REMARKS ON STRICTURE OF THE RECTUM.

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At the time of my first paper¹ on Fibrous Stricture of the Rectum, I endeavoured to review carefully the literature of this subject, and, among numerous publications noticed, the paper of Gosselin² received my most thoughtful consideration, and, indeed, enabled me to prepare the way for the ready acceptance by American surgeons of the part which chancroidal ulceration of the rectum plays in the causation of rectal strictures, which, except those of cancerous origin, occur almost exclusively in women, as the result of the extension of chancroidal ulcerations to the rectum; and the persistence of these ulcerations in the ampulla of the rectum finally causes stricture. The auto-inoculable character of the chancroidal pus explains the facile transmission and presence of chancroids in the rectum of women. The secretions of the vagina and vulva, mixed with chancroidal pus, escape and trickle down about the anus in women while in the recumbent position; and hence the liability of women to chancroids about this orifice. The extension of a chancroidal sore from the anus to the ampulla of the rectum is easily effected, and chancroidal ulceration of the rectum occurs; and this disease is indefinitely prolonged, until the chancroidal virus in course of time loses its virulent contagiousness, as it may do elsewhere. The ulceration of the rectum, however, continues, and ultimately results in stricture of the rectum, which from this cause is common, and occurs almost exclusively in women; while from simple ulcers, or cancer, rectal stricture is rare; and from syphilis, as gummy tumours of the rectum, altogether exceptional.

I have no knowledge whatever of child-bearing as a cause of rectal stricture. As for the "kink in the gut" cited by Mr. Harrison Cripps,³ and alleged by him to be due to "contraction of that portion of the pelvic fascia which runs around the rectum," occurring, as he says, generally after the fourth confinement, or after a difficult one, followed by pelvic cellulitis, this is an explanation of the cause of stricture of the rectum that, I confess, I cannot readily accept. It is easy to perceive that a pelvic cellulitis may by pressure obstruct the gut, and that an extensive chancroidal ulcer of the rectum may cause a limited pelvic inflammation, which would slightly displace the rectum to one side; and, in fact, the evidences of an old pelvic cellulitis at a *post-mortem* examination complicating stricture should not be taken as proof that the cellulitis was the cause of the stricture.

Tripiet, of Paris, was probably the first to apply electrolysis to the treatment of urethral strictures, and Dr. Robert Neuman, of New York, and myself were probably the first to use electrolysis in the treatment of rectal stricture. Dr. Neuman's case had fecal fistulæ, and died, and I had an opportunity of examining the specimen at a meeting of the New York Pathological Society. It was after seeing Dr. Neuman's case that I, then living in New York, with the valuable co-operation of Dr. William B. Neffel, treated a case of stricture of the rectum by electrolysis, which is reported in the *American Journal of the Medical Sciences* at considerable length.

The electrolytic treatment of this case extended over a period of one month, and during this time Dr. Neffel subjected the patient to four *séances* of electricity, each one lasting about half an hour. At the first *séance* an application was at first made with a Curt-Mayer (platinum zinc) battery. The cathode, made for the purpose, was introduced partially into the stricture and there was a rapid dilatation of the lower part of the stricture only. At the second *séance*, a week later, the box of Remak's battery, containing Siemens' elements, was substituted for the Curt-Mayer battery. Dr. Neffel began with two elements, and gradually increased to fifteen, at which number the current was maintained for five minutes, with a deflection of the needle of the galvanoscope of fifteen degrees. The current was then gradually, by the addition of one element at a time, increased to twenty-one elements, which was used during five minutes. It was then interrupted, and I examined the upper part of the stricture with my finger, and found it considerably dilated. The applications were several times renewed. At the third and fourth *séances* about twenty of Siemens' elements were used, and considerable frothy mucus, caused by the evolution of hydrogen gas at the cathode, issued from the rectum. Some months afterwards

the patient came to the North-Western Dispensary, and was carefully examined by my clinical assistant, and the stricture was found to be quite as tight as before the electrolytic treatment.

UNUSUAL FORM OF OBSTRUCTION OF THE LARGE INTESTINE: COLOSTOMY: DEATH: NECROPSY.

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J. C., aged 63, had been treated for varicose eczema of both legs some months ago. Besides this he could only give a history of two attacks of illness, fifteen and twenty years ago, said to be "inflammation of the bowels." Each attack lasted two days, and was accompanied by diarrhoea. For some months he had suffered from occasional abdominal pain, for which he had taken brandy. The bowels had acted naturally. From about November 30th to December 20th he suffered from discomfort after meals, with abdominal swelling. The bowels acted daily in this way. On rising he used to have a cup of tea; this gave rise to pain, and within twenty minutes the bowels would be moved three or four times. The first portion was nearly always solid, small in quantity, and of the thickness of the little finger. This was followed by a quantity of watery motion, which was the chief characteristic of the succeeding evacuations. The bowels would be moved again in the afternoon. He had not lost flesh. On December 20th, after a meal of veal pie and mince tart, he had a severe attack of pain and diarrhoea. This had stopped on December 21st, when he was seen for the first time. There was then an unsymmetrical enlargement of the abdomen. The right side was markedly more distended than the left; the umbilicus was drawn to the right of the median line, and there was considerable distension in the region of the cæcum and ascending colon. There was resonance all over and in the flanks, and no fluctuation. Below the tips of the eighth and ninth ribs on the left side, there was a more marked feeling of resistance than elsewhere, the resonance was impaired and the spot was tender. Pain, when present, was felt chiefly in the epigastric and left hypochondriac regions. The rectum was empty; the prostate was large. There was no sickness or nausea. The pulse was 72; the temperature was normal, and the tongue moist, clean. The urine of specific gravity, 1028, contained amorphous urates and no albumen.

Treatment by opium, belladonna, and enemata was tried without benefit; the patient was much worse on January 3rd, and on the following day the colon was opened on the right side; only a little flatus escaped. Some water was injected through the opening; this was returned, and with it some feces. On inserting the finger, the bowel felt capacious, and soft feces could be felt. Soon after the operation he began to pass blood-stained mucus and small clots from the anus in considerable quantity; this continued for thirty-six hours, and the latter part of the discharge had an exceedingly foul odour; a piece of feces, two or three inches long, of small calibre but natural appearance, was also passed. Whilst this discharge was going on from the anus, a fair-sized healthy, natural-smelling motion was passed from the loin; there was no mucus with it.

On January 6th all discharge from the anus had ceased, and all subsequent evacuations were healthy and passed by the loin. As a result of the operation the abdomen became flaccid, the patient looked better, and felt more comfortable. His difficulties began when he commenced to take food. Distressing vomiting and hiccup could only be controlled by subcutaneous injections of morphine and atropine, and he was supported entirely by rectal feeding for four days.

On January 8th he began to take small quantities of food; but bedsores had already made their appearance on the sacrum, on the back, the malleoli, and the outer side of the feet. Laying him on his side for a few hours produced a long, raised, red wheal corresponding to the line of the femur. The wound, which had appeared to be doing very well, was now found to have made but little progress towards repair, pus making its way to the surface by the sutures; some of these were removed and the wound allowed to gape; pus had collected in the deeper parts of the wound, but neither the temperature nor the external appearance of the wound had given any clue to it. There was slight transient jaundice, and the urine, which was very dark-coloured, on one occasion contained albumen. This also disappeared. The patient slowly sank and died on January 13th, ten days after the operation.

Necropsy.—Permission to examine the cause of the obstruction only could be obtained. On opening the abdomen the large bowel was

¹ *American Journal of the Medical Sciences*, January, 1871; see also July, 1872.

² *Arch. Gén. de Méd.*, vol. v. 5ème série 1854, p. 666.

³ *BRITISH MEDICAL JOURNAL*, December 18th, 1886, p. 1219 (Report of meeting of the West London Medico-Chirurgical Society).