to prevent injury of the canal. An elliptic piece of the protrusion was cut away, so as to completely open its cavity, and perhaps about half its substance removed. The thick and velvety mucous lining was then carefully dissected off as far as the aperture leading into the urethra, which in none of the cases was larger than just to admit the catheter. Five silver wire stitches in the second case, and three in the other two, were then introduced, by a handled needle, right across from one side to the other, and deep enough to embrace the whole of the structure except the urethra, the central stitch always reaching across the aperture into the canal. The proceedings were, in all three cases, accompanied by a very remarkable amount of hæmorrhage, altogether disproportionate to the importance of the operation. The catheter was retained in the bladder five or six days, and the stitches were removed on the eighth and ninth, and all three patients went home in twenty days perfectly well.

I have had the curiosity to hunt up the patient whose case is recorded in the *Lancet*, October 1875, and am gratified to find that there has been no return whatever of the trouble, and that she has remained perfectly cured by the operation.

In M. Gillette's paper, he alludes to several cases in which general, or what may be called ampullary, dilatation of the urethra has been met with, requiring operation. But, so far as I know, nothing of the kind has ever occurred in my own practice. The only dilatations of the urethra that I have seen are the four now placed on record; and the fact that in every one the feature of an extremely small aperture communicating between the sac and the urethra was established, makes it clear that, in these four cases, and probably, I may also say, in M. Gillette's as a fifth, we have a distinct form of disease, the origin of which is open to one of two explanations. The first, and I think the most likely, of these is that there is, as the origin of this condition, an error of development by which a small offshoot of the urethra, like a diverticulum of intestine, is the result of faulty union of the primal folds, and that this becomes of pathological importance when women become accustomed to those errors of urination to which they are all more or less addicted. The second explanation is that this urethrocele is formed by the union between the urethra and a cyst of pathological origin in the roof of the vagina. But I am disposed to regard the former as the more likely of the two, from the extraordinary similitude which all my four cases have presented, and from the fact that I have never seen any cysts at all like them in a position that such a communication with the urethra might take place.

FIVE CASES OF PELVIC HÆMATOCELE, TREATED BY ABDOMINAL SECTION.

By FRANCIS IMLACH, M.D.,

Honorary Surgeon to the Liverpool Hospital for Women.

FIVE cases of pelvic hæmatocele having chanced to come under my care in rapid succession for surgical treatment, I have narrated them in brief from my notes, while the incidents of each case are still vivid in my recollection. All the operations were performed in the Hospital for Women, with the assistance of my colleagues. That what is popularly termed "removal of the uterine appendages" implies removal of healthy ovaries and tubes, has been suggested in such fashion that I venture to think the narration of a few illustrative cases, though perhaps tedious, will show the contrary more clearly than would any long argument.

CASE I.—N. C., aged 33, married twelve years, had no children, but a miscarriage four months after marriage, since which she had been almost a constant invalid. Menstruation was sometimes scanty, sometimes profuse, but always painful; the period previous to operation lasted fifteen days. During the last eight or ten years, she had occasionally been brought by rail from Sutton, and carried on a stretcher to various practitioners in Liverpool for consultation; and, five years ago, the cervix was slit bilaterally, with considerable temporary relief. But, for the last twelve months, she had suffered great agony, and has sometimes felt a painful lump in the right hypogastrium. The abdomen was found to be tumefied, the uterus fixed and enlarged to four inches, and behind it, in Douglas's space, was an indistinct painful mass, not blocking the pelvic cavity, but rising, as was made evident by bimanual examination, into the abdomen.

On October 28th, 1884, abdominal section was performed. When the peritoneum was opened, the omentum had not its usual clean appearance, but was stained dark red, and a somewhat thick brown fluid oozed out of the cavity. This having been mopped out, a quantity of free dense old clot was removed from the pelvic cavity. The Fallopian tubes, which were considerably distended and packed deeply

in the pelvis, were next drawn up, previously to ligature. But they were of such soft structure, and so fixed, that the right one was torn away from all its attachments except its narrow insertion into the uterus, and the left one came away in my hand. Not much difficulty, however, was found in securing the bleeding points. The right atrophied and cystic ovary was also removed, but the left one could not be distinguished. Dense round masses of old black blood-clot, about the size of the cork of a beer-bottle, were found within the tubes. A glass drainage-tube was employed for three days; she made a very satisfactory recovery, and left hospital strong and well upon November 25th.

CASE II.—E. G., aged 38, married eleven years, had three children, the youngest being 3½ years old. She had been unable to attend to household work for the last twelve months; was pale and obviously in ill-health; walking was impossible without aid; menstruation was profuse, recurrent every three weeks, and was always painful. The cavity of the uterus measured three inches, and the organ was pushed forward to the pubes, and its mobility restricted by two fluctuant masses bulging posteriorly into Douglas's space.

On November 4th, abdominal section was performed, in the presence of Drs. Grimsdale, T. B. Grimsdale, Craddock, and the staff. When the peritoneum was opened, the abdomen was found to be partly filled with thick dark bloody fluid, which was mopped out with numerous sponges. Then half a pint or more of dark firm old blood-clot was removed from the pelvic cavity by the fingers, and both ovaries and Fallopian tubes were ligatured and removed. The ovaries were slightly enlarged. Both Fallopian tubes were dilated, and contained dark fluid blood. Their mucous and muscular walls were thickened, and their fimbriated extremities were expanded, thickened, and filled and surrounded with old blood-clot. The fimbriated extremity of the right tube was deeply excavated, and embraced and partially contained a large dense old clot. There was a recent rupture of the left tube near its middle. The patient left hospital on November 28th, completely cured.

CASE III.—S. T., aged 26, married when 17 years old. Her first husband, by whom she had two children, died when she was 21. She married again at the age of 24, but had since had neither child nor miscarriage. For the last eighteen months, menstruation had been both profuse and painful, and the discharge had continued without intermission during the last five weeks. Double hydrosalpinx, moderate in extent, owing to monthly rupture, was diagnosed; but abdominal section, on November 8th, showed the exact condition of affairs. There was dark fluid blood, like menstrual discharge, and clot free in the abdominal cavity. There was double hæmatosalpinx, and both fimbriated extremities were dilated, and formed abscesses. The left one contained a large recent corpus luteum—a fact only discovered after ligature and removal of both uterine appendages; and both ovaries contained cysts, with thin grey pus, though neither was wholly disorganised. That an entire corpus luteum may escape from an ovary, may be clutched by the fimbriae of the Fallopian tube, and become the core or cap of an abscess of the dilated extremity of the tube, is a link in the chain of events in diseases of the uterine appendages which has not hitherto, I believe, been recognised. The first instance in which it came under my observation was in the case of a young woman, aged 27, on whom I performed abdominal section on September 2nd. But as there was no effusion of blood into the abdominal cavity, it is not included in this series, and its full description will appear elsewhere. S. T. went home on November 26th, fully satisfied with the result of her treatment, for she was able to enter immediately into the active cares of her household and shop, and remains well to this day.

CASE IV.—S. C., aged 31, married seven years, had one child three years old; no miscarriage. Though she had an easy labour, menstruation had since then been very painful, and she had gradually become unfit for work, sleepless, and broken down in health. The last menstruation ceased October 31st. The uterus measured three and a half inches, and had a large, soft, fluid tumour behind it. Abdominal section being performed on November 14th, after a quantity of dark fluid blood had been mopped out with sponges, the right Fallopian tube was felt above and behind the uterus, greatly distended. Five ounces of serum, which almost entirely coagulated on cooling, were aspirated from the tube, and then its fimbriated extremity, expanded and thickened with chronic inflammation, and the right ovary, two inches in diameter, and containing two large purulent cysts, were drawn up with difficulty, owing to the density of the adhesions from Douglas's space. As in the other cases, the free extremity of the tube was blocked with blood-clot. The venous oozing was checked by packing the pelvis with sponges, and the use of a glass drainage-tube prevented further anxiety. The left ovary and

tube, being healthy, were not removed. The patient made an uninterrupted recovery.

CASE v.—T. L., aged 25, married seven years, had three children, the last born three years ago; all the labours were difficult; she had prolapse of the womb after the second. Since the last confinement, the uterus had not been prolapsed, but she had suffered from violent "bearing-down" pains, had had painful menstruation, and had been unfit for active employment. The uterus measured three and a half inches, and behind it was a tumour doubtfully fluctuant. On November 27th, abdominal section was performed. The omentum was adherent over the pelvic brim. When pierced by the fingers, dark fluid blood welled up, and was mopped with sponges. Both tubes were greatly hypertrophied, and filled with old dense blood-clot; both fimbriated extremities were expanded and inflamed, the right one being partly spread over a dense clot of the size of a goose's egg. The ovaries were atrophied. The cæcum and appendix were drawn down into the pelvic cavity, and their adhesions to the right tube proved somewhat embarrassing. The left tube appeared to have insinuated itself behind the rectum, and was with difficulty detached. After removal of both uterine appendages, a small rupture of uterine tissue, near the cervical junction, was discovered, and there was considerable bleeding in Douglas's space. The abdominal incision was enlarged from one inch and a half (its ordinary length) to three inches, so as to enable me to stitch the uterine tear, and to ligature several bleeding points deep in the pelvic cavity. The peritoneum was raised from the posterior portion of the left broad ligament, like the epidermis of a blister, but it did not bleed. A long glass drainage-tube was used for two days, and then a short one for twenty-four hours. During the operation, a quantity of blood flowed into the vagina, which was probably due to the squeezing of the tubes during their withdrawal. The patient has made an excellent recovery. She relished her soup on the second day, and, though she has not yet (December 5th) been allowed to rise, the pulse and temperature have been normal for many days, the incision has practically healed, and she has lost all pain.

REMARKS.—In none of these cases was there evidence of tubal pregnancy. The extreme collapse, which is, perhaps, the most significant symptom of rupture in this condition, was never noticed. It is, of course, possible that a small disintegrated fetus, or a corpus luteum, may have been a pathological factor in all of them. There was also no history of illness commencing with an abrupt cessation of the menses, a symptom so often alluded to in text-books. In all except the fourth case, there had been long enduring menorrhagia. Bernutz and Goupil (*Diseases of Women*, Sydenham Society, vol. i, pp. 180-188) have narrated, from their personal experience, five cases remarkably similar to mine, occurring in women between the ages of twenty-one and twenty-eight. In all of them, "death took place either suddenly or after a short illness;" but the symptoms and the *post mortem* examinations showed that peritonitis, and not internal hæmorrhage, was the immediate cause of death. The subsequent history of my five cases, I may say of my six cases, shall be faithfully reported.

A CASE OF ACUTE MENINGITIS.

Read before the Aberdeen, Banff, and Kincardine Branch.

By FRANK OGSTON, M.D.,

Medical Examiner in Criminal Cases for the City and County of Aberdeen.

A CHILD nearly 9 years of age, who had been dull and listless for a few days, and who, in consequence, had been kept from school, when roused one morning, complained bitterly of pain in the head and sickness. She was accordingly left in bed, and, falling asleep, slept till two o'clock in the afternoon. On awaking, she felt better, and took some food. The next day, she seemed well, and got out of bed; after which, she passed a good night. On the third day, however, she again complained of her head, and said that her eyes were sore. She took tea, but no food, and remained in bed. At three in the afternoon, she had some difficulty in breathing; "her throat was closed," as her mother said. A poultice was applied to it, and her mother took her out of bed, and sat with her upon her knee till half-past five o'clock, when she died. No medical man was called in.

I made a *post mortem* examination of the child two and a half days after death, finding the following appearances.

Externally.—There were no noticeable signs of neglect or appearance of want of food. The joints were rigid. The pupils of the eyes were slightly dilated, the left more so than the right. The lips were dry. The finger-nails were white. The front of the body was pale, the back parts purplish. There was nothing else unusual observable on the exterior of the body.

Internally.—The scalp was pale, and the bones of the vault of the skull were normal. On removing the skull-cap, the dura mater appeared healthy. When the brain was exposed to view, the whole of its upper surface was of a pale yellow colour, with blood-vessels partly distended with, partly empty of, blood, ramifying across its surface; and, when the arachnoid was cut into, a gelatinous semifluid substance oozed from underneath it. This substance was found to occupy the subarachnoid space alone; for, when the pia mater was also cut through, it stripped readily from the brain, and showed its surface healthy, to the naked eye at least; the only thing that was remarked being that the convolutions appeared a little crowded together, but this was doubtful. This morbid appearance was confined to the meninges of the superior surface of the brain, with the exception of a little tongue-like extension on that part which lay to the inner side of the orbital plate of the ethmoid bone. Otherwise, the basal meninges were quite healthy. The brain was now removed from the skull, and the dura mater carefully examined; but it was found healthy, except a small patch which covered the orbit, which was thickened, roughened on the side next the bone, and covered with a layer of lymph on the side next the brain, by which it was glued to the arachnoid; and also at the parts overlying the middle ears, where it was roughened and thickened on its outer side. The orbital plate of the right side presented a canary-yellow appearance, and a congested and roughened state of the bone. On cutting this through, the nasal cavity was found to be filled with thick creamy pus, which welled out into the brain-cavity. The middle ears were then opened from above, and were found to be filled with dirty-reddish fluid. The mouth, throat, gullet, and air-passages were natural. The heart and its valves were healthy; its central cavities contained blood partly fluid, partly as dark clots, and a large fibrinous clot was found in the right ventricle. The lungs contained a moderate quantity of blood, mostly in their posterior parts, and were attached in a few places to the chest-walls by old pleuritic adhesions. The liver, spleen, and kidneys were congested; the liver and kidneys having the appearance of slight amyloid degeneration, and the spleen being considerably enlarged and very soft. The stomach contained merely a little dirty grey fluid. The sigmoid flexure of the large intestine was distended with gas, the rest of the bowels, in contrast to it, being flat and collapsed. Nothing else unusual was observable in the interior of the body.

Here we have a case of simple acute meningitis, a disease rare enough in itself to be interesting; but this particular case is noteworthy from the fact that the cause of it could be easily traced.

This exciting cause was, it is evident, inflammation of a chronic nature probably, of the nasal mucous membrane, which had spread through the orbital plate of the ethmoid bone and the dura mater to the arachnoid membrane, which it had attacked, and the inflammation had spread along the subarachnoid space.

The history of the illness, imperfect though it be, is typical of this disease, namely, pain in the head and sickness, followed by intolerance of light (complaint of sore eyes), and the short duration of the illness.

But what makes this case still more interesting is, that another child of the same family was attacked by, and died a few days afterwards from, a disease which the medical man who was called in at once diagnosed as meningitis, and that the father fell ill with something of the same nature.

NASAL ASTHMA: ITS CAUSES AND TREATMENT.

By G. HUNTER MACKENZIE, M.D.,

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THE causal relationship between nasal disease and asthma was first pointed out by Voltolini, in 1872 (referred to by Morell Mackenzie, *Manual of Diseases of the Throat and Nose*, vol. ii, p. 360), and since that time numerous cases have been recorded which have established the accuracy of this observation. In all these instances, with one exception recorded by myself (*Edinburgh Medical Journal*, February, 1883), polyp, or marked swellings of the nasal mucous membrane, have been the varieties of disease present. This has given rise to the theory held by some, that the asthma is owing to mechanical obstruction to the passage of air; and additional confirmation of this view is supposed to be afforded by the disease disappearing on the removal of the obstructing mass.

Against this theory two arguments can be advanced; the frequency of polypus or tumefaction of the nasal mucous membrane without asthma, and the presence of nasal asthma without the occurrence of either. The first is a matter of every-day experience, and the second has received illustration by the case above referred to, in which violent