CLINICAL LECTURE ON EXCISION OF THE LEFT KIDNEY.

Delivered at the Westminster Hospital, July 4th, 1884.

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GENTLEMEN,—A most important line in practical surgery has lately been opened—namely, direct operative interference with the kidney and ureter, notably for the extraction of stone. You have all had the opportunity of studying a case of mine in the extra ward, and my object to-day is to place the salient clinical facts before you; to point out the method pursued for endeavouring to arrive at a correct diagnosis; to discuss the operative treatment, and demonstrate the *post mortem* appearances; for, although I had the hopeful satisfaction of excising this patient's kidney, and sending him out of the hospital with his wound absolutely healed and sound, yet I occupy the alternate melancholy position of one who had utterly failed to eradicate the disease, or to remove the original cause of his condition. I will read to you the notes of the case, and point out, so far as possible, my reasons for adopting surgical measures, which may be of use to you hereafter in the conduct of similar cases, and which may lead, by free discussion, to further improvement.

Tumour in Left Groin: Supposed Cyst involving the Left Kidney or Ureter: Exploratory Operation: Subsequent Excision of the Left Kidney: Recovery: Death from Encephaloid Carcinoma of the Liver, Bladder, and Left Ureter: Calculus impacted in the New Growths.—John F., aged 53, married, an upholsterer, of Wandsworth, was admitted into Mark Ward on August 11th, 1883. About ten years ago, he injured his left testis, riding at a bank. Since 1881, he has complained of pain in his left loin and side; and this has been acute for seven months prior to admission. At Eastertide, 1883, journeying from Clapham Junction to Tunbridge Wells, he suffered acutely from compulsory retention of urine in a railway-carriage; and, on arriving at Tunbridge Wells Station, he passed *per urethram* a small stone about the size of a pea. Hæmaturia followed, and has been an intermittent symptom ever since. He has passed blood in his stools, and frequently four days elapses without a motion. The lump in his groin showed itself about April 1882, and has steadily increased.

On admission, there was nothing abnormal with his circulatory, respiratory, nor digestive symptoms.

Integumentary System.—He is a careworn, emaciated fellow, with a pale skin, sallow complexion; eyes dark, bright, quick, and suspicious; hair dark, but streaked with grey; skin harsh, dry, and cool. Pedunculate mole over left scapula.

Nervous System.—Intellectual faculties normal; but, owing to his extreme weariness and melancholy, his wife placed him once in an asylum (as he says, in mistake). He was shrewd enough, however, not to forget this delicate attention on the part of his wife, as a future note will show. His pain extends across his loins, mostly on the left side, and downwards to his penis, left groin, and thigh. His nights are restless, and his pin-point pupils suggest the use of opium; but he states that he has not habitually taken any drug. Friction relieves his pain; a bandage across his loins increases it. No œdema.

Genito-Urinary System.—Penis and testes are structurally natural; no retraction of left testis, but pain is intense in the penis, and persistent; he holds the organ in his palm, and has repeatedly asked to have it cut off. In his left groin is a fluctuating swelling, of the size of a cocoa-nut; not painful on manipulation, but giving discomfort by its mechanical enlargement. The tumour recedes from the upper part of the groin into the abdomen; is dull on percussion, and immovable. Urine (specific gravity 1020) slightly albuminous; no sugar. Blood can be noticed by the naked eye, and large epithelial-looking scales and mucus-corpuscles by the microscope. Has never impregnated his wife; no sexual desire remains. The act of micturition causes much pain, referred to vesical spasm.

Operation for Diagnosis.—On August 14th, 1883, the man was put to sleep. I introduced a catheter into his bladder; and, on examination *per rectum*, I found some thickening in the region of the prostate and base of the bladder; on compressing the left ureter with the rectal lever, urine was excreted—proving that the right kidney was acting. I next opened his left abdominal region by a straight cut (parallel to his linea alba, but two inches posterior to the anterior superior spinous

process of the ilium). The peritoneum was opened; a cyst was exposed, carefully held outward with forceps, and punctured with a trocar and cannula, and thirty-three fluid ounces removed. The fluid was of specific gravity 1014, of pale, straw, dull colour; coagulates, but does not solidify on boiling. The microscope shows blood-corpuscles, compound granule-cells, large epithelial-looking cells, scales, mucus-corpuscles, and sheets of cholesterine; no hooklets. The puncture made by the trocar was neatly ligatured, and the string hung out through the wound. It healed perfectly well, and the man left the hospital on October 12th, 1883, with the groin-swelling much reduced, but by no means absent.

He was readmitted in a forlorn state on October 30th, 1883, half dead and starved. On November 6th, 1883, our senior physician, Dr. Sturges, held a consultation with me, on the propriety of excising the cyst. We both deemed it to be renal; the patient's local pain was intense. Dr. Sturges recommended that operative interference should be postponed for a week; and that one-sixth of a grain of morphia should be subcutaneously injected over the tumour. This course was adopted, and with benefit. The man was carefully nursed, and generously fed, but no stimulants were allowed.

On November 13th, 1883, assisted by my colleague, Mr. Thomas Bond, I opened the patient's loin posteriorly, carefully dissected down to the cyst-wall, laid hold of it with the lion forceps, opened it, and let out about sixteen fluid ounces of dusky brown fluid; inserted my forefinger into the interior of the renal cyst, but could not feel any calculus. I removed the whole kidney by shelling it out, and ligatured separately, the renal artery, vein, and ureter. Could not pass a probe down the ureter (left) to the bladder, as the probe impinged on a dense obstruction, and would not descend beyond about four inches. I next inserted a sponge, enveloped in oil-silk, into the chasm, and placed him in a special ward. The flaccid tumour measured $7 \times 2\frac{1}{2}$ inches; it was the remnant of a kidney, no real kidney-structure being left, but only a huge partitioned fibro-cystic bag. The peritoneal cavity was, of course, not opened; and the suprarenal capsule was felt at the upper part of the gap, loosely connected. [A drawing of the kidney was shown to the students.]

November 14th.—The patient rallied well, and his urine was, for the first time, free from albumen. There was a little cloud on boiling, but nitric acid cleared this up. Complaints of pain at his loin, but of a more bearable kind than previously.

16th.—Some few blood-clots passed *per urethram*. Man doing well.

17th.—Sponge removed without bleeding.

18th.—In addition to a generous diet, he was ordered half a dozen oysters every day.

22nd.—I had to break the news to him to-day of his wife's death. On my cheering him up, and begging him to really show himself to be a man of the right kidney, he seemed to take courage, and said, "Thank God! life is again worth living for."

28th.—One of the ligatures came away in the night. No albumen in urine.

December 5th.—The second ligature came away.

December 18th, 1883.—The last ligature had not cut its way out. On careful examination, it was found to be only tied once. On pulling both strings, aortic pulsation could be felt most distinctly, but the ligature would not quit its hold. I therefore passed a tube down over the ends of the ligature, bringing them out at a side-hole in the cylinder; and, on firmly pressing the cylinder down on the loop, and twisting the ends, pulley-fashion, on a pair of dressing-forceps, the ligature came away without any bleeding. Thus the small piece of fibrous tissue which had not been strangulated was neatly ecraseured off.

December 24th.—He was well enough to be transferred from a special to the general ward.

December 30th.—Wound was perfectly healed. Cicatrix, firm and dry ($2\frac{1}{2}$ inches long), is about one inch above the crest of the ilium, oblique, and, at its commencement, about $2\frac{1}{4}$ inches from the lumbar spines.

The man passes about three to four pints of urine daily, which contains about 1.46 per cent. of urea (2 per cent. standard). Dr. Dupré, F.R.S., also kindly tested his urine with acetic acid and the ferrocyanide of potassium, and it gave a slightly albuminous reaction.

January 10th, 1884.—He was discharged from the hospital, and was sent to the St. George's Infirmary, Fulham Road, S.W., under the charge of the medical superintendent, Dr. Webster.

January 15th.—Dr. Webster wired to me that John F. died this day; that he objected to any stranger coming near him, and that he had stoutly refused to take any food. By the courtesy of Dr. Webster, every facility was given for making a *post mortem* examination; and on

January, 16th, 1884, at 3.30 p.m., Dr. Hebbert, Mr. Wills, Mr. Mitchell and I examined the case at the St. George's Infirmary.

Section Cadaveris.—Body extremely emaciated. No bed-sores, nor any external wound. Scar over left loin, as described during life, also over abdomen (first operation). Head was opened by tractor and long saw; brain and membranes healthy; thoracic viscera healthy. On opening abdomen, the intestines looked healthy, but were quite empty; slight omental adhesions on the left side. The liver was large, and studded over with white cancerous looking masses, varying in size from a pea to a walnut, soft, and yielding on section a white juice. The lumbar glands were much enlarged from the same cancerous looking deposit, but no marked involvement of surrounding structures. The left kidney was gone, and a cicatricial patch, more or less reddened by organised lymph, filled its place. The suprarenal capsule was intact, though surrounded by some enlarged glands.

I may here show you, in spirit, the kidney removed during life; and, over it, in the same glass, the sound left suprarenal capsule, surrounded by cancerous glands, removed after death. The right kidney, with the suprarenal capsule, was healthy, and weighed 10½ ounces, average weight of a male kidney being about 5½ ounces. The thoracic duct was small and empty; and no diseased glands were seen above the diaphragm. I next made a side view of the pelvis, and found the base of the bladder and rectum invaded by a new growth; which had ulcerated into the rectum about two inches from the anus, on the left side, had generally involved the left interior of the base of the bladder, and had spread upwards along the left ureter. This encephaloid growth completely obstructed the left ureter, for five inches up from the ureteric outfall; and exactly at the left ureteric opening, only covered by some thin film of cancerous stuff, was found an oxalate of lime calculus, as large as a hazel nut, conical at each end, bossed over with many nodules in the centre, superficial, but smooth as glass at each terminal cone.

I here exhibit the calculus; which is, in my judgment, the *pons et origo mali*. At the upper end of the left ureter, where the ligature was placed on the day of operation, there existed a puckered cicatrix; but the opening, though narrow, was not completely closed.

The new growth was carefully examined for me by my colleague, Dr. Heneage Gibbs; the liver-structure was compressed by cirrhosis, and sections of the new growths showed large nucleated cells with nucleoli. The two slides now beneath the microscope are good examples of encephaloid cancer.

Having laid before you the clinical facts, let me say a few words on the method pursued for endeavouring to arrive at a correct diagnosis. In addition to his physical signs, there was the history of unilateral lumbar distress for three years, and the previous transit of a calculus *per urethram* in 1833. Careful examination *per rectum* digitally gave imperfect information; but, in any such future case, I should again avail myself of a combined examination; namely, manipulating a full-sized sound in the bladder, and the forefinger in the rectum. I find that on the dead body, the ureteric outfalls can be faithfully subjected to touch by such operative treatment; but in F.'s case this means of diagnosis failed by reason of the new growth surrounding the stone. The utility of ureteric compression *per rectum* was demonstrated in this case; and I venture to draw surgical attention to the additional value of the lever, as one aid to diagnosis; by which I mean, had the right kidney line not acted, when the left ureter was blocked, strong evidence would be afforded of the worthlessness of the right kidney; and therefore any operative measures on the left would have been negatived. This point has also been noted by Dr. Robert F. Weir, and published in the *Medical Record*, New York, April 7th, 1883, but such an application of the rectal lever had been demonstrated by myself in 1874.

It is also possible, of course, to compress either ureter against the true pelvic wall on its own side, *per rectum*; but not so reliably as by the use of the lever applied at the point where the ureter is passing over the common iliac artery on the psoas magnus.

As to the operations performed on this patient. In the first, an exploratory one, the peritoneal sac was opened; and this was really more accidental than intentional, my object being to tap the cyst at a point where doubts might have been cleared up with reference to the intestine. The information gained would have been equally the same, had it not been opened in this case.

With regard to the second operation, I must give preference to the posterior lumbar wound; as ample space can be had in that quarter for the removal of any kidney, and cleanliness and free drainage are naturally promoted by the dependent wound.

Both wounds (first and second operations) healed perfectly well, without any dressings whatever, excepting such as were necessary for keeping the patient dry, clean, and comfortable. I am inclined to

give the calculus impacted at the left ureteric outfall the credit of being the starting point of the encephaloid cancer, by reason of its definite localisation; and to explain the complete freedom from cancerous infiltration above the diaphragm by the anatomical facts, that the lumbar glands receive the lymphatics from the ureter, and the liver those from the rectum through the portal circulation. Be this as it may, it is worthy of note that the lumbar glands and liver seemed to act as the collecting filters. I cannot too highly praise the conduct of the nurses who had the charge of this troublesome man; nor can I omit to record my high appreciation of the skill and cultured care freely given to our patient by Mr. Charles Humphreys, Senior House-Surgeon to the Hospital.

ON SOME CASES OF AMPUTATION OF THE CERVIX UTERI.¹

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IN a paper, read at the last meeting of the former Dublin Obstetrical Society, I called attention, for the first time in this country, to the value of tracheloraphy in many uterine complaints, which had long been improperly treated until it was shown by Dr. Emmet, of New York, that they resulted from lacerations of the cervix uteri, and were generally curable by the repair of this injury. I now desire to offer some clinical evidence of what I also then briefly stated—namely, that tracheloraphy is not applicable, however, in all cases of this kind; that, under even favourable circumstances, it occasionally fails; and that, under such circumstances, we may, at least in many instances, best treat the long train of symptoms consequent on this injury by the amputation of the lacerated cervix.

This opinion is not in accordance with Dr. Emmet's. But, though none can more fully recognise the authority of that distinguished gynaecologist, especially on an operation which he has made peculiarly his own, yet I certainly cannot agree with him that amputation of the cervix, except for malignant disease, is necessary malpractice. The removal of the neck of the uterus for hypertrophy, or for abnormal elongation, is also deprecated by Dr. Emmet, who is equally opposed to the application of the cautery or caustics to heal ulceration on surfaces that may possibly be brought into a healthy condition and united by his operation. "If," in Dr. Emmet's words, "this so-called ulceration, or this elongated cervix, should prove to be merely a laceration, the sides of which can be brought together and united, so that the integrity of the parts will be as perfect as if the accident had never occurred, then to resort to ablation is malpractice." This proposition is self-evident. But in that little "if" lies the entire question; and, highly as I value tracheloraphy, and successful as I have generally found it in appropriate cases, I must repeat that, in certain cases of extensive stellate lacerations of long standing, with considerable loss of substance, and accompanied with chronic inflammatory conditions of the adjacent structures, or cellulitis, as well as with hypertrophy or hyperplasia of the injured cervix, caused by inflammatory exudations rather than by any development of the normal cervical connective tissue, tracheloraphy is inapplicable and useless. In such a case, we can only cure an otherwise incurable patient by the amputation of the mutilated and diseased cervix. Moreover, this operation, according to my experience, is fully justifiable in some cases of non-traumatic hyperplasia and chronic parenchymatous cervicitis, especially in patients who are predisposed to malignant disease, as well as in some few instances of cancer of the cervix, either as a possibly curative measure in its earliest stages, or to relieve suffering, if not to prolong life, in the latter stage of the same disease. In those cases of laceration in which I have removed the cervix, the patients have not since become pregnant. But there may be other reasons to account for this; and, on the other hand, there can be no doubt that this operation is, nevertheless, called for in some cases of sterility, resulting from the mechanical obstacle to impregnation offered by a greatly hypertrophied, elongated, and conical cervix uteri.

Within the last five years, having, for the foregoing reasons, amputated the cervix in a considerable number of cases, I may observe, and my colleague, Dr. Kennedy, who kindly and skilfully assisted me in nearly all these cases, both in the hospital and in private practice, confirms the statement, that, up to the present, we have had no experience of any of the disastrous consequences which some writers insist on ascribing to this operation. I shall now only briefly refer to

¹ Communicated, and Specimens exhibited, at the Academy of Medicine, Ireland, May 1884.