

not reach it, owing to the curve of the instrument and the small size of the outer wound. I therefore with my finger broke down a part of the constricting neck, and with very little difficulty pushed the gut back into the abdomen. The patient was ordered to be kept quiet, without medicine, until the evening, seven or eight hours from the operation, when he had an injection, and took a dose of calomel.

On the following morning he was in every respect worse; there had not been the slightest relief in any one symptom, and he died about twenty-two hours after the operation, with obscure symptoms of strangulation.

The body was examined, and the following were the appearances found:—No gut was found in the hernial sac, but within the abdomen at least two feet of the small intestine (ilium) was found strangulated through a slender ring of membrane connected with two points of the mesentery. This gut was as black as a coal, and evidently all but gangrenous.

It is to this latter condition that I wish to direct your attention especially. I need scarcely say that I was much vexed at the issue of the case, and, as everything appears to have been favourable at the time of the operation, I was most solicitous to see the reason of its failure. The post-mortem relieved my mind at once.

The complication of an internal strangulation with hernia I have frequently remarked. There is a preparation in the museum of a case of this description. A man was brought into the hospital with a large scrotal hernia, and with all the symptoms of strangulation. The hernia was reduced without much difficulty; but the symptoms continued, and increased in urgency, and in a short time the man sank unrelieved. I examined the body, and found an internal strangulation, to the extent of ten or twelve inches, of small intestine, which had passed through a ring of membrane connected with the mesentery. Now this was the case in the subject before us; but there is this difference, however, that in the latter example there was a portion of intestine in the hernial sac, obviously strangulated, and requiring an operation for its relief; whereas in the former case the gut was readily reduced by the taxis.

Let me, however, direct your attention to what is supposed to be the true explanation of this phenomenon, and I believe it to be this: Many of you are aware that in the early periods of embryotic existence there are some vessels which, springing from the mesentery, take their course towards the umbilicus, whence they pass out, and having reached a small sac on the outside of the amnion, they distribute themselves around it. The sac itself is called the *vesicula alba*, or the umbilical vesicle, and is the analogue of the yolk of the egg of the bird. It is supposed even in man to communicate by a slender duct with the small intestine near its termination, and the vessels have been traced along it. Müller has given an excellent description of this. The true arrangement and connexion of these vessels and the duct of the *vesicula alba* cannot be well understood without a very accurate knowledge of the anatomy of the embryo, and into this it is not for me to enter in this place. I must refer you to Müller's Physiology, where you will find a full description of this in a note by the translator, at page 1581 of the second volume. Suffice it for me to observe to you that two slender threads, enclosing a piece of intestine, pass from the mesentery towards the umbilicus in the embryo, of about one inch and a half in length.

Now, under ordinary circumstances, all traces of these structures have long since disappeared at birth; but presuming that some arrest has occurred of the process of obliteration, a ring of membrane remains, enclosing a piece of intestine, through which a coil of gut can pass, as is known not unfrequently to occur under the influence of extraordinary exertion, or from some irregular action of the bowels. I don't think, therefore, that I am far out in stating that the disease in question depends on an arrest of development.

In such a case can anything be done? Most certainly. If there were any positive signs by which this condition could be made out, it is our duty to cut into the abdomen, and, by dividing the ring, disengage the intestine. I admit the subject is one of difficulty, as the means of diagnosis are obscure, and most, if not all the operations undertaken with the view to relieve such cases have failed; but I do not despair of success at some period or other. I was called some time since to see a youth suspected to be dying of this disease. It was supposed that his complaint had gone too far to admit of relief by operation; the post-mortem revealed to me the decided impression that the operation would have succeeded. Now, if you think yourselves justified, in a case of obstruction supposed to be of this character, to cut into the abdomen, I need not remark to you that you should select in preference the

right inferior region of the abdomen, as the seat of this form of strangulation must, from anatomical reasons, be there found. You must, however, bear this in mind before you determine on the propriety, that there are many causes of internal obstruction independent of that I am now considering, and I candidly own that I know of no positive diagnostic signs of it. Some of you, I dare say, remember a case of this sort which was in the hospital last year, and in which an operation was performed; the case turned out to be one of the character now referred to, and I doubt not that a vast number of fatal cases of obstruction come under the same category.

CALCULI IN THE KIDNEYS—RETENTION OF URINE.

By ROBERT HAMILTON, Esq., JUN., M.R.C.S.E.

ON Saturday, Nov. 9th, 1853, I was called to attend A. F.—, aged thirty-six, of stout, full habit, who was suffering from violent attacks of pain in the abdomen, extending round on each side to the loins. I concluded it to be owing to the passage of gravel, as he had had similar attacks before, and at various times had passed small portions of gravel, and six months previously a calculus about the size of a very small elongated pea. The pains, which were not incessant, but recurring at longer or shorter intervals, continued, in spite of the means tried to alleviate them, till the Monday mid-day, when, in attempting to pass urine, he found himself unable to pass more than a few drops. After trying several times without success, in the evening he sent for me. The catheter was introduced, but no urine came, and the bladder appeared quite contracted. He was then ordered a warm bath, afterwards mustard plasters to the loins, and a draught containing ten grains of nitrate of potash, which latter he vomited. He passed a restless night, with no relief, though able to sleep in the intervals of pain.

The next day, the pain continued across the whole abdomen and bowels; he did not complain of any in the region of the kidneys, except where rather strong pressure was made with the hand. Vomiting now ensued, and he rejected whatever of food or medicine he took.

Thus he went on from day to day, not passing one drop of urine, various remedies of course being tried, as leeches to the loins, and frequent warm baths, which usually gave him some temporary relief from pain. Spirits of turpentine, and also tincture of cantharides, were tried, but without avail. On the Friday, Mr. Bickersteth met me at the case. The catheter was again introduced, to make sure there was no urine in the bladder, and so it proved. Frequent doses of acetate of potash were now given, some of which he retained. On Saturday all the symptoms were increased, sickness constant, and pain more severe. He also now complained of a sense of weight and fulness over the kidneys. Still the system had not begun to sympathize; the tongue was quite clean, the pulse very little accelerated or otherwise altered from its natural state, no headache, no stupor, and not that anxious expression of countenance one might have expected from so much suffering; this might, perhaps, be owing to his being able to sleep quite calmly and naturally in the intervals of pain, often for half an hour or more at a time.

Sunday.—All the symptoms very much aggravated; the feeling of fulness in the loins, as if he was lying on a pillow, was much increased. The bowels were rather confined. He was therefore given a strong purgative of calomel and colocynth; and afterwards, one-eighth of a grain of elaterium every four hours, and more leeches were applied. The same evening, about nine P.M., he passed nearly a pint of urine without any difficulty; he afterwards had a good night's rest, and pain and sickness ceased. Early on the Monday morning he again passed urine. It unfortunately was not tested, but in appearance it was quite natural, and without any sediment. This was the last time he passed any urine; on trying again, he failed. In a few hours the pain returned, then the sickness, and during the night and the following day most of the previous symptoms. More leeches were applied to the loins, and the elaterium again given, by which constant purging was kept up. Each day the symptoms became more aggravated. On the Saturday, Mr. Bickersteth again met me. Galvanism to the loins was tried seven or eight times. Small doses of tincture of muriate of iron were given every hour, all without avail. The violent retching and vomiting became almost incessant, the fluid thrown up being mostly of a green colour; the fits of pain were more intense; the purging continued so

frequent that the elaterium was discontinued; the stools were large, loose, of dark colour, very offensive, and had sometimes the appearance of a little urine floating on the top. On the Thursday evening he became much worse; too weak to raise himself in bed; his countenance began to express much anxiety; his breathing became very quick; the abdomen more distended and harder; tongue rapidly dry and brown; pulse flagged. The sickness and pain ceased. Towards morning the breathing became more and more hurried; he gasped and panted for breath; and at eleven o'clock A.M. on the Friday, perfectly sensible and collected to the last, he died, just nineteen days from the time the urine first stopped, and eleven from the second period of its ceasing.

Autopsy, twenty-nine hours after death.—A large quantity of dark, grumous-looking fluid had flowed from the mouth and nostrils; the abdomen was very distended, leading us to expect to find a quantity of fluid in it, but on opening into it, through nearly two inches of fat, scarcely a teacupful was found, it being of a light colour, and having no urinous smell. The stomach was very inflated, but neither it nor the intestines presented any appearance of inflammation. The bladder, which was first examined, was entire, but quite empty and contracted. The left kidney was much enlarged and softened; a good deal of serum between it and its capsule, and a small quantity of urine in its pelvis. The ureter for about two-thirds of its length was perhaps double its natural capacity, and at that distance from the kidney was a small, elongated calculus, smooth, and of the size of a coffee-berry, lying lengthways in the direction of the canal; below it the ureter was of the natural size. The right kidney was much smaller, but also softened; on its capsule was a large cyst, which, however, did not communicate with the kidney. At the upper part, between the latter and its capsule, was some dark clotted blood, amounting perhaps to half an ounce. In the pelvis of the kidney was a little urine and a great many minute calculi. The ureter was enlarged like the other, and to the same extent down, where was also found another calculus, about the same size as the other, but round, rough, and more firmly impacted; below it the ureter was contracted to the natural size. The singularity of this case consisted in his living so long without passing urine, and also in none of the head symptoms coming on, which we usually expect when the urine is not eliminated from the blood. We must suppose that this last was owing to the immense quantity of fluid thrown off by both stomach and bowels from the very first, thus carrying away what otherwise would have passed into the blood, and if not secreted from thence by the kidneys, would have given rise to those brain symptoms, coma, &c., the absence of which so surprised us, and thus led to a more rapid termination of the case.

Great George-square, Liverpool, 1854.

CASE SHOWING THE POISONOUS EFFECTS OF BICHROMATE OF POTASH,

OCCURRING IN THE PRACTICE OF T. J. WILKINSON, ESQ.,
HULME, MANCHESTER.

By G. HEATHCOTE, Esq.

HAVING seen in several of the leading and scientific journals notices of the poisonous effects of bichromate of potash, I should feel much obliged by the insertion of the following, which may prove of interest and utility to some of your numerous readers:—

August 2nd, 1853.—I was requested to visit William H.—, a spare, anæmic-looking man, aged thirty, single, about five feet ten inches in height. He had been under medical treatment for ten weeks, during which time he gradually became much emaciated and exhausted. He had been suffering from ulcerated sore-throat for more than three months, which presented the following appearances: several ulcers on the tonsils and throat, the surface of which seemed covered with an ashy slough, and the surrounding mucous membrane was dark, livid, and swollen; pulse 120, small and sharp; great thirst; loss of sleep; tongue rather dry and red; difficulty in swallowing, in consequence of the state of the throat.

I considered him labouring under syphilitic sore-throat, although he stoutly denied it. I commenced with iodide of potash and mercury pill; but after four or five days, finding that the ulcers were spreading, I made further inquiry, and found he had been some time a crystallizer of bichromate of potash under Mr. Wm. Dentith, of Collyhurst. He told me it was a complaint to which the men were all more or less subject. His father, employed in the same occupation, died

some months ago with ulcerated sore-throat, aged fifty-five, though before he commenced as a crystallizer he had never been ill.

8th.—Having failed to produce any effect by the above treatment, and wishing much to get the man under the influence of mercury, I began to give him one-sixteenth of a grain of bichloride of mercury every four hours, at the same time sponging the throat with a lotion consisting of two grains of nitrate of silver to one ounce of water. This treatment was commenced with a twofold view, firstly, of forming an insoluble and therefore innocuous chromate of silver, should the ulceration be due simply to the corrosive action of any bichromate of potash mechanically resting on the throat; and secondly, I hoped, by the remarkable antiseptic properties possessed by bichloride of mercury, to counteract the decomposition of the tissues of the throat manifest by the ulceration, and due, perhaps, to the corrosive action of the bichromate. This treatment, I am happy to state, was remarkably successful, as will be seen on reference to the following notes:—

Aug. 10th.—Pulse 110, weak; tongue slightly moist; great restlessness and extreme sensation of suffocation. Continue medicine; throat to be sponged twice daily; to take beef-tea and jelly.

12th.—Throat not quite so painful, and sensation of suffocation very much relieved; pulse and tongue much the same; sleep better. Continue medicine; beef-tea; to take two glasses of port-wine daily.

14th.—Throat decidedly better; swelling less; ulcers granulating nicely; gums slightly affected; pulse 100; sleeps well. Continue medicine, sponging, beef-tea, &c.

16th.—Throat and general health continue to improve; gums painful; teeth rather loose; livid appearance of throat seems in a great measure to have gone. Medicine to be taken three times a day, and throat to be sponged once; to take a mutton-chop in addition to wine &c.

20th.—Ulcers nearly healed; pulse 90; tongue clean, and appetite good. To continue medicine &c.

30th.—Ulcers perfectly healed; throat presents rather a redder tinge than natural; pulse 80; sleeps soundly; appetite very good, and declares himself well. To take the medicine once a day, and to discontinue the lotion.

Sept. 10th.—Quite well, except a slight redness of the mucous membrane of the throat, and a little hoarseness of the voice; has become very much stouter, and can walk five or six miles with ease.

Remarks.—Since the latter date, I have had under my care several similar cases, although not quite so severe as the one in question; and by the treatment described, I have in every case been enabled to effect a complete and rapid cure.

I am indebted to my friend Mr. Lowe, of the Manchester Royal Institution, for the information regarding the decomposition of the medicine, not being exactly *au fait* in chemistry.

Hulme, January, 1854.

ON THE IMPORTANCE OF MENTAL PHILOSOPHY AS A BRANCH OF MEDICAL AS WELL AS GENERAL EDUCATION.

By JOHN ROSE, Esq., M.D., L.R.C.S. Edin., &c.

It has been well remarked that the study of the phenomena of mind presents a subject of intense interest not to the moral philosopher only, but to every one who has in view the cultivation of his own mental powers, or the proper application of them to the investigation of truth in any department of knowledge.

The medical observer has admirable opportunities of collecting facts illustrating these phenomena, and it is gratifying to know that an increasing share of attention has been lately given to these investigations by some members of the profession. Valuable facts, however, are frequently lost either from negligence or indifference, or from an erroneous impression that because they are not altogether new or original, they are not worth recording.

For example, it is particularly interesting to observe the effects of febrile affections, injuries of the head, cerebral diseases, and even gastric derangement on the mental functions. A patient, say, has received fracture of the cranium; is insensible for several days or weeks, and recovers without the slightest recollection of the accident, or of what has occurred in the interval. He is found to have lost the memory of words, or it may be all his former acquirements. This state may be either temporary or permanent. This simple illustration will show