

earliest inception, and if properly treated then all its troublesome secondary consequences would be averted."

The sixth of a series of cases reported is especially interesting. With reference to it Mr. Lloyd says: "Until a month ago I had thought that the sterno-mastoid tumours of infants were always unilateral, but I then saw a little breech-born patient a few weeks old with a nodule in each muscle."

If this case had been allowed to drift on untreated each muscle would have become shortened, the chin being firmly fixed towards the episternal notch. There would have been no turning of the face to one side or the other, the neck would have been merely bent forwards in the middle line. Thus, single sterno-mastoid tumour produces single wryneck, but double sterno-mastoid tumour does not produce double wryneck—such a condition being manifestly impossible.

A few years ago, as Mr. Lloyd says, the nature of these tumours was shrouded in mystery, but even at the present day, though they are of by no means uncommon occurrence, they are often mistaken for enlarged glands or gummata.

DISEASES OF THE GENITO-URINARY SYSTEM.

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1. Renal surgery.

The progress of surgery relative to the kidney and its duct formed the subject of the Hunterian Lectures (1898) at the Royal College of Surgeons, by Henry Morris. The published volume (Cassell & Co.) also contains a fourth lecture devoted to injuries of the ureter. The work embraces not only a digest of the author's large experience of the subject, but a liberal reference to the practice of others. The surgery of the ureter is importantly added to, and much that is new and progressive is advanced and summarised. The various methods of effecting uretero-ureteral anastomosis are described and illustrated, and their respective advantages discussed. As the permanent occlusion of a ureter, following its rupture or accidental division, means irreparable damage to the corresponding kidney, the importance of this method of obtaining repair, as in the analogous case of the male urethra, is obvious, if the kidney is to be saved. Nephrectomy as a primary operation for surgical injuries of the ureter is quite unjustifiable. It would occupy too much space to describe the different modes of establishing ureteral anastomosis. The classes of cases in which it is applicable are stated as follows: "To restore the continuity of the duct (1) after accidental section, and (2) after resection of a short length of it during abdominal operations. (3) After resection of a portion of the ureter for strictures, ulceration, sloughing around a calculus, or any other condition which, if not removed, would terminate in stenosis. (4) After rupture and other injuries from external violence—as soon as the case is diagnosed when intraperitoneal, and before suppuration or sloughing occurs when retroperitoneal." Various forms of ureteral grafting are also described. Amongst the most satisfactory are: "(1) Invaginating the fistulous aperture itself into the bladder after first incising the vesico-vaginal septum. (2) Grafting the ureter to the bladder

through the vagina. (3) Grafting the ureter into the bladder by an extraperitoneal route through an incision in the abdominal wall. (4) Grafting the ureter into the bladder by a transperitoneal or intraperitoneal operation." "In cases of limited suppuration," Morris proceeds to remark, "of circumscribed tuberculous disease, of innocent growths, and in certain injuries of the kidney, partial excisions are now being practised in place of nephrectomy. In many instances of calculous pyonephrosis irrigation of the renal calyces and infundibulum, followed by suture of the kidney, has taken the place of nephrectomy." Calculous anuria is referred to as a question of the day, and one of the greatest importance: "Nephrotomy should be performed in the gravest cases to prevent death from uræmia; in the slighter and intermittent cases, to extract a stone which may at any time produce complete persistent anuria."

2. Affections of the urinary apparatus in children.

J. H. Morgan gives a useful summary of these in his Lettsomian Lectures (*Trans. Med. Society of London*, 1898, and Reprint). He thus expresses his views as to the treatment of stone in children: "(1) That, in the cases of boys and girls, stones of moderate size should be dealt with by litholapaxy; (2) that stones composed of oxalate of lime, or of such size as not to be readily grasped between the blades of a lithotrite, should be removed by the lateral operation in the case of boys; and (3) that the suprapubic operation should be reserved for stones of very large size or inconvenient shape in boys or girls, or cases of calculus embedded in a sacculæ of the bladder or impacted in the mouth of a ureter." He proceeds to remark: "Cases have occurred to myself and others where the lithotrite cannot be introduced owing to some puckering of the mucous membrane of the urethra, and the lateral operation may be forbidden on account of a narrowed and rickety pelvis; but I think it is proved that the tendency of surgeons is, when possible, to use the lithotrite instead of the knife, and that with proper care such a course is followed by the best results, and is free from the after-consequences of a cutting operation." With these conclusions most, I think, who have had much experience in the treatment of stone, will agree.

3. Urethral stricture following ruptured urethra.

In the same lectures Morgan refers to the subsequent history of a case of this kind (*Practitioner*, 1888) as illustrating a practice which he speaks of with commendation. The case was one of dense stricture of the urethra, with two sinuses in the perineum, through which all the urine was passed, following rupture of the urethra from a fall. The proceeding is thus described: "I opened

the bladder above the pubes and passed a bent probe down to the posterior surface of the stricture. Cutting down upon this, I attached the mucous membrane of the urethra to the edges of the incision. The result was most satisfactory. At the end of a year I inspected him, and found him very greatly improved in health. The urine was voided from a nipple-like elevation close to the posterior edge of the scrotum. No irritability of the bladder existed, and the control over it was perfect. The urine, which previously to the operation contained pus and albumin, was normal, and the cicatrix of the abdominal wound was firm and level. So satisfactory was his condition that he and his parents declined any further interference."

This case may be regarded as a leading one relative to some traumatic strictures with certain complications in male children, and its value is enhanced by the further history of the patient and reference to this practice by the author in his recent lectures. So many proposals are tried and then dropped as to render records of this kind even more valuable to the practitioner than some novelties.

4. The Röntgen photography in the diagnosis of renal calculi.

During 1898 several successful attempts have been made in Great Britain to obtain indications of the presence of stone by the use of the X rays. The literature of the subject is still scanty, but the following two cases may be mentioned:—

F. Taylor and Fripp presented a case to the Clinical Society of London (*Lancet*, April 30, 1898). The points of interest were:—

(1) That an operation was performed before the photography was tried. The kidney was not opened, as no stone could be felt. Kidney very high up, and only partially palpable through lumbar wound. (2) The plates showed distinct evidence of a stone high up under the ribs (on right side), so a piece of the twelfth rib was excised one week after the first unsuccessful operation, and Fripp removed an atrophied kidney containing a fair-sized stone. (3) This is believed to be the first case, in England at all events, where the Röntgen method has been successfully used for the detection of renal stone.

The second case was brought before the West London Medico-Chirurgical Society in June, 1898 (*West London Medical Journal*, Oct., 1898), by Swinford Edwards and Low. The case was, surgically speaking, unimportant, but a very clear shadow of the stone was obtained previous to operation. It is of interest to observe that in this case also the kidney substance was extremely thin, and stretched over the stone, but was apparently healthy,

and so the kidney was not removed. A good recovery was made in each case. Since the introduction of the X-ray photography a very large number of patients have been submitted to the process, with disappointing results at present. No doubt other successful cases have occurred which have not as yet been published, but this method of diagnosis is not sufficiently established to obviate the advisability of a lumbar exploration when the photographic plates give no indications of stone. As an additional means of diagnosis there can be no doubt of its value.

5. Septic infection of urinary tract.

David Newman (*Brit. Medical Journal*, Oct. 29, 1898) lays stress on the danger of infection following the use of instruments, even if completely sterilised, where the bladder from one cause or another is not able completely to empty itself. The vesical mucous membrane loses its resisting power in such circumstances, and bacterial infection follows. The same danger attends the use of instruments in cases of injury or disease of the general nervous system where the control of the nerve-centres is impaired or cut off.

Thorchild Rovsing (*ibid.*) draws attention to the fact that infection of the bladder may be caused by a perfectly sterilised catheter or sound pushing back into that viscus the bacteria which swarm in the urethra in many instances; and that infection of the bladder and upper urinary passages may occur where no instruments have been used, citing cases in his own experience where urinary incontinence (probably retention with overflow) was present, a column of urine thus reaching from the meatus to the bladder becoming infected by micro-organisms swarming about the genitalia. He mentions also cases of urethral stricture where collections of pus occur behind the constricted portion of the canal, some of which pus may regurgitate into the bladder.

He separates the bacteria usually found affecting the urinary organs into two rough classes, viz. those which decompose urea, and those which do not. His own researches lead him to believe that the former class is of by far the greater importance, and he considers that the bacterium coli which belongs to the latter class is almost benign in comparison with the urea-decomposing bacteria. His views on this subject are in striking contrast to the opinions of the members of the great Paris school, Guyon, Albarran, Hallé, and others, who all lay stress on the importance of bacterium coli. Rovsing states that bacterium coli, even when decidedly pyogenic, cannot attack the *intact* vesical mucous membrane and cause a suppurative cystitis, and that when present in larger numbers they assist in causing a condition described under

the name of "bacteriuria," a condition quite distinct from suppurative cystitis, and more closely approximating to the catarrhal cystitis described by Mansell Moullin and other observers.

On the other hand, pyogenic urea-decomposing bacteria are certain to produce a suppurative cystitis if their peculiar power is exerted sufficiently long to render the urine ammoniacal. Rovsing concludes a paper of great interest by some practical remarks arising from the foregoing statements. He advises that as it is practically impossible to avoid the introduction of a certain number of bacteria they should be given the best chance of rapid evacuation, and to this end recommends the use of sterilised olive-oil or glycerine as lubricants, to the exclusion of all vaseline and fats, stating that the latter tend to stick to the mucous membranes with entangled bacteria attached, whereas the former are speedily passed. After any instrumentation where infection is to be feared he uses a 2 per cent. solution of silver nitrate as a bladder wash.

C. Mansell Moullin (*ibid.*) states that the rigors so often met with after internal urethrotomy are due to rapid absorption of toxins, derived from bacteria coli. The effects produced are strictly comparable to those seen after the injection of half-minim doses of Coley's fluid.

Max Melchior of Copenhagen (*ibid.*) inclines to the belief in the dangerous properties of bacterium coli held by so many surgeons.

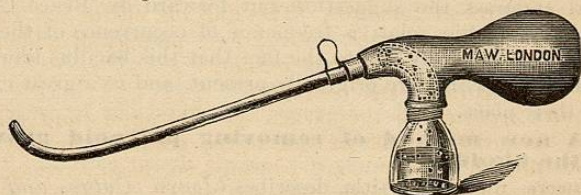
Kocher (*ibid.*) agrees with Rovsing in considering the colon bacillus of a much more benign nature than it is usually held to be, and endorses the suggestion put forward by Bruce Clarke and Klein that the relative frequency of occurrence of the bacterium coli is probably due to the fact that this bacillus triumphs over the cocci, which are originally present, and to a great extent usurps their place.

6. A new method of removing polypoid growths from the bladder.

Chismore, under this title, describes (*Journ. Cutan. and Gen.-Urin. Diseases*, July, 1897, New York) the process he employs as follows:—"The principle on which the operation is based is that by the aid of the suction exerted by an aspirator attached to a litholapaxy catheter or other suitable tube, catching the growth or growths in the eye of the instrument when by gentle traction and slight to-and-fro movements they are torn from their attachments and drop into the reservoir of the wash-bottle." Further it is remarked:—"For reasons that are obvious no estimate of the ultimate results of such an operation can be predicted, but it is contended that enough has been shown to

make recourse to this simple and painless procedure justifiable in cases of emergency, and when the bladder is filled with clots and retention from over-distension is present with its attendant suffering."

In connection with this proposal, which is illustrated by the narrative of two cases where it appeared to have succeeded, the only analogous instances I can call to mind are those where portions of villous growths or papillomas have been accidentally removed after a bladder has been searched for diagnostic purposes with the aspirator catheter and wash-bottle as used for litholapaxy, and where the growth has come away in the eye of the former instrument. I remember examining an entire tumour about the size of a small grape which was thus withdrawn, where the leading symptom was profuse hæmaturia, and which permanently ceased after this occurrence coincidentally with the recovery of the patient. I believe similar instances have been met with. Whether Chismore's ingenious proposal can be extended advantageously to more solid growths, innocent and malignant, seems doubtful. There is so little risk incurred now by a suprapubic exploration of the bladder, whilst precision is thus gained in the removing of a growth, that I hardly think a change in procedure of this nature is to be advised. Possibly it may be utilised for simple papillomas and small pendulous out-growths from the prostate after the bladder has been carefully cystoscoped. At my request Messrs. Maw, Son & Thompson have been making some of these hand rubber aspirators as



Hand Rubber Aspirator.

described by Chismore (*International Clinics*, vol. iv., sixth series), for use with evacuating catheters. I am also having some flexible catheters fitted to them with large eyes. Chismore thus describes this simple apparatus: "It consists of a rubber bag shaped to fit the hand, without stopcocks of any kind, the soft rubber nozzle fitting the end of an aspirating catheter. A short curved hard rubber tube is placed within in such a way as to direct fragments into the glass receiver, where they are but little

disturbed by the reverse current. It is easily filled by submerging it in a pan of warm borated water and compressing the bulb a few times until the air is excluded, and it is readily and completely cleaned by boiling. I boil the rubber aspirator in a strong solution of boracic acid, which serves to increase the durability of the rubber to a remarkable extent." Ordinary catheters can thus be used for washing out the bladder with this aspirator. The apparatus may also be employed for the withdrawal of small renal calculi from the bladder, as well as for some diagnostic purposes where a movement of the fluid contents is necessary.

7. A useful method for circumcision.

Paul Rebebrand (*Annales des Maladies des Organes Génito-Urinaires*, January, 1898) describes a method of circumcision which seems a distinct advance upon those more generally adopted. It is specially applicable to those cases in which relief is required for a tight phimosis, but where there is no necessity to remove the whole prepuce. He proceeds as follows:—The edges of the preputial orifice are grasped by forceps, and the prepuce is pulled well forwards. With a pair of scissors a cut is made all round this skin alone, from 4 to 6 centimetres behind the edge. The skin immediately retracts a little on the subjacent mucous membrane, and is rolled right back beyond the corona. The mucous membrane is then slit right back to the sulcus and removed all round. The edges of the skin and the mucous membrane are now accurately united with a few points of suture and the skin rolled forwards. The line of suture lies in the sulcus, and the glans is well covered by a prepuce of which the inner as well as the outer surface is skin.

8. Teratoma of the testis.

Chevassu reported to the Société de Chirurgie (*ibid.*, June, 1898) a case of teratoma of the testis, occurring in a young candidate for the army, but causing no inconvenience. It had been noticed from birth, but had grown somewhat larger during the last six months. When it came under Chevassu's notice the left side of the scrotum was occupied by a swelling about the size of a very large hen's egg. The swelling was irregular and evidently composed of the testicle invaded by a new growth of some kind. The testicular substance, apart from the growth, felt of the usual consistence, and testicular pain was readily elicited on pressure; the growth, on the other hand, was quite insensitive; the skin was nowhere adherent, and there was a little fluid between it and the tunica vaginalis, which was tightly stretched. On cutting into the mass

it was found possible to shell the growth out from the testicle and to leave that organ behind in a perfectly useful condition. The growth contained various histological elements, including islands of cartilage and a small fully-formed bone with periosteum complete. The author adds a very full report of the minute structure of the growth, and mentions the recent work which has been done on the teratomata by various pathologists.

9. A new lithotrite fitted with a concussor.

Chismore (*Journ. Cutan. and Gen.-Urin. Diseases*, Oct. 1898) describes a new method of applying power for the purpose of crushing stones in the bladder, which, by reason of their unusual size, can only be broken with difficulty by the ordinary lithotrite in use. The principle of this device is the adaptation of the shattering effect of repeated sharp blows for breaking the stone. It was first suggested to the author by observing the ease with which an automatic rock drill penetrated the hardest granite. The concussor consists of a light hammer, actuated by a spiral spring enclosed in a cylindrical tube properly fitted to the external end of the male blade of the lithotrite. Chismore remarks: "In some experiments with a very light lithotrite, in New York last June, I readily broke pieces of grindstone an inch and a half in diameter, pieces utterly beyond the power of the instrument. In London, in the same month, Mr. Reginald Harrison was good enough to let me try the method on a large stone which he had cut for, after trying in vain to crush it, *in situ*, with his lithotrite, a far more powerful one than mine. It required but a very few blows to cause it to fly into fragments, small enough to be dealt with in the usual way."

Reference has been made in a former Year-book (1895) to Chismore's lithotrites, in which are combined in the one instrument means for crushing the stone and evacuating the fragments. It appeared to me that the introduction of the latter object tended to weaken the lithotrite materially, and thus added a risk in the case of all stones, except the smaller and softer varieties. With the view of providing against this objection, Chismore has suggested primary fragmentation of the stone by concussing instead of by screwing, and has devised this ingenious plan of giving effect to his idea. The early French school of lithotritists employed concussion in the breaking of stones with a hammer applied to the male blade, and in more recent days I have seen Guyon, at the Necker, once adopt the same principle. I am well satisfied with the most modern patterns of the ordinary lithotrites now in use. What I have seen, on trial, of Chismore's concussor would lead me to regard it as worthy of further consideration and use.

10. Castration and subsequently prostatectomy for enlarged prostate.

Nicholson (*Annals of Surgery*, Sept., 1898) reports a case of this kind occurring in a man aged sixty-four. Twelve months after castration, as the conditions arising out of prostatic obstruction were not improved, the bladder was opened in front, and a large fibroid mass connected with the middle lobe, which could be felt above the pubes before the operation, was enucleated. It weighed over 7 ounces. Twelve months after this the patient was much improved, and able to follow his occupation, though he had to wear a urinal, as he could not exercise sufficient control over micturition.

I have recorded a case, and collected others (*Trans. Royal Med. Chir.*, vol. lxx.), where large growths were shelled out of the prostate with the finger in the course of perineal lithotomies, and the patients made good recoveries. These are instances where neither castration nor vasectomy would have been of any avail, as occurred in Nicholson's case. Having regard to the great variety in form and structural composition of the hypertrophied prostate, not to say anything of the independent growths, innocent and malignant, by which its size is increased, and obstruction to urine thus caused, discrimination is necessary in the selection of cases for vasectomy. The best results following the latter have hitherto been met with in instances where the enlargement is general, and not limited to a pendulous lobe, and where the gland from its feel has not become largely fibrotic, but contains a fair proportion of its glandular and muscular element. The benefits which immediately follow vasectomy appear to be due to certain vascular changes induced in the part, whilst the more remote are atrophic.

11. Stone in the bladder.

Reginald Harrison, writing (*Lancet*, Nov. 12, 1898) on a series of over 100 consecutive operations for stone occurring in his practice, draws attention to the subject of recurrence, and the causes contributing towards it. Chief among these is senile hypertrophy of the prostate, rendering the act of micturition in many cases mechanically difficult or impossible, favouring ammoniacal decomposition of the urine with phosphatic formations, and in addition atonic conditions of the bladder, which impede the discharge of small stones descended from the ureters. Under such conditions the bladder resembles a bedding-out ground for renal calculi where they may grow. To avoid as far as may be these recurrences, several practical hints are offered. The lithotrites employed should be capable of breaking up the stone without pounding it into a sticky mass. Great care

should be exercised in removing the fragments and seeing that the bladder is left quite clean. Stress is laid on the necessity for careful after-treatment of the bladder and urine in these cases, the writer recommending that the former should be well flushed out at least once a week by the surgeon for some time, with an aspirator catheter and wash-bottle, in addition to the means which the patient himself may be able to employ. The useful properties of silver nitrate in the prevention of phosphatic deposits are referred to, and a striking case is mentioned illustrative of the benefit to be obtained by its use, where a man suffering from prostatic enlargement, for which regular catheterism was necessary, had the misfortune to break off a piece of his instrument in the bladder. His condition did not admit of immediate operation, but nitrate of silver injections were used for ten days, and the piece then removed. It was found to be quite clean, and without a trace of phosphatic concretions. The part played by castration and vasectomy in the treatment of prostatic hypertrophy is mentioned, and the latter operation is advised, as an aid to the prevention of stone recurrence.

DISEASES OF THE RECTUM.

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I. Atony of the rectum.

This subject is discussed by Acheson, of Ontario, in the *British Medical Journal* (Oct. 30th, 1897). He considers that atony may be either a cause of chronic constipation, or that the latter may induce the former. When from any cause impaction of feces occurs in the rectum, the normal nervous sense is deadened, causing prolonged distension of the rectal walls; on the other hand, atony may be caused by one or other of the following—viz. a sedentary life, irregular habits, gaseous distension, due either to fermentation or to the drinking of effervescing waters, the excessive use of enemata, or to pressure from without from some form of pelvic tumour; all these causes of the atonic condition having constipation as a marked symptom.

Other symptoms which point to atony, whether as the cause or the result of constipation, are—a sense of fulness and weight in the pelvis, with tenesmus and the passage of blood-streaked mucus or a thin, watery matter. This state of affairs may induce the following nervous symptoms through absorption of the bowel contents, or in other words by auto-intoxication—viz. headache, migraine and hysteria. Constipation by its mechanical effect may be the cause of uterine displacements or of vesical irritability. The author recommends by way of treatment, if no obvious cause of obstruction can be discerned, a careful attention to the daily action of the bowels. Purgatives are not advised, but the author has found the following tonic pill of service, viz.: R. Aloin, gr. $\frac{1}{2}$; Strych. Sulph., gr. $\frac{1}{50}$; Ext. Belladonnæ, gr. $\frac{1}{8}$; Ipecac., gr. $\frac{1}{16}$. The action of this pill may be increased by the use of a small cold-water enema, or for severe cases one or other of these astringent injections may be employed: R. Tannin, gr. xxx., Aquæ, iv.; or R. Ext. Rhatinæ, gr. cxx.; Sp. Vini Rect., \bar{z} v.; Aquam ad \bar{z} iv. For fecal impaction some form of operative interference is usually necessary.

It will be seen that the views here set forth coincide in a large measure with those of Bodenhamer, to whose article in the