

nowise interferes with its antiseptic quality; and, as the same gauze will bear ten or fifteen boilings and impregnations, it becomes a very cheap preparation.—*Med. Times and Gazette*, Aug. 23, 1879.

Catgut as a Source of Infection.

Prof. ZWEIFEL, of Erlangen, reports (*Centralb. f. Chir.* No. 12, 1879) a case where twelve days after closing a very small vesico-vaginal fistula with a catgut suture, the patient had pyæmia and died. The *post-mortem* examination proved that the infection could only have taken place from the pelvis. The instruments used for the operation had been kept in carbolic acid for many hours before the operation, so that the infection could only be ascribed to the catgut. Professor Zweifel was confirmed in his suspicion by reading an article in a foreign journal where a similar occurrence was related. It had been a case of ovariectomy. The operation had been performed with all possible antiseptic precautions, and the patient had died of pyæmia. This led to a microscopic examination of the catgut, which was found to contain bacteria. Herr Zweifel had some catgut which he was going to use in an operation for ovariectomy examined under the microscope, and a large number of bacteria were discovered in it. As the catgut had always been kept in carbolized oil, this seems to prove that bacteria possess a certain immunity against carbolic acid. In what way the microscopic organisms penetrated into the catgut is not quite clear. The author thinks that it is very probable that they may have been developed even in the well-stoppered bottle, as carbolic acid is very apt to evaporate, especially if kept in a warm room. This circumstance may possibly explain many cases of death from pyæmia, which has supervened in spite of the most elaborate antiseptic precautions.—*Lond. Med. Record*, Aug. 15, 1879.

Treatment of Cancer of the Thyroid Body.

Dr. C. KAUFMANN, of Berne, in the concluding section of an elaborate contribution on malignant struma—primary sarcoma and carcinoma of the thyroid body, gives the following instructions as to treatment (*Deutsche Zeitschrift für Chirurgie*, Band ii, Heft 5 and 6). Extirpation has been rarely performed, and, in most instances, with a fatal result. The attention of surgeons has, however, again been directed to this operation in consequence of the success that has recently attended its performance in two cases of cancer of the thyroid body under the care of Billroth. The prospects of recovery after such proceeding can never be regarded as favourable, but still the question of operative interference is usually considered in the presence of a certainly fatal affection of any superficial organ. Two operations have been proposed for the removal of cancer of the thyroid; scooping out of the growth—*Évidement*, and extirpation. The former operation is applicable only to recent cases and those in which the morbid growth is not very extensive. The structure of the tumour must be soft and pulpy. *Évidement* is a much less dangerous and less difficult proceeding than extirpation. The success of the operation will depend, on the one hand, on the removal of the whole of the growth by sharp spoon and canter, and, on the other hand, on the absence of any metastatic growths. When the cancerous growth is large and its structure firm, no operation short of total removal of the thyroid body can afford any chance of permanent relief. This operation, to be successful, must be performed at an early stage of the disease, since primary cancer of the thyroid body is speedily associated with metastatic deposits in other organs. These conditions being favourable, the operation is further indicated when there is no very extensive adhesion of the skin to the front of the diseased thyroid body, when the tumour rises during movements of deglutition, and so does not

extend far towards the mediastinum, when the borders of the tumour are well defined, and when the whole mass is freely movable in all directions.

Unfortunately, it will always be very difficult to make out before operating whether there be any adherence or not of the tumour to muscles, large vessels, trachea, and œsophagus. Extirpation, even when performed under the most favourable conditions, must necessarily be a prolonged and tedious operation. The administration of an anæsthetic is usually attended with much difficulty in consequence of stenosis of the trachea, an almost constant result of malignant enlargement of the thyroid body. Whether in cases of isolated disease of one lobe, the whole thyroid body, or merely the affected part, should be removed, would depend on circumstances, especially on the size of the portion of gland remaining free. The safer course would be total removal. Dr. Kaufmann is of opinion that the proceeding of extirpation, if applied at an early stage of the disease, and with attention to antiseptic measures, will, in future, have better results. In too many cases, however, of cancer of the thyroid body, the patient applies for relief at a late period, and when the growth has attained a considerable size, and has contracted extensive adhesions to the skin in front of the neck, and to the trachea, œsophagus, and other important deep-seated structures. With extirpation, as with *évidement*, the chief element of success consists in submitting the patient to operative interference at the earliest possible period. The rule that applies to the management of other superficial malignant growths applies with still greater force to like disease of the thyroid body; the sooner the surgeon interferes the more easily will the operation be performed, and the more complete will be the cure.

When the disease is too far advanced to permit of any operation for its removal, the treatment should be directed to the relief of the effects of tracheal stenosis and of difficulty in deglutition, and to the reduction of profuse and exhausting discharges of pus from the ulcerated growth. The relief of the patient in a case of tracheal stenosis from the pressure of the enlarged thyroid body is usually attended with much difficulty, in consequence of displacement of the air-tube. The only operations that can be performed for opening this tube are crico-tracheotomy and inferior tracheotomy, and of these, the latter, when practicable, is to be preferred. The former may be attended with this disadvantage: the canula being applied at the seat of the stenosis is liable to cause, through pressure, perforation of the wall of the trachea, and so to favour the penetration of portions of the malignant growth into the air-passages. When the cancerous thyroid body extends downwards to the root of the neck and cannot be dragged upwards, crico-tracheotomy is the only operation that can be performed. When, in consequence of the extent of the tumour, it is necessary, in order to reach the air-tube, to divide some portion of the diseased gland, this may be best done by the application of the thermo-cautery. The diseased structure can be divided with much less hemorrhage and with greater rapidity by the application of this agent than by the use of the knife. When the wall of the trachea has been involved in the disease, tracheotomy may be attended with indirect changes, in consequence of some free portion of the soft cancerous structure being drawn into the canula. The operation is indicated chiefly in those cases in which the respiratory disturbances have just commenced. It is very necessary to support the strength of the patient in cases of malignant struma. The obstruction to deglutition will necessitate the use of the œsophageal tube in feeding, and subsequently the use of clysters. A like danger to that attending the wearing of a tracheal canula may follow the passage of a long tube into the stomach, the wall of the œsophagus may be perforated, and portions of cancerous growth penetrate into the alimentary canal.

The amount of suppuration may be reduced by removing from time to time ulcerated and gangrenous portions of the cancerous growth. This may be done by the use of the knife or sharp spoon, or by applying the actual cautery, and the raw surface should then be submitted to the action of a strong solution of chloride of zinc. By such treatment, rapid breaking down of the tumour, and consequent profuse discharge, may be controlled to a considerable degree.—*London Med. Record*, Aug. 15, 1879.

Excision of Pylorus.

M. PÉAN, the well-known surgeon of St. Louis Hospital, has recently performed an operation which has considerably occupied the minds of the medical world in Paris. The patient was a man suffering from cancer of the pylorus, and was, at the time of the operation, in the last stage of cachexia, he not being able to retain any food in his stomach, and having to rely almost entirely on nutritive enemata for sustenance, which, as usual, were found to be insufficient. He accordingly applied to M. Péan to take some operative measures to relieve him, or, if nothing could be done, he was decided, he said, to put an end to his life. M. Péan, rather reluctantly, agreed to comply with the entreaties of the patient and his relatives, and decided to attempt an operation. An incision, about ten centimetres in length, was made on the left side of the umbilicus and parallel to the linea alba. When the peritoneum was opened the stomach was found to be considerably dilated, extending downwards as far as the pubic arch. Its walls were greatly hypertrophied. The peritoneum did not seem to be affected in any great degree. The pyloric portion of the stomach was then gently drawn forwards, when it was found that the growth measured six centimetres transversely and four in a vertical direction. The whole of this mass was excised, as was also a portion of the epiploon, which was diseased. The two surfaces of section were then drawn in contact by means of catgut sutures. No liquid of any kind was allowed to enter the peritoneal cavity during the operation. The abdominal wound was closed in the ordinary manner. The operation lasted two hours and a half. For the first two days after the operation the patient was fed by the rectum, but on the third day some food was allowed to be introduced into the stomach. During the first three days the pulse remained alarmingly weak, consequently it was decided to perform transfusion. Fifty grammes of blood were introduced into the median cephalic vein on a first occasion, and subsequently eighty more were injected. Unfortunately his condition did not improve, and he died on the night of the fourth day. He had shown no signs of peritonitis during these four days. It is much to be regretted that it was not possible to obtain permission to perform a necropsy, as it would have been highly interesting to see what had become of the catgut sutures, and to know whether the intestinal wound showed any signs of uniting.—*Lancet*, June 7, 1879.

Extirpation of a Floating Kidney.

Dr. A. W. SMYTH, of New Orleans, records (*New Orleans Medical and Surgical Journal*, Aug. 1879) the following successful case of extirpation of the kidney:—

Mrs. H. A., aged 35, childless, of medium stature and delicate build, consulted Dr. Smyth in April, 1879, and gave the following history of her case:—

Eight years previously, she began to be afflicted with a pain in her right side. Shortly after the commencement of this pain, she discovered a tumour in her right side, to which she attributed her suffering. She tried various remedies for the relief of her pain, without any benefit. In 1873, Drs. Wilkinson and Callo-way, of Galveston, performed on her the usual operation for ovariau tumour,