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CLINICAL STUDY OF THE PRESENT EPIDEMIC OF ASIATIC
CHOLERA.

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IT has been the custom not to describe epidemic diseases until, after having accomplished their complete evolution, they have ceased to make their melancholy influence felt. It is then only that we are able to sketch the picture of the symptoms and to represent truthfully all the possibilities of the disease. Perhaps, nevertheless, it may not be without its advantages for physicians to be instructed less tardily, even if something unforeseen should be omitted. I have thought that in making at the present time a summary description of the cholera epidemic, as it actually appears at Paris, I might possibly meet the wishes often expressed by physicians.

The brief descriptions which follow have been exclusively collected at the bedside of the patients, either in the city or in the male cholera wards under my charge in the hospital Necker. In relating the facts which I have witnessed I have avoided all theoretical interpretation, and have even thought that I ought to abstain from all parallel with preceding epidemics: I have had no object in view but to furnish materials for a more profound study.

The present epidemic of cholera has not been announced by any of the morbid conditions that have been set down as the precursors of the disease. The public health was as it usually is at this time of the year.

Either from the action of the extreme heat of the autumn or for some other reason, gastric difficulties have appeared in great numbers, and frequent examples are still met with. They have appeared to come on with a peculiar activity. The tongue was coated from the first, there was considerable general uneasiness, and the attack yielded speedily to an emetico-cathartic. These cases, in other respects, presented nothing peculiar.

Since the invasion of cholera, the gastric troubles, without chang-

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ing their character, have been accompanied by some symptoms which ought, I am persuaded, to be attributed to the previous anxiety of the patients. Courageous as one may be, it is impossible to avoid a certain apprehension when he finds, during an epidemic of cholera, that he has a complaint of the stomach and bowels. It is the habit of diseases of the stomach to give warning by sensations which no one escapes, and which are interpreted differently according to the temperament of the patient. Thus patients feeling either a gastralgia or nausea, tormented by the desire to vomit without the ability, or troubled by transient pain in the bowels, are very easily alarmed. Next comes on a chill or an exaggerated precordial anxiety, or trembling of the limbs, which redouble their fears. We should hardly be authorized in attributing entirely to fear the morbid condition which is revealed by positive signs; at the utmost we may make it chargeable as a complication.

Diarrhoeas have not seemed to me more frequent than usual; but I do not accept this generic term as representing a disease. Diarrhoea figures, in the statistical tables of every country, among the affections which cause a considerable mortality; as long as this vague term is employed, the information will remain without any professional value.

I have seen, like all physicians, many people affected with accidental diarrhoea, produced by imperfect digestion, succeeding more or less rapidly to the use of improper food, or a meal taken under unfavorable circumstances. In these cases the matters passed were feculent, of dark color and characteristic odor, and the diarrhoea yielded of itself, without leading to any particular manifestation. It is very different with certain forms of diarrhoea upon which I propose to dwell more at length.

The treatment employed, either for the gastric difficulties or diarrhoeas of simple indigestion, has often been more prejudicial than the malady itself. The patients, imperfectly instructed or timid to excess, have hastened to repress the symptoms of their complaint without taking into the account the disease itself. They have swallowed precipitately laudanum, stimulating alcoholic drinks, or the subnitrate of bismuth. The affection restrained without benefit, there resulted an increase of the malaise, of the thirst, a slight febrile reaction, and above all a colic which is combatted by the same means.

Physicians, in view of the definite responsibility imposed upon them, hesitate to have recourse to a radical treatment, which the patients themselves receive with great distrust. Without being a partizan of emetico-cathartics at the commencement of confirmed cholera, I have seen no other than a good result from their employment in those affections which do not partake in any degree of the influence of the epidemic. I am convinced that in overcoming these complaints, which have a tendency to be protracted, we diminish

rather than augment the predisposition to contract the reigning malady. It has not happened to me once to see any bad effects from a purgative, even an active one, or from an emetic when indicated. When the gastro-intestinal affection has been suspended in its regular evolution by the use of astringents or opiates, and constipation is thus established, patients complain of heaviness of the head, swelling of the belly, pain after food, lassitude, &c., all of which are dissipated by a saline cathartic or a moderate dose of rhubarb.

The diarrhœa caused by the prevailing epidemic, even when it is not destined to a serious termination, has peculiar characters. Preceded by a severe colic, it consists from the first of a liquid evacuation, serous, abundant and more or less colored. The evacuations follow more or less rapidly, every hour or two, often with a longer interval even. After the second or third evacuation the discharges are pale, whitish, quite like thin paste; they are passed without pain, and do not occasion even a sensation of tenesmus or burning; their quantity is always relatively considerable. During the intervals the patient feels rumbling in the bowels, which the hand perceives when laid upon the belly. Pressure does not excite severe pain, nor is there tympanites. The evacuations, in spite of their abundance, are not followed by the sense of weakness which succeeds so commonly to less copious evacuations. When, after five or six stools, the nature of the substances passed is not changed, and the excretion has become neither more watery nor more colorless, it is a favorable sign. In grave cases, or those destined to become such, the stools take on before this time the true cholera aspect.

The vomiting, although not very frequent, is already a harassing complication, whatever may be the nature of the liquid discharged from the mouth. A certain number of cholera patients continue to vomit greenish matters long after the stools have become exclusively serous.

The general condition of the patient furnishes the most important indications for a prognosis. Sometimes the skin remains warm, the eyes are only slightly sunken, the pulse is full and frequent, in spite of the persistence of the white diarrhœa. Sometimes the influence of the cholera appears by different signs. We find some one of the symptoms of cholera either singularly limited or strangely localized. In some dyspnœa comes on without any sense of chill, even partial; in others it is a precordial distress; in others, cramps of the lower limbs, or even in a single limb. There are some in whom there is no coldness, except of the tongue, or the nose, or the hands; who complain only of thirst, of trembling, or of suppression of the urine. Each one of these warnings, slight as it may be, deserves to be taken into consideration, since by itself alone it indicates the threatening, if not the speedy coming of a change.

This is, if we may accept the term, the true diarrhœa, not pre-

monitory, but precursory. Most persons thus attacked, if suitably cared for, have a good chance of recovery; but it must not be forgotten that cholera slowly developed presents relatively benign symptoms, and is consequently the most amenable to treatment.

Among workmen and people little anxious about their health, many recover spontaneously, by simple rest in bed and warm drinks, without calling in a physician. Others, not regarding their indisposition, continue their occupation and mode of life. The disease, in fact, has this peculiarity in certain cases, that it does not impair the appetite, causes only slight lassitude, and occasions neither physical depression nor mental anxiety.

In a young man employed in a commercial house, the specific diarrhoea began on Saturday. Five or six evacuations, of which he gave a very exact description, occurred during each day; in the morning only he had some vomiting. The patient did not give up his occupation, and it was only on the Saturday following that he came to consult me at the solicitation of one of his friends. His tongue was cold, his nose was blue, the general circulation was good, the heat of the body was normal; the urine had not been suppressed, but it was not passed except with the stools. This young man, transferred at once to the Municipal Maison de Santé, died at the end of twenty-four hours.

In different establishments where the people can be subjected to strict surveillance, they have succeeded almost always in checking these symptoms, which are slowly progressive. The sick who have presented themselves as out-patients at the hospital, complaining of a serous diarrhoea which dates back two or three days and presenting as yet only local and incomplete cholera symptoms, received and treated immediately, have recovered, without exception.

The medical treatment varies according to the individual case. If the tongue is coated, if the patient has nausea or vomits, I believe we may have recourse to ipecac; at the same time, in hospital cases, the patients having almost always been under the influence of the diarrhoea at least for three or four days, and being very weak, I prefer rather a stimulating treatment, which restores at once the warmth, easily recalled at this period. Once warmed the patient may be treated deliberately, as if he were under the influence of a diarrhoea of less serious character. Opiates in small doses, absorbent powders, astringent injections, are ordinarily sufficient. Even at this period, I do not ordinarily suspend alimentation completely, and I believe that porridge is generally the best vehicle for opium. I give every three hours a tablespoonful of wine of cinchona containing two drops of laudanum, and immediately afterwards two teaspoonfuls of thick tapioca. The injections are not given until the next day, or the day after even, if the diarrhoea does not abate with sufficient rapidity. Rest in bed is imperatively maintained. Little drink is given, and by preference bitter aromatic infusions.

The indications drawn from the state of the body are perhaps more significant than those furnished by the stools. I attach great importance to the presence or absence of gurgling under the pressure of the hand, and to the nature of the intestinal rattling thus produced. The evacuations are but the most evident symptom of a diarrhœa which may persist without discharges, or which may not continue after the last evacuation. Simple as this recommendation is, not to take the dejections as the only measure of the intestinal secretion, it is not useless, as the physician is too often inclined to accept them as the only measure of the diarrhœa.

Recovery takes place either suddenly or gradually: in the first case constipation succeeds immediately to a serous, whitish evacuation, identical with those which have preceded; in the second, the evacuations approach each time more and more in color and consistence to the normal condition. When the diarrhœa is thus arrested suddenly, it is well on the next day to prescribe a light purgative, under pain of allowing a general malaise to develop itself, characterized particularly by gastric pains and headache.

I do not wish here to discuss, not having the facts before me to determine it, the question of the greater or less frequency of the premonitory diarrhœa; it does not seem to me that the problem should be stated in the terms in which it is customary to present it.

Clinically there exist two forms of cholera—the one slow, progressive, proceeding by the successive evolution of symptoms, and allowing the physician time to observe and interfere; the other, identical in its progress, but so rapid, so vast, that days are represented by hours and almost by minutes. Both begin with the same diarrhœa, both may end in the same fatal event. The diarrhœa is the necessary antecedent, it governs without exception the other symptoms; only, in acute cases, the succession of events escapes our examination, and they seem to appear simultaneously. Whether in the diarrhœa which precedes for eight days the other phenomena of cholera, or that which precedes them for an hour, we find an uninterrupted series of steps.

The forms called overwhelming (*foudroyantes*), in which the first choleraic stool is the disease itself, are so common that no one has thought of denying their existence. In order to tranquillize the public mind its frequency is dissembled, and this deception has its excuse, but it would be unreasonable to give it the semblance of a scientific fact. In point of fact, as is always the case, some patients enjoying full health, sober, robust, young or old, having in no way transgressed the laws of a strict hygiene, are taken with a sudden diarrhœa which, from the first evacuations, has the specific aspect; the symptoms are crowded together tumultuously rather than succeed each other; in less than an hour the patient is under the stroke of confirmed cholera.

The grand attack, of which I need not recal the characters, too

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well known and never to be forgotten, has nothing to distinguish it from the cholera which I observed in 1847 in Russia, in 1849 and 1854 in Paris. It is only in studying simply the principal symptoms that one has a chance to observe any peculiarities in the present epidemic which may happen to exist.

The variable coldness, more or less slow in its appearance, is constant on the tongue, in the mouth, on the nose. The forehead and the cranium have almost always a decidedly elevated temperature. Warmth is quickly reestablished in the belly, sufficiently so in the lower extremities, much less so in the upper extremities. This chill is the most important indication of the general condition of the patient. From the moment that the tongue recovers its heat, we have a right, notwithstanding the persistence of all the other symptoms, to assume the commencement of a change. The coldness of the limbs is deceitful, for it is possible to employ and to keep up an artificial extra-vital heat; that of the tongue is decisive and never deceives. I except only a single case, which I may be excused for alluding to, where the patient has taken ice.

The cyanosis has seemed to me to have less intensity; it is often distributed very unequally, and does not affect by preference the extremities. In many patients it appears in the form of bluish patches, ecchymotic, not disappearing under the finger, occupying sometimes the thighs, sometimes the penis, never the belly nor the chest; so extensive in some places that one might believe it to be a traumatic extravasation of blood. The most brisk flagellation, which produces a violet-rose color in the parts least affected, causes no change in these ecchymoses. The face gives no measure of the general cyanosis, which does not correspond on the other hand to the intensity of the coldness.

The skin is sometimes dry, sometimes covered with cold sweat, which ordinarily appears only at intervals.

The muscles have no characteristic flaccidity, contracting slowly when they are pinched or struck by the hand. The cramps are confined almost entirely to the calves, rarely affecting the muscles of other parts of the body. They are generally of moderate severity, occurring only at long intervals, and above all do not occur after the first period of the disease. Patients in whom the pain is so severe as to force them to cry out, are the exception. The visible muscular contraction is not very great. I do not remember to have witnessed an epidemic in which the patients have relatively suffered so little from this painful complication. In many grave cases, terminating fatally, the patients have declared that they have been little or not at all inconvenienced by the cramps.

During the cold stage the arterial circulation is more or less impeded. The heart seems to pulsate deeply, the pulse in the radials cannot be felt, sometimes not even in the groin. At other times the pulse is regular, but always rather retarded than accelerated. The

respiration is equally variable—sighing, anxious or almost normal, without revealing by auscultation, either in this or any other stage, any anomaly in the respiratory murmur.

The gastro-intestinal affection is entirely in accordance with the standard description. The vomiting, however, is far from having the invariable uniformity of the alvine evacuations. Many of the cases vomit only at the commencement of the attack; others, less numerous, are tormented by repeated vomiting, but which, even in extreme cases, is not to be classed among the number of symptoms the most indomitable. I have not seen a single patient of whom it might be said that the persistence of vomiting had rendered therapeutic intervention fruitless.

The serous diarrhœa, limpid, mixed with flocculi, is identical in almost all cases. Sometimes, in place of the granules which have been compared to grains of rice, the patients pass semi-coagulated, albuminous masses. In three or four cases the serous diarrhœa has been bloody, like lees of wine, from the first; none of these patients recovered, or showed any sign of even temporary amelioration. As in the slow form of the disease, the alvine evacuations may cease suddenly, without having changed their character, and, after one discharge exclusively serous, constipation is abruptly established, or the diarrhœa is gradually modified and approaches more and more to the normal condition. The second mode is much the most favorable.

The diarrhœa, whether it is suspended or not, does not give an exact measure of the severity of the disease.

The urine is suppressed and cannot be secreted anew, until long after the return of warmth and the cessation of the specific diarrhœa.

[To be continued.]

CLINICAL LECTURES ON AMBLYOPIA AND AMAUROSIS, BY PROF.
A. VON GRAEFÉ.

[Continued from page 440.]

CASE VI.—*Blindness of each Eye of sudden occurrence, with incomplete Restoration of Vision on one side, probably caused by a Basilar Tumor.*

Friedrich R., a tailor, 32 years old, pale and bearing evidence of insufficient nourishment, comes to consult us for a recent loss of vision of the right eye and weakness of the left. The functional examination reveals the absence of quantitative perception of light on the right side, diminution of the acuteness of vision to $\frac{1}{2}$ on the left, and (by lamplight) indistinctness of eccentric vision in the outer and lower quadrant of the field. The pupil of the blind right eye is entirely insensible to the influx of light; contracts energetically, however, when the left eye is illuminated, a circumstance which