

the handle of the scalpel, the bladder is exposed, and an assistant by depressing the catheter makes it project into the wound. A tenaculum with a large curve is passed transversely into the bladder, touching as it goes the point of the catheter. A longitudinal incision is made from above downwards in the bladder wall, and the escape of its fluid contents is prevented by plugging the opening with the left forefinger. This being done, the bladder is seized with nibbed forceps, one applied on each side of the incision, the catheter is withdrawn from the urethra and the bag from the rectum, and the first part of the operation is complete. It is important to remember that it is not wise to cut down on the point of the catheter until the bladder has been fixed in position by the tenaculum. If this be done, the point of the catheter protrudes from the wound, the fluid escapes from the bladder, while the viscus itself sinks deep in the pelvis, from which it is only dragged with considerable difficulty. We now examine the interior of the bladder and its neck to ascertain the exact nature of the prostatic enlargement. It is possible that we may find a condition which does not permit further operative interference. My experience is not sufficiently large to enable me to say whether this will be often the case or not. My belief is that it will be extremely rare. If we are unable to do anything further, we must content ourselves with temporary or permanent drainage. We shall, however, in a large majority of cases find one of the three forms that have been already described, each of which is removable. A pedunculated middle lobe can obviously be removed with ease, its pedicle being divided with curved scissors. A sessile middle lobe can be removed in the same way, helping the scissors by tearing with forceps. The collar enlargement is removed with greater difficulty. It is, I think, advisable to divide it longitudinally by inserting one blade of the scissors into the urethral opening and dividing the portion above, and then passing the other blade into the same opening and dividing the portion below. We now have that part of the gland which projects into the bladder divided into two lateral halves; these can be removed separately by scissors curved on the flat,² or enucleated with the tip of the forefinger. Care must be taken not to leave any portion of the projecting valve untouched. When the operation is complete, whichever form of growth has been removed, it is advisable to see that the urethra is patent, and to pass the forefinger as far as the first joint into its canal. The hæmorrhage which occurs is not excessive; this is accounted for by the fact that the prostate is not a very vascular organ; the so-called prostatic hæmorrhage which occurs occasionally in operation on the perineum being derived from the prostatic plexus of veins, which cannot be wounded in the operation now being described. Such bleeding as occurs is speedily arrested by injecting a hot antiseptic solution. When this has been done, a large rubber tube is passed into the bladder and left out of the lower angle of the wound in the abdominal wall; this is partially closed by a point or two of suture, and a large pad of salicylic absorbent cotton-wool is applied as a dressing. The pad is renewed as often as it becomes saturated every three or four hours. The tube is removed at the end of forty-eight hours.

My experience of this operation is limited to three cases.³ With the details of these cases I need not trouble you, as they have already been published. Suffice it to say that in each case before operation constant catheterism was required, and that in two of them the urine was purulent, alkaline, and fetid, while in one symptoms of uræmia and of surgical kidney were present; that they all made a quick and satisfactory recovery; and that they left the hospital in restored health, passing urine without the aid of a catheter in a natural manner. Two of the patients were operated on eight months ago, and neither have in any way deteriorated. It might be supposed that cicatricial contraction would occur at the seat of the operation wound, that the urethral orifice would become contracted, and that a stricture of the worst kind would result. In my cases this has not occurred; probably because, the contraction being eccentric in character, the urethral mucous membrane is pulled outwards, and thus the urethral orifice is rather enlarged than diminished.

In conclusion, I would urge the advantages to be gained by comparatively early operation. If the bladder be atrophied and the kidneys diseased, we can only expect temporary relief; if, on the other hand, the bladder and kidneys are in a healthy condition, we may hope that prostatectomy will in many cases lead to a radical cure.

A FATAL CASE OF HÆMATINURIA.

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J. W—, a sailor, aged thirty-six, was admitted into the Seamen's Hospital, under my care, on March 22nd last. His history was difficult to elicit, but he had been ill for two weeks with some cough, and for three days had had acute pain across the loins, passing "dark urine" for two days before admission. He had no previous recollection of such attack, had had no malarial affection, but had been exposed to severe cold just before coming to the hospital. He was dull and apathetic on admission, with a cold skin and feeble pulse, and rapidly passed into an unconscious state, dying within thirty-six hours. He only passed one sample of urine, which was acid, dark brown, sp. gr. 1014, containing one-half albumen, giving a good blood reaction to the usual tests, and exhibiting under the microscope a few blood-corpuscles, with many small round bright bodies and much granular debris, but no casts.

The necropsy, made twenty-eight hours after death, exhibited recent adhesions of the pleuræ, with much congestion of the lungs and accumulation of muco-purulent matter in the bronchi. Heart not enlarged, and apparently healthy, as were the liver, spleen, and other organs. The kidneys were large; capsules non-adherent; their substance was pale and smooth, and on section appeared unusually homogeneous, the medulla and cortex being of a pale purplish-red colour; the organ, though simply removed from the body, looked as if it had been macerated in water for one or two days.

Dr. Sheridan Delépine kindly made the following microscopical report:—"The capsule is thick and dense, and shows a tendency to be laminated; it is slightly connected with the substance proper of the kidney, and in some places extensive slits exist, as if fluid had accumulated between the surface of the cortex and the deep aspect of the capsule, something like subcapsular lymph spaces. In one or two places, corresponding to the inter-tubular regions, there is a slight increase of interstitial connective tissue under the capsule. The connective tissue round the large branches of the renal artery shows fibrillation of the bundles more distinctly than usual, as if the tissue had been macerated; in some places the lymphatic spaces seem to be filled with some homogeneous material. In a number of small vessels leucocytes are more abundant than usual, and some are pigmented. Several of the large vessels situated between the bases of the Malpighian pyramids, some of the arterial arches of the boundary layer, and some inter-lobular arteries are almost entirely filled up with a transparent colloid material, staining badly with ordinary reagents. In the midst of that colloid-looking material altered red blood-corpuscles, leucocytes, and endothelial scales are found; in addition to these, much granular debris is to be seen in some vessels. Some of the inter-lobular arteries are also almost entirely obstructed by desquamated endothelium. The capillaries of the Malpighian glomeruli are much congested, and there is a decided increase of nuclei among them. The inter-lobular capillaries are in places much distended with blood, but in a few instances the blood-corpuscles, instead of being distinct, are replaced by the hyaline material already described as filling up many arteries; in other regions the blood found in the vessels is poor in red blood-corpuscles and rich in leucocytes. Pigmented granules are frequent, and the capsule of many Malpighian bodies is thickened. The epithelial cells of the convoluted tubules are evidently proliferating in several places; some are swollen, and among these many seem to be in a state of mucous or fatty degeneration; they take staining badly. Pigment is found in some of these tubules, but it is more abundant in the straight tubules, several of which are occluded by it, and desquamated epithelium."

Thus, from the microscopic examination it would appear

² Weiss and Son have made for me some scissors which will, I think, be useful in this part of the operation.

³ Since the above was written two other cases have been operated on, one successfully, while the other remains under treatment.

that a disintegrative process was going on in the renal vessels, and probably in the vessels of other organs, as evidenced by the state of the blood in some of the larger vessels; that this disintegrative process led to destruction of several vessels, and alteration of structure of their walls. As Dr. Delépine says, all these things would account for exudation of modified blood and stained plasma; the presence of pigment in the tubules, in which no blood-corpuscles can be discovered (notwithstanding there being corpuscles quite distinct in neighbouring capillaries), shows that the corpuscles are not destroyed in the tubules, that statement not being invalidated by a few accidental hæmorrhages.

The disease has been so well described in all its bearings by Lichtheim, Bollinger, Ehrlich, Bras, Mackenzie, Franz, Dickinson, and others, that recapitulation is uncalled for. But fatal cases are rare—so rare that Van Rossem had not a fatal case in his thirty-one cases, and considers that the intermittent form “may not seriously affect the patient’s health”—a fact which must be borne out by everyone’s experience. Mackenzie, insisting that the red blood-corpuscles do not pass through the renal vessels, says that, “owing to an independent paralysis of vaso-constrictor nerves, the blood is driven suddenly and with great force into the glomeruli; that the capillaries of the latter did not give way is evidenced by the non-appearance of blood discs in the urine.” Murri reported a fatal case of hæmatinuria—though of the intermittent variety—in which there were tubercles in the kidneys, with swelling of the cortical tubal epithelium and pigment in the cortical tubes. Dickinson’s cases throw no light on the pathology of hæmatinuria, his cases exhibiting extravasations of blood and much congestion; one case, however, besides tubal and interstitial nephritis, exhibiting much pigmentary deposit in the spleen. I am inclined to refer the present case to exposure to cold in a man who was possibly a drunkard, and had bronchitis, the extreme blood change occurring at the period of lowest vitality; and I only wonder that such cases are not more frequent. I have retained the title “hæmatinuria” as being the one best known, though hæmatin has a definite spectrum which is unobtainable from the urine of such cases, which would be more accurately known as cases of hæmoglobinuria.

ON THE USE OF THE HYDROBROMATE OF HYOSCINE IN THE TREATMENT OF RECURRENT AND ACUTE MANIA.

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My attention was first drawn to this drug by an annotation which appeared in THE LANCET of March 21st, 1885. Later, I received a copy of the twenty-eighth report of the Asylum for Nova Scotia, at Halifax, N.S., in which Dr. Alex. P. Reid praised the drug as an excellent hypnotic. More recently an article headed “Hydrobromate of Hyoscine, its Use in Cases of Insanity,” by Drs. Peterson and Langdon, appeared in the *New York Medical Record*. Messrs. Ferris of Bristol, the well-known chemists, prepared at my suggestion a solution containing a grain in 400 minims. I fixed upon this strength, so that in the event of a moderate quantity being given in mistake for the same of a solution of morphia no particular harm would be done. The dose of this solution is from two minims (1-200th of a grain) to four minims (1-100th of a grain). As much as six minims have been given, but the patient is made so “drunk” that the smaller doses are preferred. My colleagues and I have used the new drug in many cases, but we find that while on all occasions it acts as a certain hypnotic, it is of most use in cases of chronic, and recurrently chronic, mania. The effect on the sexes is about the same. There is marked sluggishness of all motor functions, with depression of reflex activity, and dizziness, dimness of vision, an ataxic gait, and dryness of the mouth and fauces. All these symptoms are but faintly seen when only a proper medicinal dose has been given. The drug has been used here, as I have

said, in very many cases, and I can say that on no occasion have we failed to produce the desired effect. The patient is quietened and falls asleep, but the sleep is not very deep of its kind, and at any stage there is no difficulty in rousing the patient to the fullest extent of wakefulness, though he soon falls asleep again. In acute mania, where much restlessness and tendency to knocking about are the chief symptoms, it acts most beneficially. The patient comes to his senses and rests quietly, and so time is gained and exhaustion avoided. I give below, at random, three typical cases, for the notes of which I am indebted to my colleagues, Drs. Benham and Cameron.

CASE 1.—Henry M.—, aged fifty-one, admitted in 1882. He was then a chronic maniac, and for years had been in a private asylum. He was wild, noisy, restless, and destructive. Until 1886 he remained much in that state, with occasional periods of comparative quietness, but he never was free from some excitement. In August of that year the hyoscine was tried; 1-200th of a grain rendered him much quieter, and he slept well all night, while previously he had hardly ever slept, and, instead of spending his days in restless gesticulation, he became more orderly, and occasionally employed himself. Since he relapsed he has had many such attacks, which, however, are cut short by two or three injections, instead of lasting three months at a stretch, as before.

CASE 2.—Emma E. H.—, aged forty-six, admitted in 1882. She has marked symptoms of hereditary syphilis, “Hutchinson’s” teeth, is nearly blind from chronic keratitis, and stone deaf. From the time of her admission until August, 1886, her life was one of continual excitement. She fought, scratched, bit, and tore her clothes. She had to be forcibly fed. Seeing the usual struggle to give her dinner, I gave her three minims of the solution of hyoscine. She soon fell asleep, but was easily aroused and then fell asleep again, and at tea-time took the first meal voluntarily since her admission. She occasionally lapses into a similar condition, but a single dose of the drug makes her comfortable once more.

CASE 3.—Fred. G. L.—, a barber, aged thirty-six, whose brother, an epileptic, is now, and whose father, also an epileptic, was, an inmate of this asylum. With this strong taint the patient escaped any symptom of insanity until very recently, when, in shaving a “customer,” he made menacing remarks which caused his client some alarm. After a few days of dangerous excitement he was brought to the asylum. There is a history of “fits” in his case, but since his admission on Nov. 5th last none have occurred. He has been in a state of “uncertain” restlessness, and has indulged in tricks, such as the setting of a rolled sheet between the door and the frame, and so forcing the door off its hinges. He passed many restless and sleepless nights, until he was put on 1-200th of a grain of the hyoscine twice a day, since which date he has not indulged in his disagreeable pranks, and has slept well.

We find, then, that in mania of any form the hydrobromate of hyoscine is the best calmate which has yet come to our notice. In some cases of general paralysis attended by busy restlessness, with dry skin and some suppression of urine, a small dose puts the patient in a much more comfortable state. In fact, in any sort of mania which appears to be accompanied by some form of cerebral “disorganisation,” as in old age, the patient is much improved by the treatment. Should the drug in other hands prove to be an anodyne without being accompanied by much stupor, as I believe it will, it will be an invaluable addition to the materia medica.

A CORONER’S ANNUAL REPORT.—From the annual statistical report just issued by Dr. Diplock, coroner for West Middlesex, it appears that during the year 1887 the number of cases reported in the western division of Middlesex was 1106. In 299 of these inquests were not deemed necessary, and the number of inquests actually held was thus 807, which are classified as follows:—On persons under one year, 229; above one year and under sixteen years of age, 135; above that age, 443. The verdicts were:—Murder, 4; manslaughter, 2; suicide (36 males and 8 females), 44; violent deaths (accidental), 280; and from other causes 477. Last year there was a marked decrease in the number of suicides. The population of the forty-nine parishes which comprise the western division of Middlesex is now computed to be about 640,000.