was kept in bed for about three weeks. Unfortunately her rectum was allowed to become loaded during the first week after the operation; this gave some trouble, but none of the stitches gave way. She was carefully examined before being dismissed on December 8th, and the cervix was found to be in excellent condition, the cystocele and rectocele having completely disappeared. Some six months subsequent to the operation the condition of parts remained thoroughly satisfactory.

CASE II.—Mrs. J., aged 40. Her first child was born when she was 20 years of age. Prior to the birth of this child she had three miscarriages, all at about the third month; the last was accompanied by great hemorrhage. Her doctor said the uterus was displaced. After the birth of her child she became a widow. She married again, and a second child was born six years after the first, when she was 26. After this she had a miscarriage. About two years later her third child was born, after which she "felt an internal displacement." She had then great difficulty in passing water. She subsequently had "a very bad miscarriage." She was not "examined," and "something was left which made her very ill." She did not notice that the prolapse got any worse (although she had another child, now 10 years of age) until about six years ago, when being again left a widow with two children to maintain, she had to work very hard, and earned her living by charring. The prolapse of the bladder then became much worse, she was unable to walk, especially upstairs, unless she "wore a lot of pads to keep it in." She again had great trouble with her water, often being unable to pass any although she had great desire to do so. She attended St. Pancras Dispensary as an out-patient in May, 1891, when she was treated with a rubber ring pessary, which gave her some little relief, although the prolapse still came down. On October 26th, 1891, I operated for the cystocele by the old method, denuding a large superficial flap from the anterior vaginal wall, and suturing transversely by ten stitches, seven silkworm gut and three chromicised catgut. She was discharged on November 17th. This operation was only partially successful; for although the most urgent symptoms were relieved she returned in May, 1892, with the cystocele almost as large as ever. I performed Stoltz's operation on May 18th, 1892, and also treated the posterior wall in the same way as in the first case. The rectocele was much smaller than in Case I, but it seemed a wise precaution to operate on it also. A week later the cystocele was found to be non-existent. The tongue of mucous membrane on the posterior wall had not been removed and was only partially adherent on one side, where sutured at its edge, so a couple of fresh stitches were inserted. June 20th. She was examined. The improvement in her condition was very marked. She could now retain her urine for ten hours with comfort; before the last operation she had to pass it every two or two and a half hours. The condition of the anterior wall was vastly better, no cystocele existed, but there still remained some thickening of the tissues between the bladder and vagina. There was a very good perineum; all the tissues were healed and looked healthy. The os uteri was very patulous, and an erosion was felt on it. I directed the application of pure carbolic acid; and after three days the insertion of a soft ring pessary to be worn for two months. The patient was discharged on June 24th, feeling very well.

CASE III.—M. C., aged 21, sent by Dr. Shaw Mackenzie. The patient had been delivered of a child 5½ years before. Since then she had suffered great inconvenience and discomfort from prolapse of the bladder; she had had incontinence of urine for over five years. There had been no other pregnancy. She was admitted to Chelsea Hospital for Women on April 4th, 1892. On admission she was found to have almost complete vesical extrusion; the urethra had evidently been torn longitudinally, but was now healed; it was very low down and projected forwards to an extreme degree. The perineum was deficient, but there was no rectocele. The uterus was not prolapsed. The patient was a miserable anæmic creature, she suffered from a troublesome cough and had an ill-defined presystolic murmur. She had almost constant incontinence of urine, and had to micturate very frequently. On April 7th my modification of Stoltz's operation was performed, the perineum was repaired at the same sitting. The stitches were removed on the 19th, and the patient was sent to the Convalescent Home at St. Leonards on May 3rd. On her return she was seen by Dr. Mackenzie, who found her condition greatly improved; the urine could be retained normally, and the incontinence was effectually relieved.

Conclusion.—It would be easy to record several cases in which equally successful results have been obtained by myself and some of my colleagues who have adopted the operation I have described, but these three have been related as among the most testing I could select. I shall be glad if other operators will give the procedure a fair trial.

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PRESENTATION.—On Thursday, March 14th, Dr. Macaulay of Halifax was presented by the ladies who attended his course of lectures on Nursing Air, First Aid to the Injured, with a silver afternoon tea service. A few weeks ago the gentlemen who attended a course of lectures on Fresh Air presented him with a handsome silver-mounted walking stick and a fitted Gladstone bag.

THE OPENING BETWEEN THE FOURTH VENTRICLE AND SUBARACHNOID SPACE, AND ITS CONDITION IN TUBERCULOUS MENINGITIS:

AND ON THE BEST POINT FOR DIRECT DRAINAGE OF THE VENTRICLES.

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At the annual meeting of the British Medical Association in 1891 I read a paper on the pathology of tuberculous meningitis, with reference to its treatment by tapping the subarachnoid space of the cord.¹ Since then I have investigated the condition of the opening through which the fourth ventricle communicates with the subarachnoid space, both in the normal brain and in cases of tuberculous meningitis, by a special method of dissection. The condition of this opening is of much importance in connection with the recent surgical procedure of draining the subarachnoid space of the cord to relieve pressure in the ventricles; for it is evident that for the success of such treatment this opening must remain patent. Some pathologists maintain that its closure in these cases causes the increased accumulation of fluid in the ventricles; but my examinations distinctly show that it is not closed. As stated in my paper last year, observations on this point made after the removal of the brain could not be relied on, and therefore I have examined the opening in 14 cases before its removal by the dissection I am about to describe, in 7 normal brains and in 7 cases of tuberculous meningitis.

My method is as follows: The skull cap is first removed, the section being carried low down behind. Then a wedge-shaped piece is removed from the middle of the occipital bone with base uppermost, and with apex, almost an inch wide, forming the upper boundary of the foramen magnum. Before doing this the muscles must be well cleared off the occipital bone. The removal of this wedge now exposes the dura mater covering the upper part of the cord, and the medulla and cerebellum. The part below the tentorium is then carefully slit up, so as not to go through the arachnoid, which may be bulging beneath, and turned aside. Then the subarachnoid space is opened. If there is excess of fluid this will be distended, so that the arachnoid is pushed into close contact with the dura mater. The fluid in the space should be very gently sucked up with a fragment of sponge just dipped into it, and not allowed to touch the parts beneath. This will render the view of the pia mater closing in the fourth ventricle plain, when the lateral lobes of the cerebellum are just gently separated with the handles of scalpels. In this method of examination there is no possibility of rupture of the pia mater closing in the ventricle. The cerebellum and medulla are so fixed under the tentorium that the removal of the skull cap cannot damage the pia mater passing from the one to the other.

My investigations by this method show that the opening is not accurately described as a foramen, in the sense of a small hole in a layer of pia mater. The opening in the normal brain reaches from cerebellum above to the calamus scriptorius below, and is a broad slit, or larger space. Sometimes a few delicate strands of membrane intersect one another across it, but this is only occasionally seen. In tuberculous meningitis it is not blocked, so as to dam back the fluid in the ventricles. Even when the membrane around it is most thickened, and it appears blocked, fluid can still be made to flow easily out of the ventricle through it by the slightest pressure on the hemispheres; and usually it is not even narrowed. It was not necessary to examine the lateral openings, as it was enough to show that one (the central one) was never blocked.

In a few cases the ventricles have been drained directly through the brain. If we determine on this method, it is necessary to find out at what spot on the scalp the lateral

¹ BRITISH MEDICAL JOURNAL, vol. II, 1891, p. 840.

ventricles can be best reached. Dr. Alex. Fraser, in his *Atlas of Brain Anatomy*, has worked out the relations of the ventricle, but has not shown where it is best to tap the ventricle. When assisting at the operation of trephining for supposed cerebral abscess in the temporo-sphenoidal lobe, according to Birmingham's directions—that is, $1\frac{1}{4}$ inch behind and 2 inches above the meatus, but rather less in this case, as the patient was only 12 years of age—I noticed that, on passing a director through the brain towards the base, clear watery fluid escaped. This induced me to try on the dead body a point 2 inches behind the meatus and 2 inches above. In the body of a child, aged 8, a point was taken in Reid's base line $1\frac{1}{2}$ inch behind the meatus and $1\frac{1}{2}$ inch above this ($1\frac{1}{2}$ inch rather than 2 inches to allow for age), and a tube passed in 2 to 3 inches, very slightly upwards and forwards, until it seemed in a cavity, when fluid began to flow. On removing the brain, it was found to have entered in the lower part of the occipital lobe, and gone along the descending horn into the ventricle.

The second experiment was on the body of a baby, 2 years old. As the head was so small, a point only $1\frac{1}{4}$ inch behind the centre of the meatus in Reid's line and $1\frac{1}{4}$ inch above this was taken; a tube, pushed in very slightly upwards and forwards, passed through the descending horn into the lateral ventricle, and freely drained fluid, which was in great excess, as the case was one of tuberculous meningitis. As this disease is most common in children, it was thought wise to experiment on the child's head.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

RADICAL CURE OF HYDROCELE.

I SEND herewith a list of 19 cases of hydrocele cured absolutely in one operation. The operation consisted of slitting up the scrotum and tunica vaginalis to the extent of one inch, letting out the fluid, and then sewing the tunica vaginalis to the outer skin and applying a dressing of carbolie oil. I did not stuff the cavity nor interfere with it in any way, as I find that this is unnecessary. The operation is as simple as possible, causes no great amount of inflammation, and is perfectly effectual. Age does not seem to be any obstacle to success, as may be seen by the list, nor does the fact of other operations having been performed. All these cases had been tapped before, some had had iodine injected, but all did equally well and all are now completely cured.

List of Cases of Hydrocele admitted into the Allahabad Central Gaol Hospital. (Prepared by Karim Baksh, Hospital Assistant.)

Date of Admission.	Name of Prisoner or Patient.	Date of Discharge.	Age.
November 22nd, 1892	Soor Joo	January 28th, 1893	22
December 7th, 1892	Khaan Khaan	January 29th, 1893	38
December 17th, 1892	Shw Naudan	February 2nd, 1893	35
	Lall Jee	February 5th, 1893	40
December 28th, 1892	Kulloo	January 29th, 1893	60
"	Akber Hasine	January 29th, 1893	35
"	Lalla Singh	February 6th, 1893	45
December 29th, 1892	Galam Ally	February 16th, 1893	55
January 3rd, 1893	Ellahu Khan	January 29th, 1893	25
"	Jipall	January 29th, 1893	50
"	Khowaji Ahmed	February 7th, 1893	25
"	Foh Koor Singh	February 17th, 1893	39
January 10th, 1893	Sabai	February 6th, 1893	45
"	Maheosh	February 2nd, 1893	40
"	Goodir Singh	February 11th, 1893	25
"	Gokool	February 10th, 1893	55
February 7th, 1893	Nunnih	In hospital	35
February 16th, 1893	Dul Thummun	"	35
"	Jokho	"	50

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PLACENTA MARGINATA.

I HAVE recently come across in my practice a very complete form of the above, deserving, as I think, from its extreme rarity to be reported.

The chorion, instead of lining the whole foetal surface of the placenta, passing over from the cord to the margin, rose almost entire from the root of the cord, constituting the so-called chorion frondosum, and leaving the margin entirely bare of membranes. At one point it did pass across in a straight line till within about half an inch of the margin, but upon the whole it had very much the appearance of a flattened turnip with the leaves left attached. The manner of its expulsion was also peculiar. The patient, who was anæmic, but otherwise enjoying good health, had a very easy and natural labour, but no sooner was the child born than vomiting set in, and almost immediately, without any pain and before the cord was well tied, the placenta, membranes and all, was expelled during an act of vomiting. The vomiting and fainting still continued, and as this could not be accounted for by any undue hæmorrhage, and as the membranes were ragged and it was difficult to make a complete bag of them, and although it was pretty clear that it was not a case of the membranes being shorn off the margin of the placenta, there not being the slightest trace of a torn edge perceptible all round, I explored for membranes and inversion, but found neither. A bichloride douche was given immediately after, and one of Condy's fluid on the second and third days. She had no rise of temperature, but with the help of a little bismuth, etc., the slight retching which continued for two or three days was by-and-bye completely arrested, and she made an excellent recovery.

The precipitateness of the expulsion of the placenta would, apart from the act of vomiting, be accounted for mainly by the lack of membranes round the margin, thus making the surface of adhesion to the uterus much less extensive.

Several years ago I had a somewhat similar case in a patient who was confined at seven months. In this case the placenta presented the appearance of a truncated cone, with the cord and membranes growing from the top.

Sunderland.

B. STRACHAN, M.B., C.M.

ACUTE TORSION OF SPERMATIC CORD: REDUCTION: IMMEDIATE RELIEF.

SINCE I first reported in the *BRITISH MEDICAL JOURNAL* of June 6th, 1891, a case of strangulation of the epididymis due to torsion of the spermatic cord, operated on at the South Devon Hospital, Plymouth, by Mr. Whipple, there have been three cases reported—one by Mr. Bryant, in a paper read at the Royal Medical and Chirurgical Society on Feb. 23rd, 1892; the second by Mr. Davies-Colley in the *BRITISH MEDICAL JOURNAL* of April 16th, 1892; and the third by Mr. Herbert Page in the *Lancet* of July 30th, 1892. I have now to record a fifth case, which in onset of symptoms resembles the others but in treatment differs, as it was relieved without operation.

On March 17th, 1893, a schoolboy, aged 19, in perfect health, at 3 P.M. jumped a form, from 3 P.M. till 5.30 P.M. was boxing at intervals, at 6 P.M. had tea, and at 6.30 began to feel seedy. At 6.45 P.M. he went to bed, and then first felt a pain in his right testicle. At 7.30 P.M. he vomited, and at 7.45 I saw him. He was then pale and faint, and complained of pain in his right testicle, extending along the spermatic cord.

The testicle and epididymis were very tender and somewhat swollen, especially the latter. On tracing up the swollen cord from the epididymis, about one inch above the top of the testis I found a very tender lump about the size of a cobnut. Above this the cord was not altered in any way. The external abdominal ring was not unduly patent. The epididymis lay in front of the body of the testis; there was no urethral discharge. The fact that the epididymis was in front of the body of the testis, that the testis and epididymis were swollen and tender, that there was a distinct lump or knot involving the cord, above which the cord was normal, and below which there was swelling, made me believe that the cord was twisted. I therefore decided to attempt to untwist it. I rotated the epididymis in front of the testis to the patient's left, but it caused more pain and would not stay in that position. I next rotated it to the patient's right, so that it resumed its normal position behind the body of the testis. It remained so, and the lad at once said that all pain had gone. In two