addition, there are towards the internal surface not infrequent clefts or cyst-like spaces, isolated or grouped, which are lined with what appears to be a single layer of low cubical epithelium. In a few cases these spaces are filled with a material resembling fibrin.

Judged solely from the histological standpoint the precise nature of this cyst is obscure. There is nothing sufficiently distinctive in the microscopic structure of its wall to suggest the ovary as a starting point; it rather favours the possibility of a local origin. The existence of the cyst-like spaces mentioned would imply an epithelial origin of these particular structures, but the actual nature of this epithelium, and especially its source, is not clear.

REMARKS.

It is now thirty years since I performed the first successful ovariectomy in Glasgow. Since that time I have done a great number of abdominal sections and removed tumours of all sorts. But I have never myself met with, nor seen, nor have I read of one precisely similar to this. Its clinical characteristics and pathological description as to structure of the sac and the endogenous sacculi, as well as the nature of its contents, fluid and viscid, are all those of an ovarian tumour; but the absence of any trace of a pedicle on its wall, and of any fragment remaining attached to the ovary or broad ligament seem to favour the idea that its origin was not ovarian.

Cases are cited by Sir Spencer Wells, Thornton, and others, which had been diagnosed as ovarian cysts, but during operation or on *post-mortem* examination had proved to be mesenteric or omental. In none of these, however, so far as I know, has there been such similarity in the structure of the sac and its contents to multilocular true ovarian cysts. In fact so much am I impressed with the idea that it is of ovarian origin that I believe it is one of those rare cases of transplanted ovarian cysts. It is easy to understand how an extra-ovarian tumour, such as a parovarian cyst, can escape from its position below the ovary, can form adhesions to peritoneal folds, and how its pedicle can be elongated, stretched, or twisted, and ruptured. But for a tumour which has its origin in the substance of the ovary it is not so easy. Ovarian tumours which have been found detached, or in the process of detachment, have the distal end of the pedicle adhering to their walls, and the proximal stump of the pedicle connected with the broad ligament. Cases of this kind are described in the *Edinburgh Medical Journal* for 1861 by Sir Wm. Turner, who quotes other cases from Rokitsansky, 1860. But here there was no stump at either end, so that it was not an ovarian tumour which had become disconnected by division of a pedicle of the usual kind, which includes the Fallopian tube.

But a tumour of ovarian origin might become disconnected, through having no true pedicle in the ordinary sense of the term. Suppose a Graafian vesicle on the surface of the ovary should put on a cystic character, should grow externally without invading the structure of the organ or pressing upon it and incorporating it with the substance of its walls, should increase in size till it became a pedunculated tumour with a neck consisting of little more than the peritoneal covering and the stretched fibres from the opening of the ovarian capsule through which it escaped. Having attained a certain size, it became attached to the mesentery, and soon derived its chief supply of blood from the mesenteric vessels. The intestinal movements gradually pulled it off from the ovary, the neck being stretched and elongated till it was thinned away to a mere shred; then some sudden movement or twist broke this through. The cyst, being disconnected, rapidly increased in size till it became an abdominal tumour; and the ovary, being now free, slipped back and resumed its normal place in the pelvic cavity. Such I imagine to be the history of the tumour under consideration. Myomata have occasionally been found detached or semidetached from the uterus in a similar manner.

REFERENCES.

I have made some inquiry into the subject of transplanted ovarian tumours and mesenteric tumours simulating ovarian, but I found that it involved an extended search through many books, pamphlets, and periodicals. I therefore ob-

tained the assistance of my former house-surgeon, Dr. Munro Kerr, now assistant to the Professor of Midwifery, and he has furnished me with the following references. They may be useful to others engaged in similar research:

Ovarian Tumours.—Baumgarten, *Virch. Archiv*, xxvii, p. 18. Chalot, *Ann. de Gynéc.*, xxvii, p. 161. Ruge, *Ztsch. f. Geb. und Gyn.*, xxi, p. 211, refers to atrophied ovarian cysts as free bodies in the abdominal cavity. Greig Smith, *Brit. Gyn. Journal*, November, 1887, also in his work on *Abdominal Surgery*, p. 118. Turner, *Ed. Med. Journal*, 1861, vol. vi, p. 698. Wells, *Diagnosis and Surgical Treatment of Abdominal Tumours*, 1885, p. 8, refers to several cases.

Mesenteric and Omental Cysts.—Akérion, *Etude sur les kystes du Mésentère*, Thèse de Paris, 1891, 142 pages. Buckley, *BRITISH MEDICAL JOURNAL*, 1885, i, p. 994. Carter, *BRITISH MEDICAL JOURNAL*, 1883, i, p. 7. Collet, *Sur les kystes du Mésentère*, Paris, 1884. Dalnez, Emile, *Kystes du Mésentère*, Thèse de Paris, 1891. Doran, *Obstet. Trans. Lond.*, vol. xxiii, p. 165; *Med. Chir. Trans.*, vol. lxxviii. Gooding, *Lancet*, 1887, i, p. 311. Hahn, *Concerning Cysts of Mesentery*, *Berlin. klin. Woch.*, 1887, xxiv, p. 408. Newman, *Med. Times and Gaz.*, ii, 1862, p. 162. Ormsby, *Med. Press and Cir.*, 1883, i, p. 258. Péan, *Tumeurs de l'Abdomen*, vol. i, p. 111. Ransom, *BRITISH MEDICAL JOURNAL*, 1890, ii, p. 1062. Schwarzenberger, *Multilocular Cystoma of Great Omentum*, *Diss. Heidelberg*, 1894. Schmitt, *Multilocular Cyst of Great Omentum*, München, 1893. Greig Smith, *Abdominal Surgery*, p. 38, 656. Thornton, *BRITISH MEDICAL JOURNAL*, 1882, ii, 1242. Waldey, *Cystic Tumour of Omentum*, *Lancet*, 1889, ii, p. 642. Wells, *Diagnosis and Treatment of Abdominal Tumours*, 1885, pp. 104 and 205; also *BRITISH MEDICAL JOURNAL*, 1890, i, 1361. Barrat, *Cystic Development of Ovum*, *Pathological Transactions London*, vol. xvii, 1860, p. 192.

IMPROVED METHOD OF DEODORISING AND CLEANSING CATHETERS.

By JOHN WARD COUSINS, M.D. LOND., F.R.C.S.,

President of the Council of the British Medical Association; Senior Surgeon to the Royal Portsmouth Hospital, and the South Hants Eye and Ear Infirmary.

SURGICAL tubes and catheters are difficult to clean, and every surgeon has felt the need of some simple method by which they could be readily cleansed and effectually deodorised. These instruments are often syringed out with some antiseptic solution; but this process cannot be wholly relied on. I have frequently found catheters which had been washed out in this fashion lined with a dangerous mixture of foetid urinary products and decomposing oily matter. Catheters are manufactured, too, with hollow points, and these become receptacles for a septic accumulation which is always very difficult to remove.

Another method frequently employed consists in simply boiling the instruments in a long tin or copper vessel with some disinfecting solution, but this boiling process alone is not sufficient to secure the thorough cleansing of the interior of the tube.

At the recent Bristol meeting I exhibited a deodorising apparatus, with some special instruments and cleaning rods. The catheters are made of solid metal points, terminating in flat surfaces within the tubes, just above the first perforation. The antiseptic method I recommend consists of two stages—(1) steaming the catheters, and (2) polishing the interior of the tubes.

1. The deodorising of catheters can be very rapidly and effectually performed by the action of steam. The apparatus consists of a boiler having a capacity of about 3 pints, and capable of bearing a pressure of 80 pounds to the square inch. It can be heated by a spirit or gas jet in about fifteen minutes. The steam pipe is connected with a circular tube fitted with projecting terminals, and these are adapted to hold a complete set of catheters. Steam cocks are arranged on the steam pipe to regulate the discharge of steam, and a tray is placed beneath the instruments to collect the condensed water. Steam sprays—the relics of early antiseptic days—are still to be found in many hospitals, and these can very easily be converted into catheter deodorisers. Four tapering tubes can be attached to them capable of holding three catheters of different sizes, and with this arrangement four catheters can be steamed at the same time.

2. As soon as the deodorising process is finished, the instruments should be wiped dry with a soft leather, and their insides polished with the steel stilettes. The beak of a catheter and the corresponding stilette are represented in the woodcut. The point of the stilette consists of a flat metal disc,

which exactly fits the bore of the instrument; the stem is flexible, and terminates in a strong handle. By the friction of the disc the interior of the tube can be perfectly polished in a few minutes.

The whole process is so extremely simple that any hospital nurse can carry it out, and completely deodorise a set of catheters in half an hour. The steaming apparatus with the catheters and stilettes have been made for me by Messrs. Maw, Son, and Thompson, of London. Gum-elastic and vulcanite catheters with solid points are also manufactured by the same firm. These can be readily cleaned by the same process, but a polishing stilette must be selected which does not quite fit the bore of the tube.

The apparatus was exhibited in the Section of Surgery at the annual meeting of the British Medical Association at Bristol, 1894.

SIXTY-SECOND ANNUAL MEETING

OF THE

BRITISH MEDICAL ASSOCIATION.

Held in Bristol, July 31st, and August 1st, 2nd, and 3rd.

PROCEEDINGS OF SECTIONS.

SECTION OF OBSTETRIC MEDICINE AND GYNÆCOLOGY.

J. G. SWAYNE, M.D., President.

INTRODUCTION TO A DISCUSSION ON VAGINAL HYSTERECTOMY:

THIRTY CASES: TWO DEATHS FROM OPERATION.

By FREDERIC BOWREMAN JESSETT, F.R.C.S.,
Surgeon to the Cancer Hospital, Brompton.

MR. PRESIDENT AND GENTLEMEN,—Vaginal hysterectomy for carcinoma uteri and certain forms of uterine myoma has now become a recognised operation; but although it has been performed for some years on the Continent and in America, it is only within a comparatively short period that it has found favour in the eyes of gynaecologists in this country. The reason of this is not difficult to understand, for the mortality after the operation in former years was so great, that it was not considered justifiable to advise patients to submit to it. Practice here, however, as in other abdominal operations, has now enabled us to reduce the mortality so much, that perhaps it may be ranked as one of the most successful operations in surgery.

The cases, short notes of which I propose to place before you to-day, constitute a series of operations performed by me for malignant diseases of the uterus, and in two cases for fibroids of the uterus; the whole series were operated upon between July, 1892, and April, 1894. Twenty-eight of the cases were purely vaginal hysterectomies, and in two the organ was removed by the combined abdominal and vaginal method.

The time at my disposal is so short that I shall confine my remarks purely to the cases before us, only alluding shortly to the different methods of performing the operation

adopted by different operators, and describing in detail the operation as performed by myself. Perhaps the most important point to determine is how to select cases, and to decide which may be operated upon with the fair hope of a successful issue: first, as regards the operation itself, and, secondly, as to the chances of the patient being free from recurrence. To this, however, I shall allude more particularly when commenting upon the cases themselves. I will now proceed to describe the different steps of the operation which was adopted in all the cases I now place before you. There are three methods of operating:

1. Removing the uterus and its appendages, ligaturing the broad ligaments in segments.
2. Removing the uterus by applying clamps to the broad ligaments.
3. Removing the diseased organ by the combined abdominal and vaginal method.

Preparation.—The preparation of the patient for operation is the same in all, and success or failure depends very greatly upon this.

Vagina.—The patient should be kept perfectly quiet for three or four days or a week in bed. The vagina must be syringed out twice or three times a day with some antiseptic solution. I prefer either corrosive sublimate solution (1 in 3,000) or solution of carbolic acid (1 in 40 or 60). These injections should be made through a Ferguson's speculum; and, if there is much ulceration, the parts should be thoroughly dried with wool on uterine forceps and dusted with iodoform; then some iodoform gauze or a tampon should be applied lightly to the os and the vagina and left *in situ* until the next douching. If this is done thoroughly the most offensive cases are found to be fairly free from bad odour when they come on to the table for operation.

Bowels.—The bowels should be thoroughly cleared out three or four days before operation by means of a good dose of calomel, followed in the morning by some Glauber's salts in hot water. The salts should be taken every morning for the three days previous to operating, and on the morning of operation a large enema should be administered; by this means the bowel and rectum are thoroughly cleared.

Diet.—The diet for the week before should be light but nourishing: strong beef-tea, milk and soda water, eggs whipped up in tea or, if the patient is very low, in brandy. A little boiled white fish may be allowed once a day, and farinaceous food. By adopting this method of preparation the patient is placed in the very best condition for operation. The vagina is made as aseptic as it is possible; the uterus, from the patient being in the recumbent position, is relieved of much congestion; the bowels are emptied, and at the same time the patient's strength and general condition is improved.

Method of Performing the Operation.—The patient being placed on the table, is to be thoroughly æsthetised and then put into the lithotomy position by means of Clover's crutch, two Sims's specula are placed into the vagina which must be thoroughly douched out with carbolic acid solution (1 in 40). With a sharp hook the anterior lip of the os is caught and the uterus drawn down, the upper speculum is removed and the os seized by two pairs of vulsellum forceps, one pair securing the upper lip and the other the lower.

If the uterus can be drawn down between the vulva readily the lower speculum may be withdrawn. A sound is next passed into the bladder and its relations to the uterus defined, then, with a pair of strong scissors bent on the flat, the mucous membrane around the os is divided, being careful to keep as wide of the disease as it is possible. The next step is to separate the bladder and ureters from the uterus, and this is done entirely by means of the two index fingers, and here care must be taken to free the bladder thoroughly laterally, as by this procedure the ureters are pushed forward out of the way. The utero-vesical fold of peritoneum will now be readily recognised: this should be opened and the index fingers introduced and the membrane torn across from side to side. The next step is to open up Douglas's pouch behind—the uterus is now free before and behind. The surgeon next passes the forefinger of his left hand into the peritoneal cavity in front, and the thumb behind when he will recognise the uterine arteries. The uterus being now drawn well down, and a few nicks made