on first opening the abdomen was immediately sent to the laboratory for examination.

Dr. Bethel, our pathologist, says, "I found it showed an adeno-carcinoma, papillomatous form."

I will close the abdominal wound without attempting the impossible—the removal of the tumor. Our prognosis must be of the most hopeless character. While the patient will probably recover from this exploratory operation, her lease of life will not extend, probably, beyond six months.

*Case 2.*—This woman is 37 years of age; married; has had three children, and two miscarriages. About three years ago she had an attack of peritonitis which followed "catching cold" after a miscarriage. This term catching cold is another term for infection. Infection, extending from vagina or cervix, which was present before the miscarriage occurred, or infection introduced by a careless obstetrician or midwife in attendance on the miscarriage, or it might have occurred as a result of the patient using a dirty douche point in attempting to cleanse herself after the miscarriage. Infection occurred and this was manifested by a high fever with rapid pulse, excessive pain in both sides in the region of the appendages, and considerable distention of the intestines.

This was undoubtedly caused by infectious material extending into the peritoneal cavity from the open ends of the Fallopian tubes. The immediate result of the leakage was a violent inflammation of the peritoneum at the point of infection. Fortunately, when this occurs at any point in the peritoneum the omentum, intestines and outlying peritoneum rushes in and attempts to limit the extension of the inflammatory action. This it ordinarily succeeds in accomplishing, and then the peritonitis remains local and runs its course in a few weeks, leaving the peritoneum with one or two pent-up pockets of pus. If this pus loses its virulence in the meantime, it may lie dormant for an indefinite time, and finally it becomes completely sterile. If the suppu-