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CASE OF RUPTURE OF THE BLADDER: RECOVERY.

By WILLIAM CHALDECOTT, Esq., Surgeon, Dorking.
(Read at the Annual Meeting of the South-Eastern Branch of the Provincial Medical and Surgical Association, held at Ashford, Wednesday, June 24, 1846.)

The records of surgery exhibit so few instances of recovery after rupture of the urinary bladder, that probably the details of the following case may not be unacceptable to the members of our Association, affording as they do encouragement to both surgeon and patient to hope under circumstances that have generally forbid any other than the worst anticipations.

At twelve o'clock on the night of Tuesday, the 7th of April, Mr. John Philips, a wine-merchant in Dorking, a healthy and temperate man, of about fifty, having passed two or three hours at a concert, ran across the street to empty his distended bladder, and the night being dark, he did not see a newly-erected post, with the top of which the lower part of his abdomen came in violent contact. He states that he fell, and with great difficulty reached his home, which was about a hundred yards distant.

I saw him about half an hour after the accident. He was faint, and suffering severe pain over the stomach and belly, with desire but no power to pass his urine. I ascertained that none had escaped into his clothes, and my suspicions as to the nature of the mischief, were confirmed by the circumstance of nothing escaping through a full-sized catheter which was passed easily and completely into the bladder. He was placed in bed, and hot fomentations were used to the belly until re-action took place, with which came increase of pain over the stomach and abdomen. Twenty leeches were also applied, and I now passed a gum catheter, but with the same unsatisfactory result as before, not a drop of urine escaping through it. I wished to have left the instrument in the bladder, but to this the patient strongly objected, and I urged it the less from some apprehension that in his restless movements the point might be forced through the wound in the bladder; the catheter was therefore passed every three or four hours, although up to two o'clock p.m., fruitlessly.

I apprised the friends of the patient of the nature of the injury, and the extreme danger attending it, and in consequence Mr. Key was sent for. He arrived at six o'clock, which was about eighteen hours after the accident, by which time the symptoms of peritonitis had increased to an alarming degree. The belly was

painful, swollen, and tender; the pulse rapid and feeble, and the countenance anxious. Mr. Key passed a catheter, (none having been used for the previous four hours,) and about an ounce of bloody urine came through the instrument. Mr. Key concurred with me in his opinion as to the nature of the injury and the nearly hopeless prospect for the patient.

At ten o'clock I gave him two scruples of liquor opii sedativus, which after a few hours produced some comfortable sleep, and about four hours from the time of Mr. Key's visit I again passed the catheter, and drew off about four ounces of clear urine. From this time, the pain, swelling, and heat in the stomach and abdomen gradually lessened, and it was evident that the bladder now held, as on each introduction the catheter brought away clear urine.

From this time until the 13th, (that is the sixth day from that on which the accident happened,) all went on well, excepting that a smart attack of gout occurred on the 10th, although the patient had never before suffered one; but on the 13th, from a strong desire to become independent of the catheter, he made straining efforts to pass his water, and he had scarcely passed a tablespoonful, when he felt (to use his own expression,) something give way, and a burning pain all over his stomach and bowels, as if boiling water had been poured over them, and the same symptoms of faintness and distress occurred as when the accident first happened.

I saw him within a few minutes of this re-opening of the wound of his bladder, for I could not doubt but such had been the consequence of his attempts to pass his water. On using the catheter, not more than a teaspoonful came through the tube. He had now again the symptoms of peritonitis, with the addition of incessant sickness. The same plan of treatment was again adopted—viz., fomentations, leeches, and a full opiate, with calomel.

About four hours after, on the introduction of the catheter, the bladder was again found to retain the urine; and although the peritonitis had increased to a severe degree, the pain, tenderness, and sickness, gradually subsided; and by a patient submission to the continued use of the catheter for a fortnight, no more interruption to the patient's amendment occurred, excepting that the gout, which, under the use of colchicum, had nearly disappeared, again became severe, no doubt, from the fresh absorption of urine which this second accident had permitted to escape into the cavity of the peritoneum. But by this time it was presumed that the wound in the bladder had closed with sufficient firmness to allow the patient to

yield to the desire to evacuate his urine without any straining efforts.

Two months have now transpired since the commencement of the case, and he feels no other inconvenience from his accident except a dragging sensation over the abdomen, chiefly on the right side, which is much increased when he attempts to lie upon his left side. This no doubt results from adhesions, consequent upon the peritonitis.

Remarks. The manner in which the accident happened, and all the circumstances and symptoms which followed it, were to me conclusive of the nature of the mischief. If anything could suggest a doubt about the rupture of the bladder, it was the very circumstance which makes the case remarkable—namely, the recovery; but to one who watched the case, no such doubt could occur, since it must be recollected that the bladder was known to be full at the time of the accident, no urine escaped into the clothes, nor did any come through the urethra for more than eighteen hours after, and then only about an ounce, mixed with blood. If, therefore, it did not escape into the cavity of the peritoneum, what else could have become of it!

This case may range with many, in proof of what severe injury the peritoneum may sometimes sustain, and the patient yet survive. Indeed out of the evil of peritonitis, which usually renders this accident fatal, came the good of such an effusion of lymph, as no doubt glued the bladder where wounded to the contiguous viscera.

The fact of gout occurring upon the absorption of the urine which first escaped into the peritoneum, and its aggravation upon its second extravasation, is interesting as connected with the pathology of that disorder.

CASE OF ABSCESS IN THE RIGHT LOBE OF THE LIVER.

By WILLIAM NORRIS, M.D., Stourbridge.

Thomas Price, aged 29, car-driver at the Talbot Hotel, in this town, suffered severely from an affection of the kidneys six weeks; these symptoms gradually left him, and acute hepatitis immediately followed, which did not yield to the usual remedies. The constitutional symptoms were very severe, and hectic fever soon set in, with frequent shiverings, and at the end of six weeks there was a fluctuating tumour in the right hypochondrium, without any external sign of inflammation; the feverish excitement increased, and his sufferings became more and more urgent, and it appeared certain, that the disease had terminated in abscess of the liver. Under these pressing circumstances, I made an incision an inch and a half in length, through the most prominent part of the swelling down to the peritoneum; the wound was plugged with a roll of lint to keep it open, and covered with a poultice. At the end of six days a large quantity of purulent matter, tinged with bile, escaped through the wound. I passed a probe into the aperture three inches. This discharge continued flowing abundantly for a fortnight; the hectic symptoms speedily subsided; the appetite and strength returned. Seven weeks after the operation he followed his employment, and has

enjoyed uninterrupted health seven years, although the wound oozed a little thin fluid for two years before it closed.

Dr. Graves, of Dublin, says that, it is obvious for the success of the operation that adhesions of the peritoneum must be a necessary condition, for in the event of their not existing, the matter will make its way into the peritoneal cavity, and probably destroy life.

I feel greatly indebted to this eminent physician for suggesting this novel and ingenious operation, for if I had not read of the successful result of his cases, I should not have performed it; and which I consider a most important addition to the surgery of the abdomen. The operation has everything in its favour, it is quite safe and easy, and will preserve the lives of many valuable persons.

Stourbridge, July 12, 1846.

MEMOIR ON THE DIGESTION AND THE ASSIMILATION OF AMYLACEOUS AND SACCHARINE MATTERS.

By Dr. MIALHE, Professor Agrégé at the Faculty of Medicine, Paris.

(Continued from page 324.)

After having thus established the energetic action of human saliva on feculent matters, I was naturally led to examine whether this action was not communicated to it by some special principle of the nature of a ferment, and soon succeeded in isolating a particular substance, which I proceed to make known, provisionally, under the name of the "active principle of the saliva."

The active principle of the saliva is solid, white or greyish white, amorphous, insoluble in absolute alcohol, soluble in water and in diluted alcohol. The aqueous solution is insipid, or at least without marked taste, and neutral to test papers; it is not precipitated by the sub acetate of lead; left to itself it rapidly changes and becomes acid, whether exposed to the air or otherwise; the acid which is thus generated is the butyric acid, or an acid very similar to it. This principle is without action on azotized substances,—fibrin, albumen, casein, gelatin, and gluten; and on neutral ternary matters,—cane-sugar, inulin, gum arabic, and compact cellulose. It exercises on the contrary a very extraordinary action upon starch, as is shewn by the following experiments:—

Action of the active principle of the saliva upon starch:—Like the saliva, it acts differently on anhydrous and on hydrated fecula; with crude fecula it only gives rise to a certain quantity of dextrine and of sugar of starch, or glucose, after many days digestion, but the reaction is much facilitated by raising the temperature. When a mixture of this active principle of the saliva and of starch, diffused in six or eight times its weight of cold water, is heated by a water-bath to seventy or eighty degrees, the mixture does not acquire for an instant the consistence of starch-paste, each grain of fecula being rendered soluble as fast as it becomes hydrated. After a certain time the solution is no longer coloured by iodine; on the other hand, caustic potash heated with it occasions an intense brown