of a straw-coloured limpid fluid, alkaline in reaction and highly albuminous, were obtained; the needle seemed to traverse a thick wall before the fluid came. On boiling the precipitated albumen with double the amount of strong acetic acid, the precipitate became gelatinous. On standing the fluid deposited a clear gelatinous material. Urine, 8 ounces in the twenty-four hours, acid, no albumen, no sugar, no casts.

On the following day I opened the abdomen, Mr. John Waldy assisting me and Mr. A. C. Waters giving chloroform. The incision was 3 inches in length in the median line. On dividing the peritoneum, an extremely thin, transparent cyst wall projected through the incision, and on sweeping the finger round the growth numerous soft adhesions were torn through; the growth was felt to be free of the pelvis and adherent behind. On tapping the cyst, 2 pints of fluid, similar to that obtained the day before, escaped. The mass was then gently drawn through the wound, and the descending colon throughout its entire length and the mesocolon separated from the growth, several double ligatures being used; the peritoneum was stripped off the tumour as this separation was made. Several smaller cysts were punctured, and one large multilocular cyst with thick white fibrous walls was also punctured; the pedicle contained a vessel which proved *post mortem* to be the inferior mesenteric vein. There were several small cysts the size of small marbles in the mesentery an inch or more away from the main growth, which I ruptured by squeezing. Both kidneys and the spleen were felt to be normal. The operation lasted over an hour; extremely little blood was lost, and the child was much collapsed after it.

At 9 P.M. the same night the child was crying as if in pain; there was rattling in the trachea; the lips were natural in colour; the pulse was almost uncountable and the temperature 102.5° F. Drop doses of tinct. opii had been given two or three times. At 2.15 A.M. the next day the child died.

The *post-mortem* examination, made the same day by Mr. Waters in my presence, showed the growth to have sprung from the upper part of the mesentery. Everything in the abdomen was found to be satisfactory; there had been no oozing of blood; the kidneys, spleen, liver, intestines, pelvic organs, and heart were normal. The lungs showed numerous depressed bright pink patches—to the extent of two-thirds of all the lung substance—which on section were carnified and contained hardly any air, and felt firm (atelectasis). The chest cavity was much encroached upon by the pressure from below, the lower ribs being bulged outwards.

A CASE IN WHICH SLOUGHS OF RENAL TISSUE WERE PASSED BY THE URETHRA.

By JOHN M. RATTRAY, M.B.,

Frome;

AND

J. GREIG SMITH, M.A., F.R.S.E.,

Bristol.

T. H., manufacturer, aged 45, a short, thick-set, plethoric man, was seen medically for the first time on April 29th, 1890. He had never been ill before, and the cause of the trouble he was treated for so many weeks he attributed to catching cold while attending a funeral three days before he sought advice.

His first symptoms were those of liver congestion. He looked very ill, and had flushed face, suffused eyes, thickly coated tongue, liver tenderness, and heavy bilious-looking urine. The first attack was a short one, for on May 8th he was so far improved as to be able to go downstairs and venture out of doors for a little fresh air in the verandah in front of his house. His temporary recovery was, however, of very short duration.

On May 11th he was taken seriously ill, and went to bed, where he remained for many weeks. His symptoms now were precisely those of acute Bright's disease. Fever ran high, urine scanty, dense, of smoky colour, with casts of blood and granular hyaline matter. Treated with hot bottles, milk diet,

jalap and saline medicines, he made but little improvement, and flatulence and vomiting caused him intense distress.

On May 16th, his pulse becoming intermittent, a consultation on his case was held by Dr. Rattray, his usual medical attendant, and Mr. R. L. Willecox, of Warminster. Mr. Willecox, on palpating the left kidney deep down in the abdomen, struck on a very tender spot, and he gave it as his opinion that there might ensue a pyelonephritis, consequent on the probable presence of a calculus in the pelvis of the kidney. During the fortnight subsequent to the consultation, active symptoms subsided, the temperature lowered to normal, the redness of the urine cleared away, and Mr. H. was in comparative ease. The albumen disappeared, and for a few weeks the urine was plentiful (65 to 90 ounces in twenty-four hours), pale coloured, low specific gravity (1010 to 1015), and deposited a heavy cloud of mucus on settling. Microscopically, clusters of pus corpuscles, granular matter, and epithelial squames were detectable daily. An offensive smell in the urine suggested to Dr. Rattray the expediency of washing out the bladder with boroglyceride and Sanitas fluid. Sounding for stone was tried on several occasions, but gave negative results. The case went on in a chronic state for many weeks. Recrudescence of active symptoms took place from May 24th to 27th, June 15th to 18th, and again on July 18th and onwards. On June 17th Dr. Rattray made a careful examination of the patient, and, thinking he detected a fullness of the left loin, he asked Mr. H. for the benefit of the opinion of a surgical authority. While waiting to decide as to this, the patient gradually recovered again, and for the following weeks so improved that he was able to leave his room and walk out of doors, one day going about a hundred yards from his house.

On July 18th Mr. H. had the final exacerbation of his symptoms. This was certainly his worst attack. Temperature rose to 104°, urine was loaded with albumen, pain in left loin set in, and flatulence and vomiting were continuous, intractable, and terribly distressing. Jalap, pilocarpine injections, hot bottles, etc., were tried all day, and at last, in despair and despite albuminuria, Dr. Rattray was impelled to administer morphine hypodermically. This was done with good result, and Mr. H., by means of repeated small doses of morphine, was tided over the worst of the attack.

Dr. Rattray had always cautioned Mr. H. to be careful to always pass his urine into a vessel, so that he might at all times see whether there passed from him a piece of grit or diseased substance.

On July 20th Mr. H. showed Dr. Rattray a piece of tissue which he passed the same morning after a considerable amount of pain. This was kept, and subsequently examined by Mr. Greig Smith, who saw Mr. H. in consultation on July 22nd. After consultation, expectant treatment being decided upon, there was a gradual and uninterrupted progress to recovery. Urine became quite normal. On August 25th the patient left for Weymouth, and in three weeks returned in perfect health. He has now resumed his business, and declares that he never felt better in all his life.

REMARKS BY MR. GREIG SMITH.—When I saw the patient the urgent symptoms had abated, but the patient was still seriously ill. I could detect no signs of renal enlargement, and no local evidence of perinephric inflammation. The case altogether was very puzzling, and no diagnosis was come to. The pieces of tissue which Dr. Rattray showed me threw a new light on the case. To the naked eye one of them, the size of a pea, was evidently the apex of a renal papilla, and this was afterwards confirmed by microscopic examination. I had seen pieces of renal tissue passed in a case of sarcoma of the kidney with large blood cysts, but was not aware that pieces of renal tissue were sometimes passed as sloughs in acute nephritis. This latter conclusion, or rather, working hypothesis, we adopted, and I returned, not having performed the operation I went prepared for. It was hoped that the passing of these sloughs signalled the termination of the complaint, but no definiteness in prognosis was ventured upon.

On referring to Ebstein's work¹ I find that he speaks of the occasional separation of small portions of renal substance in cases of suppurative disease of the kidneys, and their discharge through the urethra. He refers to two cases, both of

¹ Ziemssen, vol. xv, p. 357.

which proved fatal. If the literature were examined, it is likely that other cases might be found. In my own experience, and in that of everyone to whom I have described it, the above case is unique and seems worthy of being recorded.

CONGENITAL OCCLUSION OF THE URETHRA.¹

By JAMES ADAMS, M.D., F.R.C.S.Eng.,
Eastbourne.

My attention has been directed to this rare condition by a case which occurred in my practice in October, 1889. I attended a confinement, and after a natural labour a male child was born at full term, who was well formed, and in every respect apparently normal, except he was the subject of hypospadias. Two hours afterwards I was sent for to see the child, because the nurse, who was a trained and intelligent woman, thought something was wrong, as the infant, although he had been bathed and dressed, and had passed a motion, had not micturated. The meatus was patent, so I tried to pass a small blunt silver probe down the urethra, but it would go only a very short distance. I directed the nurse to give the child a warm bath and keep him in the water for fifteen minutes, and to repeat the bath two or three times during the next twelve hours if no urine passed.

The next morning, fifteen hours after birth, I found that no urine had been passed and the child was beginning to be restless and uneasy, but without symptoms of distress. I again tried to pass, with all gentleness, the silver probe, and failed to get it further than the previous attempt. I now took a small French catheter, and that seemed to be brought up at the same distance from the meatus. Being a non-metallic instrument, I used as much force as it would bear, but did not succeed in getting beyond the obstruction. I withdrew the catheter and tried again, and this time succeeded in penetrating what I believe to have been a thin membranous structure which was occluding the urethra. The urine came freely through the catheter, and I had no further trouble with the case.

It is open to remark that the urethra might not have been occluded, being merely narrowed by a congenital stricture, or that the urethra was of normal calibre, and that its sides were agglutinated by inspissated secretion. While I am unable to disprove either of these opinions, I may say that had it been a stricture I should have expected subsequent trouble, and had it been the other condition I should have expected the hot baths externally, and the effect of the warm urine internally on the vesical side of the obstruction to have caused its disappearance. Another point tending to support my view that it was an organic occlusion of the urethra is the fact of the infant being a hypospadian, showing some developmental abnormality of the mesoblast in this region. And in a case of congenital occlusion reported by Mr. Forster, of Darlington, in the *BRITISH MEDICAL JOURNAL* of January 3rd, 1885, the infant was also the subject of hypospadias.

The only other instance I have met with of this condition was in 1878. This was a premature child, born at seven months, and a weakly specimen for that age. I was unable to pass a probe or catheter, and the child died forty-eight hours after birth, never having passed any urine. The child was too feeble to bear any further surgical proceedings, even if the parents would have consented.

The literature of this subject is very scanty, and in several of our English textbooks no reference is made to it. American works contain the fullest account of it, and I quote the following by Professor Duplay from *The International Encyclopedia of Surgery*, edited by John Ashhurst, M.D. :—

"These occlusions, which result from gluing together of the two corresponding halves of the penis, may occupy any point in the canal, but the meatus urinarius is the seat of election. Sometimes the mucous membrane of the glans is seen to pass in front of the meatus without anything being seen at this point which could indicate the existence of an orifice..... Most frequently the meatus is well formed, and ends in a *cul de sac* at a distance of a few millimètres. We have only a very small number of examples of occlusions situated at

other points of the canal. The diagnosis is especially easy when the occlusion is in the meatus or in the fossa navicularis. Deeper occlusions may escape the first examination, but the ineffectual effort of the infant to urinate, and sounding with a curved stylet or very small catheter will usually render error impossible."

I will also give the short description found in Gross's *Surgery* :—

"The most common of these congenital vices are first closure or contraction of the meatus; and, secondly, absence, contraction, and change of form of the urethra. Occlusion of the external meatus always demands prompt interference. When it is caused simply by a duplicature of the lining membrane forming a sort of hymen, a vertical incision in the direction of the natural outlet is generally all that is required, the edges of the wound being kept asunder by means of a bougie. When the imperforation depends upon the presence of fibrous tissue and reaches a considerable distance back, the operation will be more serious, and will require to be performed with a trocar."

The diagnosis in these cases is easily made, for the subjects are newly born infants who are unable to pass water, and if the obstruction is at the meatus the condition is at once recognised, and if the obstruction is further down the urethra, the use of the catheter makes it evident. If the surgeon is unable to penetrate the obstruction by means of a soft catheter, he cannot judge how far the occlusion extends between the point where the catheter is brought up and the bladder, as it may involve the whole of that portion of the urethra, or only a small part of it.

On the question of treatment the proper course to adopt is clear where the occlusion consists of a membranous veil covering the meatus. This veil must be incised, and the orifice kept patent by passing a bougie daily for a week or ten days. Also in cases similar to mine, where a non-metallic catheter can be with moderate force thrust through the soft and easily lacerable membrane occluding the urethra, this treatment is clearly the one to follow; but in those still rarer cases where the urethra is obliterated for some distance, it appears to me there presents itself to the surgeon a most unfavourable condition to deal with satisfactorily.

Three courses are open, namely (1) forcing a passage by means of a curved stylet, or small curved trocar and cannula; (2) perineal cystotomy; (3) suprapubic puncture. The objection to forcing a passage is that it is an unsurgical and hazardous proceeding, and that you are working in the dark and have no guide to rely on. If you reach the bladder so much the better for your patient, for your treatment saves his life and leaves him with a urethra in its normal position.

Another argument in favour of this course is that it has been adopted with success, notably in the case mentioned above, where the urethra was said to be wholly obliterated. With regard to perineal cystotomy by the median method with the finger in the rectum, the distance to reach the bladder is short, and as it would be distended, one would feel more certainty of finding it than by the first plan. But I should give the preference to suprapubic puncture by small trocar as being simplest and safest, and I should fix in a rubber catheter and wait upon events. Afterwards, when the child was old enough, the suprapubic opening might be enlarged, the bladder explored, and a passage made from its interior by means of a curved trocar and cannula as near along the normal position of the urethra as could be ascertained.

A CLINICAL NOTE ON THE SOPORIFIC ACTION OF MERCURY.¹

By W. J. TYSON, M.D.,
Folkestone.

I AM not aware that the above action of mercury in the class of case I am about to describe has been recorded. No doubt the fact is known to many of you, yet it does not appear to me to be so generally, and that is my reason for bringing the subject forward at this meeting.

The cases in which I have found blue pill—for this is the

¹ Read at a meeting of the East Sussex District of the South-Eastern Branch of the British Medical Association.

¹ Read in the Section of Medicine at the Annual Meeting of the British Medical Association held in Birmingham, July, 1890.