arouse the attention of the nurse or the patient who lay in the next bed.

POST MORTEM EXAMINATION. When the glottis was inspected from above before the larynx was opened, it appeared that such was the tumidity of the parts above the cords that no orifice was apparent. This was due to a general condition of œdema, which reached from the inferior vocal cords to the base of the epiglottis; the swelling was greater in the latter than in the former situation. There was thickening of the epiglottis, especially towards its base, and one of its edges was irregularly twisted. The body of the cricoid cartilages was in a great part detached from the tissues in which it is imbedded. The upper and inner part was replaced by bone, and this bone retained its unions with the soft parts, though partially separated from the adjoining cartilage. The cartilaginous part of the structure which composed by far the greatest part of its bulk, was only detached laterally. In a vertical section a channel could be traced completely round it, dividing it posteriorly from the soft parts, anteriorly from the soft parts and its own osseous portion. In a horizontal direction the separation extended irregularly for rather more than an inch. It was incomplete, except opposite to the central part of the body.

The channel contained a small quantity of pus, which was most abundant at the upper part of the cartilage, and thence led, burrowing upwards, into a sort of sinus, which extended to a level with the superior vocal cords. The separated cartilage had a natural appearance on section. The submucous cellular tissue was thickened by deposit of lymph, especially that covering the superior vocal cords, so that these structures were much rounded and enlarged. The lungs were much congested, and there were old cicatrices at both apices. The kidneys were granular.

This case is recorded somewhat fully, since it exemplifies a later stage of the disease than the two preceding ones, and a stage to which, for the most part, all these cases come, unless the disease be arrested by appropriate remedies, namely, necrosis of the laryngeal cartilages. In fact, observation seems to prove that many cases of disease of the cartilages of the larynx, attributed to so-called laryngeal phthisis, would, if accurately investigated, prove to be cases of fibro-plastic deposit due to the syphilitic virus.

Of the various cartilages the cricoid appears to be much the most frequently diseased, and of this the posterior segment, either in part or the whole. If the patient's life be prolonged, the cartilage, once necrosed, sets up irritation, followed by inflammation and suppuration; the matter formed may either point and burst internally and form a fistulous opening through which necrosed portions of cartilage may be coughed up, or it may undermine the tissues of the neck, pointing externally. When these two conditions occur conjointly, they give rise to aerial fistula—bubbles of air escaping during respiration.

RUSSIAN STUDENTS. The Russian government makes great efforts to obtain well trained medical men for civil and military appointments, and with this view sends many young Russians to study in foreign universities at the expense of the Empire. At Giessen there were last summer six such students studying zoology under Leuckart. There are so many now distributed over the German universities, that they require a special inspector, and with this office M. Pirogoff, the well known surgeon and author of the *Anatomy in Sections*, has been burdened. M. Pirogoff visited Berlin last summer to pass his special clients in review.

Original Communications.

THREE CASES OF OVARIAN DISEASE TREATED BY OVARIOTOMY.

By WILLIAM LIDDON, M.B., F.R.C.S., Surgeon to the Taunton and Somerset Hospital.

THE pathological specimens of two of the following cases, with others from the hospital museum, formed the groundwork of a paper read before the West Somerset Branch of the Association in the early part of the present year. I now submit the details of those cases, with the particulars of another which has since fallen under treatment.

CASE I. *Multilocular Ovarian Tumour, Nine Years' Duration: Ovariectomy: Death Sixty-six Hours afterwards: Tumour Twenty-three Pounds in Weight.* Mary M., aged 37, married, was admitted into the Taunton and Somerset Hospital, under the care of Dr. Kelly and Mr. W. Liddon. She had twins fourteen years previously, but had not since been pregnant. The catamenia were regular. The tumour was first noticed nine years ago.

On admission (November 29th, 1862), her complexion was pale, her hair red. She had little flesh. The abdomen was much distended, especially below the umbilicus; the circumference at the latter point was 40½ inches. A liberal diet and iron and quinine were ordered.

The diagnosis was, a multilocular ovarian cyst, with solid and fluid contents; the former much in excess; without adhesions, and accompanied with ascites.

Early in January 1863, the general health had much improved; and the patient was very desirous that an operation should be performed. After a consultation of the medical staff, ovariectomy was decided upon; and on January 29th, 1863, she was placed under chloroform by Dr. Kelly. The bladder having been emptied, an incision extending downwards from the umbilicus was made, and the surface of the tumour exposed; a large quantity of ascitic fluid escaping. Spencer Wells's trocar was introduced three or four times, but with little effect. The wound was therefore lengthened to four inches above the umbilicus, and the tumour easily tilted out. One large adhesion existed between the omentum and upper part of the tumour. The pedicle was rather short, and connected with the right ovary. After being transfixed with a double ligature, and tied, it was secured externally by Spencer Wells's clamp. The omental adhesion contained such large vessels, that it was secured in two portions, and retained externally at the upper end of the wound, as the pedicle was at the lower. The wound was closed by hare-lip pins and strapping.

The operation was well borne. On her recovery from the chloroform, forty drops of Battley's sedative solution were given.

January 30th. The bladder was relieved by the catheter. Pulse 108. There had been considerable oozing from the wound, apparently of ascitic fluid.

January 31st. The patient had a violent rigor. Pulse 150.

In spite of brandy and beef-tea injections, etc., she died on February 1st, sixty-six hours after the operation.

POST MORTEM EXAMINATION, thirty hours after death. The abdomen was much distended with gas. The wound was healed, save where the omentum and

pedicle were situated. There was no peritonitis. The clamp was still *in situ*, and was found to be placed close on the uterus. The left ovary was healthy. The head and chest were not examined.

CASE II. *Multilocular Ovarian Tumour: Extensive Adhesions; Removal of Uterus and both Ovaries: Recovery: Subsequent Formation of Pelvic Abscess, and Death.* E. H., aged 24, single, was admitted February 21st, 1863, under the care of Dr. Edward Liddon and Mr. W. Liddon, with a tumour of large size connected with the right ovary.

Menstruation had been scanty and irregular since November 1862, the date of the commencement of the disease. From time to time she had felt a dragging in the abdomen, but no severe pain. She had one child eight years previously, but had not since been pregnant.

On her admission, extending from the lower part of the abdomen upwards as far as two inches above the umbilicus, was a solid pyriform mass. There was no ascites. The tumour was apparently free from adhesions. The circumference of the umbilicus was 33½ inches. Her general health was good. There was no albumen in the urine, but she had a constant desire to empty the bladder.

During the early part of her stay in the hospital, the tumour increased slowly, but subsequently with considerable rapidity. She suffered from occasional attacks of local peritonitis and diarrhoea; the legs swelled; and ascitic fluid made its appearance. Two or three secondary cysts became prominent; one near the umbilicus was tapped, and a small quantity of fluid withdrawn. Her general health also suffered; and it became evident that operative interference could no longer be delayed.

Accordingly, on July 31st, chloroform was administered by Dr. Liddon. The solid nature of the tumour necessitated an incision extending from a point half an inch above the umbilicus downwards nearly to the pubes. A large firm band, two inches broad, extending from the right iliac fossa across the tumour to its upper and left side, was tied in two places, and divided intermediately; this afterwards proved to be the lengthened pedicle. Several cysts were tapped, without materially lessening the bulk. Adhesions existed between the whole posterior surface of the tumour and intestines; and, in endeavouring to separate these by the hand, the diseased mass broke up, and was removed piecemeal. Another cyst, apparently growing from the whole posterior surface of the uterus, and occupying the pelvic cavity, was then discovered. The connexion with the womb being of so intimate a character, it was deemed inexpedient to attempt separation. Accordingly, a stout ligature was applied to the neck of the uterus, as well as the clamp; the latter thus retaining the body of the uterus and its appendages outside the wound. The pedicle of the large tumour was connected with the right ovary, and quite a foot long. The left ovary was healthy. The wound was closed with wire sutures, deep and superficial. The patient suffered greatly from the shock of the operation.

The clamp was removed on August 8th; the included uterus having sloughed away. Adhesions had formed between the stump and edges of the wound. The former gradually retracted, carrying the integument with it, and forming ultimately a sort of second umbilicus, from which for many days a black acrid discharge freely escaped. The upper part of the wound healed by primary adhesion. The catheter was not once required. She progressed remarkably well, and was discharged cured on October 18th.

On her presenting herself at the hospital in the second week of November, the following note was

made. Her general health was re-established. The vagina was considerably elongated and drawn upwards; no os uteri could be felt. She had perfect control over the bladder.

From October 18th, 1863, to January 22nd, 1864, she performed the ordinary duties of a dairy-maid; and on several occasions walked from her home into the town and back, a distance of between seven and eight miles.

On January 22nd, 1864, she was readmitted, with supposed retention of urine. For three weeks previously, she had occasional pains in the lower part of the belly; but for three days only had difficulty in passing urine. She was fat and muscular, but suffered acute pain in the hypogastrium; her legs were drawn up, and she experienced great difficulty in micturition. She had shivered much, and was sick and feverish. A firm and irregular swelling, slightly elastic and very tender, occupied the right side of the hypogastric and iliac regions. The urine was very scanty and highly albuminous. The bowels were not moved for eight days, but afterwards diarrhoea set in. During this period, the tumour reached the umbilicus, distending the lower part of the cicatrix, where it ultimately pointed and burst, giving exit to a most offensive blackened slough, sero-purulent discharge, and finally feculent matter. She became emaciated, and died on May 6th.

POST MORTEM EXAMINATION. On opening the abdomen (a portion of the walls being left around the artificial anus), the small intestines lay completely matted together, occupying the pelvis. The interior of this mass was a large cavity, communicating with the external wound, and running upwards into the substance of the right psoas muscle, and outwards into that of the iliacus. It was, in fact, a large abscess, bounded much as follows: in front, by the abdominal walls and bladder; laterally and above, by the matted intestines; below and behind, by the top of the vagina and rectum. On opening this, three or four communications were found to exist between it and different points of the intestines; whilst in other parts the serous coat of the bowel was its boundary. The vagina terminated in a puckered cicatrix. The liver was pale and enlarged.

For notes of the above cases, I am indebted to Mr. F. W. Gibson, the house-surgeon of the hospital.

CASE III. *Unilocular Ovarian Cyst, Twenty-six Pounds in Weight: Ovariectomy: Recovery.* Miss —, aged 18, single, consulted my father, Mr. Henry Liddon, in the autumn of 1863. She was suffering from a large unilocular ovarian cyst, of two years' duration. As the tumour was increasing rapidly, and fluctuation very distinct, with the sanction of the late Dr. Burridge, a trocar was introduced, and about a pint of thick viscid fluid, like white of egg (becoming solid on boiling) escaped with great difficulty.

Messrs. Alford and Cornish also saw this patient in consultation. Extirpation was recommended; and on February 4th, 1864, chloroform having been given by Dr. E. Liddon, and with the assistance of Drs. Kelly, Penny, and H. J. Alford, in addition to the above named, ovariectomy was performed. The tumour was a single cyst; and, from the tenacity of its contents, not lessened by the trocar; it therefore required an incision extending above the umbilicus, and was removed as a solid tumour. There were no adhesions. The pedicle was broad and short (connected with the left ovary); it was transfixed, and secured by double ligature and clamp. The right ovary was quite healthy.

The clamp was removed on February 7th; and, excepting at the point where this had been placed, the wound had joined by first intention, and was quite

healed by the end of six weeks. The recovery was greatly retarded by an irritable state of the intestinal canal, associated with diarrhoea and flatulence; the latter to such an extent, that one or two of the deep wire sutures snapped, and opening up of the wound threatened.

For their valuable and numerous suggestions in the after-treatment of this case, I am greatly indebted to Dr. Liddon and my father.

November 1864. This patient is quite well.

REMARKS. Ascites and œdema of the lower extremities existed in the first two cases, being due to pressure, and indicating in the second case the rapid growth of the disease. Though ascites is not a desirable complication, yet its presence in each of these cases afforded valuable evidence in concluding that the anterior surface of the tumour was unattached to the abdominal wall; this being made manifest by placing the patient in different positions, and watching the wave of fluid beneath the attenuated parietes.

In the first case, only one adhesion existed; and the chief characteristic of this was not so much its extent as the size of its vessels. For the latter reason, it was viewed in the light of a second pedicle, and retained outside the wound; the upper part being chosen, to avoid any dragging that might have subsequently taken place, had it been included in the clamp with the true pedicle. The unfortunate issue of this case prevented any true estimate from being formed, of this mode of dealing with adhesions of a formidable character.

In the second case, at the outset, the lengthened pedicle crossing the tumour was a source of difficulty, as its true nature was by no means clear. To account for its unusual length, the tumour originally, no doubt, was freely moveable, and afterwards rolled over on itself, its upper surface forming attachments below. The posterior adhesions, fortunately, though extensive, were recent; therefore easily separable, and non-vascular. The breaking down of the mass during the operation for some minutes complicated matters, it being far from clear whether or not hæmorrhage was taking place. Luckily, such was not the case; the bloody fluid within the abdomen being that of the broken-down tumour.

In dealing with the uterine adhesions, two proceedings were open for adoption—the one above described, or the clipping away of the cyst-wall excepting where adherent. The latter was not chosen, for the following reasons. 1. It would have been a matter of nicety, and taken some considerable time, which was of great moment, from the exhausted condition of the patient. 2. A number of small cysts were also attached to and growing from its free surface, some of which might have been possibly left behind, and formed the germs of a recurring disease. 3. From the successful result of a case recorded by Dr. Clay, who purposely removed the uterus, with a large tumour (uterine) attached.

The final result of Case II must be looked upon in a great measure as accidental, and as an example of what frequently happens in overtaking the strength of tissues recently concerned in the process of reparation.

One remark in conclusion. The use of the catheter was not called for after the operation in the second and third cases—a circumstance to be wished for on future occasions, and probably attributable to not carrying the incision too near the pubes.

FOOD FOR PIGS. In France they are feeding pigs on rice with great success. Porkers gain 25 kilogrammes in weight for every 100 kilogrammes of rice consumed. They are allowed to eat the rice as we are bread at the restaurants—à discretion.

Transactions of Branches.

BENGAL BRANCH.

CASES OF TYPHUS FEVER IN CALCUTTA.

By S. GOODEVE CHUCKERBUTTY, M.D.

[Read October 11th, 1864.]

As typhus fever has been hitherto supposed to be unknown in Bengal, the following cases are submitted, in the hope that their details may prove of interest to professional inquirers on this subject.

CASE I. Joseph Harlgrove, aged 25, a Portuguese seaman, of good constitution, was admitted into my European male ward on July 5th, 1864, with a fever of eleven days' standing. When taken ill, he was living in the "Irish Flag," a low boarding-house, situated in one of the filthiest parts of the town, and generally crowded by men of his class.

On admission, he was ordered to have an ounce of the liquor ammoniæ acetatis mixture of the hospital every four hours, milk and sago for diet, and congee water to drink.

On the 6th, his pulse was 100, moderately full and weak. There were numerous mulberry patches all over the body; some gurgling in the left iliac fossa; considerable headache; skin congested and hot; tongue dry, covered with fur about the centre, but clean and red at the edges; eyes ferrety; one large stool passed without griping or straining; some cough; pain in both knee-joints, more in the left; face flushed; no enlargement of the liver or spleen; no exacerbation, remission, or intermission. He was ordered

℞ Quinæ sulphat. gr. v; pulv. Jacob. ver. gr. ij; sodæ carbon. gr. v. M. Fiat pulvis ter die sumendus.

The head to be shaved, and cold applied to it.

July 7th. He was in much the same state as on the previous day. The skin of the body was still generally congested; and patches on the abdomen appeared to be vesicating partly. There was great prostration of strength. The medicines were changed to quinine and Dover's powder, five grains of each every four hours. The acetate of ammonia mixture was continued. A blister was applied to the left iliac region; and the cold to the head continued. Diet: milk, sago, and beef-tea.

July 8th. Pulse 112, exceedingly feeble; respiration 28; appetite bad; cough less; passed urine, but no stool; skin hot and dry; tongue very dry, glazed, and red at tip; face flushed still; slept; headache less. The Dover's powder was omitted; and beef-tea and port wine were ordered for diet.

July 9th. He had one scanty motion; no gurgling; tympanitis less; took his nourishment, though little at a time; was at times delirious; skin hot and dry; pulse 120.

July 10th. Two stools since last report; was restless and delirious during the night; skin moist, but still hot; face flushed; headache, cough, and cutaneous rash less; tongue dry, and covered with a thick yellowish-brown fur in the centre, dull red at the apex; lips dry and parched; gums and teeth covered with sordes; wandering in his mind. He was ordered to omit the acetate of ammonia mixture; to continue the quinine; and to have one ounce of stimulant mixture every hour.

July 11th. Pulse 100, excessively small and faltering; respiration 40; delirium about the same; skin dry and of a purplish colour; epidermis on the arms desquamating; lips and teeth covered with sordes;