believes that it has been stated that septicæmia comes on if at all about the third day and so he suspects if there is a rise of temperature then and intra-uterine treatment should be substituted.

DR. CONWAY stated that he seldom uses antiseptic treatment in midwifery; in fact he has only used it twice in treating 1500 cases and neither time was he satisfied with the results. Cleanliness, however, is all important and it is on this that he relies.

DR. ELLIOTT mentioned the case of a lady whom he had delivered the day before. She had a history of having been delivered two years previously and having a temperature at that time of 103° and 104° F. and later she had typhoid treatment in the City Hospital. For four days before this last delivery her temperature was 104° F. and her pulse was 120, but as soon as she was delivered the temperature came down to normal.

DR. STEVENS remarked that his experience had been a little different from Dr. Gerry's in that he has found that a rise of temperature on the third generally means that the flow of milk is being established, and further that when septicæmia is present it frequently comes on not till the fifth to sixth day and it may be delayed until the seventh day.

DR. KELLER asked if a microscopic examination of the specimen had been made? [answer by Dr. Gerry—No]. The Doctor then remarked that septicæmia comes on later than the third day, but yet if a chill comes with a rise of temperature on the the third day, then look out.

DR. BROWN, the President, said that he had enjoyed the valuable paper very much. The question arises, was the death of the first child probably due to this tumor. This he thinks is not the case. The woman was delicate and this tumor is probably a submucous fibroid. Septicæmia generally comes from the fourth to the seventh day but there is no regularity about it. The idea now prevails that there is no such thing as milk fever as such and that the rise on the third day is due to a commencing septicæmia.

DR. FRISBIE in conclusion said that the womb contracted to about the size of a small orange within a few hours after delivery. As all of the membranes came away he had no suspicion of anything wrong and so there was no indication for the curetting, etc., that had been mentioned.

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THE INTELLIGENT FOREIGNER ON BRITISH PIETY.—According to the *Zeitschrift des Oesterr. Apoth. Vereins*, a special prayer-book for medical men has just been published in England. It contains a selection of suitable prayers for delivery on the occasion of surgical and other operations. There should be a companion prayer-book for the patient.

# FOREIGN CORRESPONDENCE.

## LETTER FROM PARIS.

(FROM OUR REGULAR CORRESPONDENT.)

*The Chirurgical Treatment of Tuberculous Peritonitis.*

At a meeting of the Chirurgical Clinic at the Hôpital de la Salpêtrière, M. le docteur Terrillon took for his lecture the following interesting study, viz.: "The Chirurgical Treatment of Tuberculous Peritonitis." A report of this lecture is just published of which I here give the contents.

We are about to study to-day an affection which has for a long time almost exclusively belonged to medicine, but which falls more and more under the dominion of surgery. I wish to speak of tuberculous peritonitis, of which we have, at this moment, an interesting example in our hospital.

You have been able to see, just now, in my ward, a young girl of sixteen years, pale, meagre, who presents a particular deformation of the abdominal region. The stomach is globulous, pointing forwards, as that of a woman affected with a cyst of the ovary. To profile, especially, this analogy is striking.

When one feels the abdomen, one becomes easily enough sensible of a rounded mass, as globulous, which fills it entirely. The surface of this mass is not smooth as that of a cyst of the ovary, but granulous and irregular.

If one control by percussion these data furnished by the palpation, one is astonished to find everywhere a quantity of sounding bodies. There is only then in some sort an appearance of tumor.

If we touch afresh the abdomen, in order to examine it more carefully we shall then be able to perceive two new signs which will aid us in forming the diagnostic: There is, firstly, a sensation of snowy friction that one perceives in depressing lightly the lateral parts of the stomach; in the second place, some little grumblings of the bowels provoked by the profound pressure, one describes them under the name of "intestinal cries."

In presence of these phenomena, in order to assure to the diagnostic a greater precision, we have submitted the patient to the chloroformic anæsthesia. Once the muscular resolution obtained, we have proved that the abdominal wall relaxed itself a little. The appearance of abdominal tumor becomes less clear to the palpation, but one feels the small hard granulations, disseminated on the surface of the intestines. In the left flank, and more particularly in the right flank, one finds two or three masses of about the size of a mandarin. The peritoneal friction is found again upon nearly all the points of the stomach. We have equally practiced the rectal touch, which has not given us any important token.

Thus, in this case, we are in presence of an affection of peritoneum having provoked a secondary contracture of the muscles of the anterior abdominal wall, contracture which gives place to an appearance of tumor. This is, besides, a fact well known and that one observes in many circumstances, and I have been able to show you, some time since, several hysterical women who have been sent to me with the diagnostic of cyst of the ovary, and who had in reality, only contracture of the abdomen with tympany.

Nevertheless, between these abdominal symptoms of simulating hysteria, a tumor and the actual case, there exists a capital difference. With the nervous the appearance of tumor disappears completely under the influence of anæsthetic sleep. Here, on the contrary, the stomach, in becoming altogether more supple, presents, under the wall, some hard, resisting parts, superficial with respect to the intestine; that which indicates a lesion of the peritoneum.

Our patient is then affected with a tuberculous peritonitis. Her clinical history comes besides to the support of the physical exploration in order to confirm the diagnostic.

She has always been unhealthy and pitiful. Three years ago, she had already suffered during several months, of the stomach, at the same time she complained of vomitings and of diarrhœa. Her affection probably dates from this epoch. Afterwards, all had resumed its original order, when in the month of January last, the same troubles have reappeared, with more violence, at the moment of the appearance of the menstrual discharge. The patient has, since this period, suffered from sharp abdominal pains; some frequent and returning vomitings during several days, afterwards discontinuing, have much fatigued her. Finally, she has presented some alternatives of constipation and of diarrhœa. Since about a month, she has been ordered to keep her bed.

In presence of these functional troubles, the doubt is no more possible: we have to do with an unlooked for tuberculous peritonitis, without appreciable cause, in a young girl, and this is a fact frequent enough.

It rests with us to discuss the treatment that we ought to institute for this patient. But before doing so, I wish to describe to you, in some words, the lesions of the tuberculous peritonitis, its march and its complications.

I will not insist on the pathological anatomy of this affection, and I will only recall to you the particularities thereof which are essential to know in a surgical point of view.

You know that, when one examines at the autopsy, or at the course of a laparotomy, a tuberculous peritoneum, the lesions show themselves under two aspects very different.

In the first case, the parietal serous, as the visceral serous, is recovered with tuberculous granulations. These granulations remain often isolated as a seed bed to the surface of the peritoneum, and provoke an ascitic effusion more or less abundant. This form of tuberculosis has received the name of "ascitic form." Sometimes this ascitic tuberculous peritonitis presents some characters enough specious. At the same time as the ascites, are produced some false membranes which partition the effusion in several isolated bags. It is then than one often confounds peritoneal tuberculosis with an abdominal tumor, above all with a cyst of the ovary.

The second form is more rare; it is characterized by the absence of liquid, thus it has received the name of "membranous form." In this case, the tuberculous granulations, in irritating the peritoneum, have provoked the production of false membranes which retie the intestinal ansæ and the large epiploon in an irregular mass adherent to the abdominal wall. In these plastic, membranous forms, are often formed some centres of encysted suppuration, of which the volume is sometimes considerable.

The march of the malady is no more susceptible of a uniform description. In the great majority of cases, tuberculous peritonitis is a chronic affection; but it is not rare to see it commence by an acute state, as with our patient, and present successively some remissions and some outbursts-ings. Nevertheless the ascendant chronic march accompanied with accidents of the side of the intestine, is the most common.

An important fact, upon which I desire to insist, is that habitually tuberculosis rests limited to the peritoneum, and does not invade the other organs, at least during several years.

You comprehend the great importance of this fact in a surgical point of view, for if the lungs, for example, are affected, there is then a contra-indication to all operation.

I tell you, that these unfavorable circumstances are relatively rare. Notwithstanding they are able to present themselves, and I will on this account cite to you an example which will show you the embarrassment in which the surgeon can then find himself: Three months ago, I was called in consultation concerning a young officer who presented sometime since abdominal phenomena quickly developed: balloonment of the stomach, vomitings, diarrhœa. One found by this patient the sensation of peritoneal friction of which I have spoken to you. I diagnosed a tuberculous peritonitis, but, in spite of the persistence of the patient and his surroundings, I refused all intervention, for there existed at the two summits of the lungs hollow sounds, and some humid cracking noises and, more, some profuse perspirations. My intervention would have been useless, for it concerned a tuberculosis of rapid march. The patient died, a few days after, from the progress of the

affection which was accentuated as much on the side of the lung as on the side of the abdomen.

I desire also to call to your observation that tuberculous peritonitis develops itself nearly always in young persons and even in children, principally between the age of 12 and 20 years. The patients that I have latterly attended for this disease, were 12, 17 and 18 years of age. It is well to remember, however, that, in spite of its frequency at this age, it is able to reappear later, towards 30 or 40 years. You will find, in a thesis, very well made, of Dr. Hemey (1866), some examples of tuberculous peritonitis in the adult, independent of other lesions.

Finally, what is the termination of the malady? I have not considered it necessary to tell you that its prognostic is unfortunate and that, if one does not intervene, the patients finish always by succumbing to the progress of the affection. The fatal termination can be hastened by some complication. There is thereof one which, although rare, ought to interest us particularly. These are those facts of pseudo-contraction, that one finds sometimes in the course of the peritoneal tuberculosis. I have lately observed thereof a case, which I will relate to you:

In 1887, a young girl entered into my ward at the Salpêtrière, with some phenomena of intestinal occlusion enough marked: balloonment of the stomach, fæcaloid vomitings, contracted features. According to the antecedents of the patient and the abdominal palpation, I thought it to be a tuberculous peritonitis, and as the phenomena of contraction ruled the scene, I practiced laparotomy. I found some tuberculous lesions of the peritoneum very extended, but especially important to the level of the S iliac. There were there some granulations so abundant that the visceral peritoneum had the thickness of the little finger, and flattened the intestine against the wall of the basin. I tore this neo-membranous production upon several points, not being able to displace it entirely. Besides, I practiced some punctures of the intestine, with the apparatus of Potain, in order to clear it of the gases that it contained. This intervention brought a notable relief to the patient, but she died, three months after, of generalized tuberculosis.

It only remains to us, now, to study the treatment of tuberculous peritonitis.

Formerly, one only opposed to this affection a medical treatment: vesicatories, unguent Neapolitan, revulsion. One succeeded thus in easing the patients, under all its forms, but not in curing them. Fifteen years ago, Kœnig, making an error of diagnosis, practiced a laparotomy, believing to be in presence of a cyst of the ovary, and fell upon a purulent bag of tuberculous peritonitis. He cleansed it with care, closed the abdomen, and was quite astonished to see the healing persist after this operation.

Examples of this species multiplied themselves very soon, and the interventions in some cases of unsuspected tuberculous peritonitis did not fail to be numerous. Finally, surely, it is no more hazard, but by fixed resolution that one opens the abdomen in cases where this affection has been acknowledged. There exist actually many observations of this kind. We find, in a communication made before the Italian Society of Surgery in 1889, by Cecherelli, of Parma, the summary of eighty-five published observations, which have given the following results, after surgical intervention for patients affected with tuberculous peritonitis: healings, 52; deaths, 25; ameliorations, 6.

This intervention can take place under two circumstances very different. When there is ascites or when there are some purulent encysted bags, the intervention is quite natural. Truly, it is most frequently in this case that one has practiced it, and nearly always with success.

The operation consists in opening largely the abdomen. When one has proved the presence of tuberculous lesions, the purulent or ascitic bags are emptied. It is afterwards necessary to practice a minute cleansing of the abdominal cavity with sponges soaked in an antiseptic solution, such as those of thymol and of phenic acid. I generally use a solution of phenic acid.

It was in these conditions that I have operated upon a young girl, last year, who was affected with tuberculous peritonitis of ascitic form. After having incised the abdominal wall on a length of 12 centimetres, I fell upon an ascitic effusion of 7½ litres. I raised with care the totality of this liquid, and touched all the points of the peritoneal surface with sponges imbibed with a phenic solution at 200. The abdominal wound was sutured and a large drain put in its inferior angle. I left this drain in place thirty-six hours, and during this time there flowed out at least 1½ litre of liquid. The abdominal reuniting was perfect, and the reëstablishment of the patient complete. Since, I have been informed that the healing is well maintained.

I have also had occasion to intervene, at the same epoch, for a purulent encysted tuberculous peritonitis. It concerned a young girl of 11 years, in whom one had diagnosed a pericæcal abscess. The bag, that I incised, was filled with tuberculous granulations and with yellow and thick false membranes. She was cleansed with a phenic solution at 1–20. Afterwards I made the suture and instituted the drainage. For a year the healing has been maintained.

In sum, with tuberculous ascites, be it generalized, be it encysted, surgical intervention gives place to perfect results.

Even as we have already indicated it, this form of tuberculous peritonitis is the most frequent; so it is our duty to examine if one ought to intervene in the other cases; that is to say, in those where

the peritonitis has a dry or membranous form, as that which exists in our patient. The greater part of the surgeons think that it is preferable to abstain in this case, on account of the extended adherences uniting the intestine and the epiploon, and hindering to penetrate largely into the abdominal cavity. M. Truc, in his thesis of aggregation (1886), advances this same opinion. It is, really, difficult to understand if in simply tearing some false membranes, one is able to make an intervention useful to the patient.

I have been able, besides, to find in medical literature some observations of this kind; but I have personally observed a fact which permits me to conclude in favor of the utility of laparotomy, even in these unfavorable circumstances. This history is most interesting; so permit me to describe it with some details: It concerned a young girl of 18 years, who was sent to me, in 1886, by M. le Docteur Duffau, of Laon (Eure-et-Loire) and by M. le Professeur Lannelongue. She had a projecting stomach, voluminous, and to the palpation as well as to the percussion, one had the sensation of a solid tumor adherent to the abdominal wall. I thought it to be a sarcoma developed in this wall, and I decided to practice laparotomy. This operation was made in March, 1886, in presence of M. Lannelongue. The abdominal wall was abnormally vascularized, very bleeding. I arrived upon the peritoneum, thickened and adherent. It formed a sort of breastplate of the thickness of the hand, composed of a tissue of false membranes infiltrated with tuberculous granulations. I incised it largely. I sought afterwards to separate the false membranes which agglutinated the intestinal ansæ among them, but I was not able to arrive there. I was obliged to close the stomach, little satisfied, I confess, with my intervention.

The operative results were benign: the fifteenth day, the patient rose. At the end of twenty-two days, she departed for the country.

I thought that she had certainly soon succumbed to the progress of this affection, when I learned, a year after, from her physician, that the patient was much better. At the end of eighteen months, the patient came to see me at the Salpêtrière, and I proved, to my great surprise, that she was completely healed. The stomach was supple and appeared absolutely normal.

This fact is so surprising that one has the right to ask oneself if it be really the surgical intervention which has healed the patient, or if the affection has not made this retrocession of itself. I believe, for my part, that there is in laparotomy an empirical side that we shall ourselves explain perhaps still later, but which we are only able in effect to prove. I am, however, persuaded that the operation has had, in this case, a favorable influence.

I will cite to you, besides, some examples of healing for analogous peritoneal productions, which I have observed several times. It is even so, in numerous cases of ancient salpingitis, having provoked some years since some outbursts of pelviperitonitis, laparotomy demonstrates that the basin is filled with false membranes uniting the intestinal ansæ among them, and that the tumor is so adherent that one is not able to displace it. The surgeon contents himself then with making movable as much as possible the intestine and the epiploon, he cleanses with care the surfaces thus torn and closes the abdomen. In these examples, I possess thereof four, well defined and quite authentic. Not only the chirurgical intervention relieves the patient, but one sees shortly after the impotence produced by these membranous formations disappear and the intestine retake its normal functional state.

Lastly, I have made before you an operation of this kind upon an overseer of the Salpêtrière. The relief has been so considerable that the patient has been able to resume her occupation, though laborious. Nevertheless, I had not removed any of the affected organs; I had only destroyed some adherences.

Thus, in the presence of these facts, I shall not hesitate to practice a laparotomy on our little patient. We have placed to her the diagnosis of tuberculous peritonitis; we know within a little what are the lesions that we shall find at the opening of the peritoneum, and I believe that she will benefit much by an operation. It is the right and the duty of the surgeon to practice this intervention, which is besides, for the patient, the only chance of salvation.[1] A. M. G.

## LETTER FROM LONDON.

(FROM OUR OWN CORRESPONDENT.)

*Prof. Koch and his reported cure for Consumption—The Tortoise Field Hospital Equipment—Medicinal Rings—Hydro-chlorate of Glutin-Peptone—Miscellaneous Gleanings.*

Professor Koch's reported cure for consumption arouses intense interest and expectation in the Teutonic medical world. After long experiments Dr. Koch has so far perfected the discovery that he will give a full account of his method in a public lecture at the December meeting of the Berlin Medical Association. He does not expect to cure patients in an advanced state of the disease, because other parasites have then attacked the lungs while his remedy only kills the tuberculosis bacillus. But he is certain of success in the early stages, his process being curative, not

[1] The patient was operated on May 5, 1890, and presented to the Society of Surgery June 18 last. A large incision upon the median line gave access into the peritoneal cavity, filled with false membranes and granulations. Several intestinal ansæ were liberated. The wound was closed without drainage. The patient has given news of herself by letter October 1, 1890, and declares herself to be absolutely healed.