my private hospital began by taking a patient to my home as McDowell did, to watch over and care for her, and to have such results as only a private hospital could secure. I can not conceive of any such remark coming from anybody but a bachelor who has not the warmth of heart to make a good gynecologist; or to preside over a home in which he could do as McDowell did, take the patient there and care for her with paternal care, and secure such results as can only be secured in a private hospital presided over by the operator. I do particularly resent the imputation that a surgeon would be dishonest. I am not over and above honest, so far as comparison with other men is concerned; but while I have a private hospital and while many of my colleagues, including such men as John Homans, J. A. Emmet, T. Galliard Thomas, R. S. Sutton, E. E. Montgomery and others in America; August Martin, Keith, Tait and many others in the old world, have private hospitals, and are doing good work, I will say we are just as honorable, and would not keep a patient a moment longer to secure a dishonest dollar, than the man who would impugn our motives in running private hospitals.

RECTO-VAGINAL FISTULA; ITS ETIOLOGY AND SURGICAL TREATMENT.

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BY AUGUSTUS P. CLARKE, A.M., M.D.

CAMBRIDGE, MASS.

The rectal tissue appears to be often the seat of morbid processes which may extend to neighboring structures; when the vaginal wall is also involved the result may be attended with much inconvenience. An abscess may form in the lower section of the sigmoid flexure or in the cellular tissue about the rectum and the exudation may be discharged or may break through into the vagina. Ulceration may take place in the small intestine and also open into the vaginal tract. The employment of the obstetric forceps has been looked upon as productive of rectal fistula, though I have never met with a case in which I could feel certain that the lesion was so produced. Prolonged pressure of the fetal head or of some other portion of the child upon the posterior vaginal wall has not infrequently been associated with the occurrence of this mishap. When the fistula occurs from this cause the openings vary; sometimes there is only a small perforation, at other times a large portion of the posterior vaginal tissue may slough or be destroyed.

Recto-vaginal fistula may occur from violence or direct injury to the parts, as took place in a case which came under my care some few years since. The patient who was the subject of the accident was aged 30 years; she sustained a direct fall of five feet upon a sharp wooden peg, four and a half inches in length. This penetrated the anus and passed through the rectum two inches above the perineal bridge into the vaginal canal. The shock for awhile was severe; but she rallied, however, and recovered with a fistula opening into the vagina, and of size sufficient to allow the passage of a No. 27 sound, of the French scale. The opening has since been closed by an operation performed by a flap splitting method as recommended by Max Saenger, of Leipzig. Rectal fistula may result from fecal impaction and sometimes from stricture of the rectum; when associated with stricture we may entertain a suspicion that the patient is affected with syphilis.

In rare instances an abscess communicating between the rectum and vagina has been known to have its origin in the caput cecum coli; and in suppurative pelvic cellulitis, and pelvic peritonitis and in other morbid processes connected with the sexual system. Fistulous channels resulting from malignant disease, such as sarcoma and carcinoma, and from syphilitic infection are according to the consensus of authority the most unsatisfactory to treat. I have met with a few cases in which the communication between the rectum and vagina was caused by tuberculous infiltration which had extended from the abdominal cavity to the peri-vascular structures at the seat of the abdominal opening. Vestibular recto-vaginal fistula may result from attempts at plastic operations in the vicinity of the rectum and especially from flap-splitting for repair of a lacerated perineum. Such a fistula may be of the recto-perineal variety, or be a recto-laquearis when situated in a higher level in the fornix of the vagina. This would most likely occur in cases in which there had been an hyperplasia and a subsequent induration of the recto-vaginal septum. I have met with at least two such cases in which an operation for the closure of the opening was necessitated. An abnormal communication through the posterior vaginal tissue into the rectum may be established by the occurrence of pelvic peritoneal suppuration, and by suppurating dermoid and other cysts and by ectopic pregnancy; the products of the morbid processes attending these conditions may result in their escape through the vagina and rectum.

The cases in which the greatest success is expected to be achieved are those that may be denominated the traumatism of parturition. Recto-vaginal fistula arising from peri-rectal suppuration or peri-vaginal inflammation or lesions should be treated according to the several indications in each individual case. In one case in which the solution of continuity occurred from processes leading to suppuration, I succeeded in effecting a cure by a thorough curettement of the margin of the fistulous tract and by removing all the fungoid growth; then undermining at some distance and lifting away the vaginal tissue so as to expose to view the rectal portion beneath. The edges of the rectal tissue were then brought together by deep buried continuous aseptic animal sutures so adjusted as not to penetrate the rectal mucous tissue. After the rectal structure had been united, the vaginal portion was then replaced and so affixed by the sutures as to close completely the abnormal communication; the parts were then dried and covered with the compound tincture of benzoin and iodoform and protected with tampons of iodoform gauze. The wound closed by primary union. In the treatment of fistula, cauterization of the edges may sometimes be successfully resorted to. In carrying out this method the thermo-cautery or the galvano-cautery will sometimes be helpful; in some instances the hot iron, formerly more often employed than now, may occasionally be tried with advantage. The cases in which such a course is indicated are not numerous; in those cases in which there is any considerable phosphatic deposits about the edges, or in which there is indurated and thickened tissue around the fistulous margin the adoption of this method will not prove successful. It is only in cases in which there are healthy granulations springing up about the edges of a fistula with comparatively narrow opening that

the employment of cauterization in any form will be likely to yield favorable results. The method of flap-splitting as employed in perineorrhaphy comprises the best procedure as a preparatory step in a typical surgical operation for closure of such a fistulous tract. By this procedure there will be no loss of normal tissue; the openings in the rectal tissue should be closed by continuous aseptic animal sutures. The suture obtained from the kangaroo tendon is to be preferred. In no event should the suture penetrate the rectal mucous membrane; after the rectal septum has been sutured the vaginal portion should be closed from its under surface.

I can not advise the use of Lauenstein's sutures for the reason that in extensive lesions the many knots which this method necessitates to be tied in the sutures are liable to prevent speedy and complete cicatrization of the wound. In attempting to raise a flap or to undermine the vaginal tissue the line of incision should extend 1.5 centimeters above and below the fistula, as is advised by Saenger, and should be in depth in the tissue upward 1.3 centimeters. In some cases, after first undermining the vaginal tissue, the flap can be turned up by drawing merely upon the tissues, using the knife or scissors only at the point in which the parts are adherent; in other instances the subvaginal tissue may have undergone such changes by a previous hyperplasia that the recto-vaginal wall can not be separated without great difficulty. Recto-vaginal fistula may sometimes be closed by a mere denudation of tissue, but when the opening is near the perineum the vascularity of the tissue at that point may be so deficient that union will fail to take place.

The old method by transplantation of flaps from other parts as from the anterior vaginal wall, or from the rectum, and even from the cutaneous surface for certain peculiar conditions, may be occasionally tried, though operative attempts by such method have rarely been attended with success. Fistulae situated high up in the fornix are more difficult to reach; if the opening is small and the pressure through the intestinal wall is not great, division of the septum may be effected, and the recto-vaginal portion should be sutured after the manner above mentioned. If, however, the communication is of a large size the closure may be attended with greater difficulty.

Saenger,¹ of Leipzig, to whom reference has been made speaks of a method of treatment by perineotomy. The perineum is split transversely and the levator ani is partially divided; the portio vaginalis is then drawn down and the opening in the vulvovaginal canal is thus closed and the sutures are applied to the vaginal wound. The operation by splitting the recto-vaginal tissue is the one best adapted in those cases in which there is a due degree of vascularity in the vaginal structure for insuring immediate union; in the higher segments of the vulvovaginal canal the arterial supply is the most plentiful. In the lower portion the nutrition is often extremely limited. Saenger uses fine aseptic Chinese silk for buried sutures in this work; he prefers silk to catgut in effecting closure of the rent. He makes no mention of the use of tendon sutures. In his paper he calls attention to important points in methods of operating by the splitting of the recto-vaginal septum

from the perineum. His method though not complete in all respects contains principles that are capable of being utilized to the highest advantage in procedures necessary in this kind of plastic surgery.

Recto-perineal fistula though not as serious a lesion as when the rent is situated higher in the vaginal wall proves for the most part very annoying. In my practice I have met with a number of cases of this variety and have found that operative measures similar to those for fistula ani have been necessary for speedy and complete cure. As already stated, recto-vaginal fistula can not be easily cured by merely freshening and suturing the edges of the opening, nor can it be readily overcome by a triangular denudation of the vaginal layer. Such a loss of tissue by procedures of this kind does necessarily weaken the normal vascularity of the parts and so prevents closure of the communication and also entails danger of the occurrence of a greater opening.

The cure of a recto-vaginal fistula located at or near the sphincter ani may be prevented or delayed on account of frequent contractions occurring in the muscular tissue of that part. In such cases thorough division of the sphincter and sometimes of the perineum either by incision or by stretching of the parts by digital dilatation as was formerly recommended by Van Buren should be had recourse to. Recto-vaginal fistula is often more difficult to heal than a vesico-vaginal one. This is especially so when the fistula is situated on a higher level and where it can not be brought down and exposed to view. The location of a fistula situated very high up or not within easy reach may be inferred from the character of the fecal discharge which is usually much more yellow than when occurring at a lower point. The fact that the opening of a recto-vaginal fistula is much more extensive on the vaginal than on the rectal aspect necessitates a resort to the method by division or splitting of the septum; by this means the rectal portion may be more easily reached. It should then be carefully sutured in order to insure at least closure of that portion of the structure which separates the two canals from each other. If the opening in the rectal portion can be made to unite by the first intention that of the vesical side if interrupted may subsequently close by granulation. In all cases after the sutures have been inserted the parts should be irrigated again with the warm sublimate solution and should be dried, and protected by the application of iodoform or aristol or iatrol. For the first few days the bladder should be regularly emptied by the employment of the catheter. The bowels should be kept in a solvent condition, and the wound should be subsequently irrigated with the sublimate solution or with warm water, whenever any urinary or fecal excretion or other septic matter may have come in contact with its edges.

Ovariectomy Performed During the Course of a Puerperal Septicemia.—Pinard (*Bull. Acad. Med.* 20 *Fevrier* 1894) reports a case by Le Roy des Barres. Young multipara, four days after childbirth had symptoms of peritonitis; fifteen days later pleuritic effusion, and phlegmasia dolens. There was also a suppurating cyst of the ovary. Aspiration evacuated six litres of purulent liquid. Eight days later laparotomy was performed; there was found a unilocular cyst with a normal pedicle; a cure resulted.—*Revue des Science Médicales*, July, 1894.

¹ Operative Treatment of Recto-Vaginal Fistula. Transactions of the American Association of Obstetricians and Gynecologists. Vol. 3, 1890.