flammation of the upper air passages, as tympanic or labyrinthian deafness or laryngitis.

Physiologically the nose warms the respired air, frees it from foreign material before passing into the lungs, protects the air passages, and through the sense of smell warns its possessor of the presence of pleasant or irritating gases, or noxious substances, and its lining is the first part of the respiratory tract to become irritated and chronically congested, or inflamed, and extending by continuity of tissue to the pharynx, tonsils, larynx, trachea, eye, frontal, ethmoidal and sphenoidal sinuses, and to the antrum, Eustachian tubes, and aural apparatus.

THE CLINIC.

CLINICAL LECTURE DELIVERED NOVEMBER 13, 1889, AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

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[Reported for THE JOURNAL.]

ABDOMINAL TUMOR, WITH ADHESIONS.

Gentlemen: I must do a little gold beating to-day. By this I mean, that as a small piece of gold is beaten out into a large leaf, so I shall have to spin out what I have to say to-day out of a very small text. I have comparatively little material to bring before you and no operations to fill up the hour. To begin our gold beating:—Day before yesterday, I received from a physician a note, telling me that there was in a small alley in the suburbs of this city, a very poor woman with a uterine tumor, and asking me to get her into the hospital. Therefore, yesterday the ambulance was sent for her and she was brought into the female ward. This morning I bring her before you without having seen her, in order that you may learn how to make a diagnosis.

She has a large and solid tumor in the right side of the abdomen, which extends very nearly to the liver, and is almost immovable by adhesions. This you can plainly see as I expose her abdomen. She says that she is fifty-six years old and the mother of thirteen children, that her monthlies ceased one year ago, that this tumor has existed for several years, and that it has been getting larger and larger since her menopause. She suffers a great deal of pain from this tumor, and has now a frequent pulse and high temperature. Her tongue is dry and red, and she has the hebetude and dulness of sense, due clearly to blood poisoning, probably from the presence of pus somewhere.

I see upon her abdomen what I at first took to be the scar of a burn; but she tells me they came from a child-bearing and now, upon observing them more closely, I find that she is right. They are lineæ albicantes, old ones stretched open from previous pregnancies and, therefore, white and glistening; not purple, as they would be, if they were of recent origin.

The tumor presents the feature of a fibroid of the womb, but constant pain is rarely associated with such a growth, when it lies above the pelvis, then again septic symptoms should not be present. It is clearly not a cyst, for it is too hard and nodulous. Can it be a malignant growth? a sarcoma or a carcinoma? The latter could not have lasted so long as six years, nor could a sarcoma, unless the growth were first benign, and had later taken on malignant degeneration. Again, a uterine fibroid tumor has but few vascular attachments and requires but little blood for its sustenance. Therefore, very rarely, if ever, does it become converted into a malignant growth, which needs a large supply of blood for development. For this reason, we find cancers flourishing in the more vascular tissues, such as the cervix uteri, the breasts, the lips and the stomach.

But before I exclude cancer or sarcomatous tumor, it is right for me to examine her womb. I find that this organ is movable and healthy, and that the tumor has apparently no connection with it. You see that the sound gives a measurement of only three inches, and the motion communicated to the tumor does not agitate the sound. Yet it might possibly be a pedunculated fibroid of the womb, with high parietal attachments. Why then, does it not grow smaller after the menopause? As a broad rule with, however, some exceptions, uterine tumors that grow larger or make their first appearance after the menopause are usually malignant.

I must confess that I am puzzled, so let me go over her history again: She says that this tumor began in the right side, high up and, in fact, it encroaches upon the liver. Now here is a special point that I wish you to remember. If this were a growth from the liver, I should not have this narrow ribbon of resonance between the tumor and liver, hence it is not hepatic. But the growth dips down on the right side toward the kidney and extends horizontally across to the abdomen. Yet her micturition is not frequent. Her urine has been examined with negative results, and she persists in saying that she has had this tumor for six years. (The patient was now removed.)

I confess, gentlemen, that I am perplexed in making a diagnosis. I can not but think that we have here a malignant growth, either a sarcoma of the omentum or a malignant tumor of the right kidney. The pain, the increase in size since the menopause, the septic symptoms, the nodulous character of the tumor, the age of the

woman, all point to malignancy. In view of this doubt in my mind I shall get this woman to stay here in the hospital for some time, both that I may watch her symptoms and otherwise study her condition, and also that she may have the proper food and be built up; for she is now in too weak a condition to undergo an operation. After she has improved I shall make an exploratory incision into the abdomen and be governed by what I shall find.

After all then, gentlemen, instead of teaching you how to make a diagnosis, I have taught you, what perhaps is as important, how not to make a diagnosis. It is very humiliating for a specialist on abdominal tumors to confess that he is puzzled to make a diagnosis in this or any other case: But, gentlemen, you will find out when you get to be as old as I am, how little you actually do know. Often, time will throw light on an obscure case. Then an exploration incision will throw more. But even this will sometimes fail, for last week I removed before you a very large pelvic tumor, the nature of which I do not know. Both ovaries and tubes were healthy and left behind, yet there was a pedunculated tumor coming off from the broad ligament. I sent it to Dr. Formad, but have not yet got a report from him.

FIBROID TUMOR WITH ADHESIONS.

This is an interesting case which Dr. Taylor and I treated in conjunction. She has multiple fibroid of the womb, which has universal attachments to the pelvic peritoneum. She was brought into the hospital very ill indeed and with all the symptoms of septicæmia, showing the presence of pus somewhere. But we could not discover where it lay. I aided Dr. Taylor in the operation. After cutting down in the median line of the abdomen, he found a womb gnarled with multiple fibroids and with adhesions to all the pelvic organs and tissues so intimate and so numerous, that no topographical outlines could be made out. There were no ovaries, no tubes and no bladder to be recognized. Enlarging the incision, Dr. Taylor discovered behind the tumor and adherent to its whole surface a pus sac. This was accordingly aspirated and found to be full of stinking pus. It was probably an ovary, but so closely adherent to the tumor that it seemed to be growing from it, and there was no possibility of removing it. After washing out the abdomen and especially the sac, the opening of the latter was stitched to the abdominal incision and a glass drainage tube was inserted. The object of the tube was to keep the sac empty, and to make its walls collapse. Just as we put drainage tubes into any kind of abscess, and compress its walls together by bandages, so we put in a drainage-tube into the pus sac, and compressed its walls together by a large pad of cotton and an abdominal binder. The sac was then washed out once a day with carbolized water.

At the end of a week we changed the glass to a rubber tube, which being elastic is not so dangerous. She has done extremely well and the tube has gradually been pushed out by the closure of the abscess, until it goes in only three inches, and in two more weeks she will be ready to go home. These abdominal pus sacs should, when it is possible, be always removed. Yet when they can not be enucleated, it is wonderful how quickly they sometimes will heal up when drainage is employed. They heal up far more quickly than ovarian cysts which can not from adhesions be removed, and which are then treated by drainage.

THE TREATMENT OF FIBROID TUMORS BY ELECTRICITY.

There has been a good deal written and said of late in favor of and against the treatment of fibroid tumors by electricity. The extreme positions assumed by the opposing parties have reminded me of the two knights of ancient fable who, after a sore battle to decide whether the statue before them was of gold or silver, fell grievously wounded each one on that side of the statue which his antagonist had first occupied. They then found to their cost, that each one was right and each one was wrong, for the statue had a golden side and a silver side. Each one held a half-truth, between them they held the whole truth. So when I hear one gentleman advocating nothing but the knife for fibroid tumors, and another as earnest in pushing the claims of electricity, I say to myself, each gentleman holds a half truth, but unitedly they hold the whole truth.

There is no doubt that electricity will sometimes stop the hæmorrhage, and this is in itself a great gain; but whether the tumor will ever become smaller or disappear is yet an open question. The advocates of the knife, with much truth contend, that, granting the hæmorrhage is stopped, the ovaries are themselves greatly diseased in cases of uterine fibroid, and no amount of electricity can cure them. This is a strong argument and it has very frequently been verified by me, when removing the ovaries for fibroid tumors. For instance, only three days ago I removed, at my private hospital, the ovaries of a lady on account of a bleeding and painful fibroid tumor of the womb. Each ovary was found to have undergone fibroid degeneration. Usually, in cases of uterine fibroid, the ovaries are either much diseased or they contain pus-cavities. Sometimes, however, the ovaries are perfectly healthy, no matter how large the tumor may be; but these are exceptional cases. On the other hand, at the change-of-life fibroid tumors generally cease to grow, unless they undergo cystic degeneration. In other words, the woman either ceases to suffer, or she recovers her health after the menopause

has become established. Now, if a woman with a bleeding fibroid can by the means of electricity be tided over to the menopause, a very great point has been gained. But how are we to know when a uterine tumor is benign and amenable to electrical treatment? I can answer this question better by telling you when they are malignant. When uterine tumors appear in woman after the change of life they are usually malignant. If the uterine tumor appears before the change-of-life and, after the change-of-life, keeps on growing, it is generally malignant, unless it happens to be a fibro-cyst. As a broad rule, with the exception of ovarian cysts, all abdominal tumors that appear after the change-of-life, are usually malignant, unless they are of malarial origin.

The subject of the treatment of bleeding and of growing uterine fibroids by means of electricity is the burning question of the day. I am yet on the fence, although I know that in one case, electricity for the time being checked a very bad case of hæmorrhage; in fact it saved my patient from what Homer calls "The purple death." My advice to you is that, if you can not stop the bleeding by the systemic use of quinine, sulphuric and gallic acids, digitalis, ergot or turpentine; or by the internal applications of vinegar, iodine, nitrate of silver, tannic acid or Monsel's solution, you may send the case to a competent electrician.

I put Monsel's solution last, because it is liable to form a firm and hard clot, which stays behind in the womb and undergoes dangerous decomposition. I have nearly discarded it from my gynecological practice, except in rare cases of capillary oozing on the surface of the abdominal walls of the bowels after ovariotomy, and only in those cases in which Paquelin's cautery is ineffectual or it is inadmissible. But you must not suppose that electricity is altogether a harmless remedy. Repeated cases of death have been reported, and I must honestly confess that I am surprised that more have not occurred, considering the heroic dosage of electricity that is resorted to.

MEDICAL PROGRESS.

THE COLD BATH IN TYPHOID FEVER.—M. JOSIAS reports his experience in the systematic use of the cold bath in the treatment of typhoid fever. During the years 1888 and 1889 he has treated in various hospitals 36 cases by this method, giving the bath at 18° every three hours when the bodily temperature reached or exceeded 39°. One patient died, the mortality therefore being 2.77 per cent. Regarding sex 29 patients were males and 7 females. The cases treated may be divided as follows: Benign, regular and hyperpyretic, 27; grave, with or without complications, 9; relapses, in spite of the cold bath, 4; relapses, treated by the cold bath when the cases had previously been treated by another method.

These 36 patients took 2,227 baths at 18°, an average number of 61 for each patient. The baths were always begun as soon as the diagnosis of typhoid fever was definitely determined, and they were never suspended except temporarily in cases of intestinal hæmorrhage. Menstruation, symptoms of broncho-pneumonia and albuminuria were not regarded as contraindications for the treatment. There was no occasion to regret perseverance in the treatment. Thanks to the baths, the fever exhibited nothing of a typhoid character save the name. Patients treated in this manner are not prostrated; they present no torpor; they remain conscious and lucid; the tongue is moist and thirst is intense, a condition that enables one to administer 4 or 5 litres of alimentary or other fluids daily. There is diarrhœa and excessive polyuria, but these discharges are to be regarded as a means of carrying off the excessive waste of the organism and as consequently of real advantage, the more so because this washing out is effected by the aid of bouillon and milk, whereby the patient secures the advantage of superalimentation the effects of which are easily controlled. The patients above referred to did not lose much in weight and only moderately in strength, losing from 1 to 2 kilo. in eight days, and being able without much effort to get in and out of the bath. The analysis of these 36 cases shows that refrigerating treatment more than any other seems to successfully combat the fever and adynamia and place the patient in the best condition of resistance to the disease. These statistics united to those of MM. Juhel-Renoy and Richard make a total of 130 cases of typhoid fever with 6 deaths, *i. e.*, a mortality of 4.61 per cent.; whereas the general mortality from typhoid fever in the hospitals of Paris is from 14 to 15 per cent.—*La Sem. Méd.*

ABSENCE OF VAGINA.—M. PICQUÉ, of Paris, reports the case of a young woman who presented a total absence of the vagina and an infantile uterus. The vulva was normal. There was an absence of all signs of menstruation, although the ovaries were normal; this was probably due to the malformation or absence of the uterine mucous membrane. Following the suggestions of Dolbeau and Le Fort the operator attempted to remedy the principal defect. Amussat's procedure was adopted. A fibrous cord was found which served as a surgical guide but constituted an actual obstruction to the operation itself. The mucous membrane of the vestibule was made to slide back upon the posterior wall of the new vagina, while the integument of the perineum was made to cover the anterior wall. The reporter believes that this manœuvre is useful as a means of pre-