perfectly benign cases, no matter where the situation of the artificial aperture. Should the presence of pus during eating be offensive, the antrum could be opened under the inferior turbinate bone by means of an ordinary trocar bent to suit the direction of the cavity. There were no symptoms in the case beyond the offensive discharge from the nostril of same side, pointing to disease of the antrum.

New Olfactometer for Estimating Degree of Loss of Smell.—Dr. SCANES SPICER exhibited to the Section, on behalf of Dr. ZWAARDEMAKER, of Utrecht, the olfactometer already described and figured in the JOURNAL.¹

Rhinoscleroma.—Two cases of this rare affection were exhibited by Dr. WM. ROBERTSON (Newcastle): 1. The patient, M. L. J., aged 33, presented total nasal obstruction, with deformity of nose; thickening and induration of alae nasi, thickening and induration of walls of post-nasal space, which was thereby much reduced in size, with narrowing of Eustachian tubes; thickening with induration and cicatricial changes in larynx and trachea (raised semicircular band); tuberculous swellings on upper gum. Symptoms unchanged for sixteen years. 2. The patient, M. H. J., aged 30, deformity of nose, nasal obstruction on both sides. Approximation of velum palati (which showed cicatricial changes, and was drawn up), to post pharynx. Almost complete obliteration of post-nasal space. Roll-like contraction of epiglottis, cicatricial changes in larynx, semicircular raised band in trachea. Symptoms lasting thirteen years.—Mr. LENNOX BROWNE said there were some signs which tended to a diagnosis of lupus, some to syphilis, and some to scrofula; and on casual examination he would have been inclined to say that the disorder was due to syphilis in a scrofulous subject. Nevertheless, Dr. Robertson had evidently paid such great attention to the subject, and had exhausted every means of arriving at a correct conclusion, that he (Mr. Browne) hesitated to offer a contrary opinion.—Dr. SCANES SPICER said the loss of a considerable portion of the epiglottis, and the thickening of the stump in the elder patient, reminded him of cases of undoubted syphilis he had seen. It was an open question whether the application of nitrate of silver to the nares had not aided the cicatricial contraction which was apparent.—Dr. ROBERTSON, in reply, said he was quite aware of the rarity of the disease, or at least of reported cases in this country. He should have been under the same disadvantage as many who had examined these cases had he not had the advantage lately of observing the ailment in Professor Schroetter's clinique in Vienna. That experience set at rest all doubt in his own mind as to these cases being veritable cases of rhinoscleroma. Mr. Lennox Browne had made a remark about venereal infection, but this had elicited only a history of gonorrhoea in the father at the age of 25 years, and even this must have become eradicated before his marriage, as witness the fact that his wife bore eight healthy children after marriage. Beyond that, syphilis as well as lupus, or a combination, as suggested by Mr. Lennox Browne, were both characterised by lesions leading to destruction of parts and loss of tissue. In these cases no loss of any part could be pointed out. The puckering of the soft palate was due to the cicatricial contraction on its upper surface, drawing it up and towards the posterior pharyngeal wall. Again, such hardness, with its characteristics, in the alae nasi of the first patient, was entirely foreign to lesions due to either lupus or syphilis. The histological characters of the cells composing the infiltration differed from those of either syphilis or lupus, in that they were well formed and wanting in any indication of degeneration. It was not necessary to refer again to the duration of the process, the futility of treatment, and so on.

THE ANALOGY OF SUMMER DIARRHOEA AND CHOLERA.

By SIR WILLIAM MOORE, K.C.I.E., Q.H.P.,
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CHOLERA is generally regarded as a disease characterised by certain definite symptoms, the principal distinctive features being cramps, suppression of urine, and evacuations resembling water in which rice has been boiled; and it has been customary to assert that a malady is not cholera when these so-called distinctive symptoms do not present, and also if the disease does not spread

epidemicallly. From these conclusions I venture to dissent, and for the following reasons:

1. Many cases of cholera commence as diarrhoea, after which the so-called distinctive features of cholera develop; and the question, At what stage do sufferers from diarrhoea become the victims of cholera? cannot be satisfactorily answered.

2. Terming a malady cholera only when certain symptoms occur is not consistent with what is known and admitted with regard to other diseases—diphtheria, scarlet fever, enteric fever, for examples—of all of which these are very mild cases, not presenting typical symptoms.

3. It must be recollected that cholera in its manifestations is a protean malady. Nothing better demonstrates this than the number of names under which it has been described, such as asphyxia, algide, bilious cholera, dry cholera, *febris remittens choleroidea*, haemorrhagic cholera, white dysentery, etc.—terms all called into use by the varying nature of the malady. The disease appearing under different phases, and being described as it appeared, obtained a different appellation. The variability of cholera was noted by a Dr. Pennick, in 1832, on the presumed first appearance of the malady in this country. Pennick pointed out in what respect the English cholera differed from the previous Russian cholera. About the same time, Allan Webb asked in India: "Who can tell where cholera ends and plague begins, or distinguish between certain forms of cholera and fever?" Chevers states: "As the malarious poison produces all variations, from a fatal remittent to the mildest ague, so with the cholera poison." Sir Guyer Hunter writes: "As there are varying degrees of fever, so there are varying degrees of cholera. It may manifest itself by a slight looseness of the bowels, or as a sudden paralysis of the vasomotor system." In my *Manual of the Diseases of India*, I enumerate various peculiar phases—among which may be mentioned immediate death by collapse, without evacuations; cases resembling the sweating sickness of olden times; stools tinged with blood, or with bile; rice-water evacuations absent; cramps the only symptom; and, on the authority of Dickson, increased flow of urine.

4. The most recent surmise of the cause of cholera is Koch's comma microbe. And the previous surmise was Pettenkofer's theory, which postulates the earth with being the breeding place of the cholera germ. And now Pettenkofer has, it appears, adopted Koch's microbe as the germ. Pettenkofer's conditions are a certain degree of porosity of the ground, a certain amount of moisture indicated by a sinking of the ground water, and a certain amount of organic matter. Conditions which, by-the-by, are not and cannot be fulfilled in various localities where cholera prevails. Now this is somewhat similar to the most recent theory of the causation of epidemic diarrhoea. Dr. Ballard, as the result of his recent investigations, says summer diarrhoea does not begin until a thermometer at 4 feet deep in the earth shows 56°, and that diarrhoea prevails so long as this earth temperature is maintained, no matter what the external temperature may be. Dr. Ballard also says the lighter the soil the more the diarrhoea (which is rather against the presumed salubrity of gravel soils). Lastly, Dr. Ballard expresses a provisional opinion that the essential cause of diarrhoea resides in the upper layers of the earth, where it is intimately associated with the life process of some micro-organism not yet detected, captured, or isolated.

5. Dr. Klein has investigated the pathology of summer diarrhoea, and he mentions empty intestines, or containing only fluid, follicular ulcerations, congested spots, denudation of epithelium, and degenerative kidney changes. Such conditions are mostly applicable to cholera.

6. Although the diagnosis of a typical case of cholera from a typical case of diarrhoea is sufficiently easy, in seasons of epidemic no one can say whether or not the latter will become the former. Moreover, there are cases which so resemble cholera that they would be "unhesitatingly recorded as cholera if cholera were epidemic at the time." This remark actually occurs in Reynolds's *System of Medicine*. Ziemssen observes: "It is impossible to distinguish one from the other, unless regard be had to the absence or presence of cholera." Sir Joseph Fayrer says "the conditions are very similar if not actually identical." Flint observes: "It is by no means easy to distinguish the first case of cholera from cholera nostras."

7. If recovery from bad diarrhoea takes place a low febrile condition often ensues, just as results after Asiatic cholera.

8. The best treatment for summer diarrhoea, whether hygienic or medicinal, is that found most suitable in cholera.

¹ JOURNAL, vol. ii, 1888, p. 1295.

9. Summer diarrhoea prevails most in the warmest weather of temperate climates, and cholera prevails most in warm climates, and usually in the hottest season of such climates.

10. Asiatic cholera has been regarded as a new disease, unknown in India previous to 1817, and in Europe previous to 1832; but there is no doubt that this is quite incorrect. There is proof positive that cholera occurred in India long previous to the great epidemic of 1817, and there is almost as certain proof that it has occurred in Europe from remote periods. Macpherson, in his *Annals of Cholera*, has elaborately and satisfactorily shown that cholera is one of the most ancient diseases of which distinct descriptions exist, prevailing both in Europe and Asia from the earliest times.

Experience has taught me not to expect to be able to recognise Asiatic malignant or true cholera, as it is distinctively termed, as a disease always characterised by rice-water evacuations, cramps, cyanosis, and other symptoms or phenomena attributed to it in textbooks; but to be prepared to meet it in insidious forms, especially in that of diarrhoea. Mere degree is not sufficient for considering a disease different in essential character. A standard author says: "The symptoms of summer diarrhoea closely resemble those of cholera, but ordinarily they are less severe;" and this, I believe, constitutes the only difference. When we consider the mode of commencement of the two maladies, the diversity of the symptoms of cholera, the presumed causes of the two diseases, the difficulty of diagnosis, the pathology, the sequelæ, the climatic conditions under which cholera and summer diarrhoea most prevail, the conclusion seems inevitable that summer diarrhoea is really cholera in a milder form than the type we generally see in the East.

OBSTETRIC MEMORANDA.

RUPTURE OF THE UTERUS DURING LABOUR FOLLOWED BY RECOVERY.

ON August 20th, 1887, I was called to J. E. H., aged 29, who was in labour, being seven months advanced in pregnancy. I found an arm presentation, gave chloroform and turned, bringing down one leg without much difficulty. After waiting and finding no progress, I gave chloroform again and brought down the second leg. A male child stillborn was easily delivered. The hand had to be introduced into the uterus to remove the placenta, when a large rent in the anterior wall was discovered, the hand passing into the abdominal cavity and touching the intestines. I remember hearing a soft tearing sound, and looking down on the bed to see if I was kneeling on and tearing any part of the bedclothes. Not much blood was lost externally, and there was no very marked collapse nor any very special symptoms at the time. No ergot was given during labour; after the removal of the secundines a hypodermic injection of morphine and ergotine by my friend, Dr. Mumford, who saw her with me and confirmed the diagnosis. No vaginal injection was used during or after labour.

The patient had been married ten years, and had never had any miscarriages. Her first child was born, when she was 20 years old, at seven months, but died at the age of 5 years from scarlet fever. Her second child, when she was 27 years old, was also born at seven months, and is now living and well. The above was her third confinement, twenty-six months after the birth of the second child. The woman herself was thin, pale, and cachectic-looking, short and wiry. She was hard worked and much worried, and had often to keep very late hours. She had from a girl suffered from scanty and painful menstruation. Previous to and during her confinement she lived in the dark basement of a large London house.

The day after her confinement her temperature was 102° F., pulse 120, but for the rest of the week the temperature was under 101°, rising to 102° on the 27th, but gradually falling to below 100° during the second week, after which it suddenly rose to 104°, gradually falling to 99° during the third and fourth weeks, when it rose again to 101.5°, falling after two days to normal. This last fall of temperature was coincident with the escape *per vaginam* of half a pint of offensive purulent discharge, and the reduction of a swelling on the left side, which had extended up to the umbilicus. Two days after this she had an ordinary menstrual flow.

During the second week after labour she had profuse diarrhoea, after which the abdomen was swollen and softer. She had several

rigors, with cold sweats, flushed cheeks, and chilled extremities. Five days after labour Dr. Herman saw her with me in consultation, and gave an unfavourable prognosis. The medicine she had was pil. opii, gr. j, every four hours, and, in addition, for about two weeks, liq. morphiae, ℥xv. A few hypodermic injections of morphine were also given, but after their effect passed away she always felt more pain. Brandy was not spared, and when the pain was less quinine was given.

On October 1st she went as an out-patient to the Soho Hospital for Women, where Dr. Oliver saw her, and wrote to me that she was suffering from "pelvic peritonitis with suppuration, especially on the left side of the uterus, and involving the left Fallopian tube." She now began vaginal injections, as the purulent discharge through the vagina continued.

On October 19th she had her menses slightly. On November 19th for a whole week. On December 19th again, and since then, she has been fairly regular, often with a five or six weeks' interval, though suffering from a profuse leucorrhœa.

April, 1888, I find her walking about quite uprightly, instead of stooping forward as she has done more or less since her confinement. She tells me she has been laid up for five weeks with acute rheumatism; her menses still regular, and she is still going to hospital. June 30th, she is going about as usual.

April, 1889. During the past year she has been regular every month, losing for fourteen days, with leucorrhœa between her times.

September, 1889. About her daily duties as usual.

Dr. Garrigues, in the *Philadelphia Medical News* for March 3rd, 1888, puts together ten cases; eight of these died from shock, peritonitis, or septicæmia; the remaining two, who were delivered by turning in the abdominal cavity with extraction easily *per vias naturales*, recovered.

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A CASE OF PROLONGED PREGNANCY.

Mrs. F., multipara, returned from the seaside to her husband on September 21st. She had had severe flooding while away. In the first week of October she menstruated, the flow being very small in amount. From the end of this week, that is, from October 6th to August 16th, when the child was born, is 314 days. About the middle of June genuine labour pains appear to have come on, and, after continuing for some considerable period, to have passed away. At the birth (head presentation, fourth position) there were no perceptible labour pains; the membranes had ruptured before my arrival. The head was fixed at the brim, and had to be delivered with forceps. The forehead was completely moulded away, the child dying a few days later from meningitis. This was the second male child the mother had lost similarly; all the female children had survived. The mother is extremely rickety, and no doubt the pelvis had suffered along with the other bones.

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CASE OF INTRAUTERINE STRANGULATION.

ON September 4th I was called to see Mrs. H., and found her in bed suffering from very acute labour pains. She stated she thought she was about six months' pregnant, and had not felt at all well for some time. There was some slight sickness, but no "show" or hæmorrhage whatever. Her pains had come on about three hours previous to my arrival, and the nurse informed me that the "waters had just broken." Upon examination, I found about two inches of the umbilical cord projecting into the vagina, the os uteri was well dilated, and I could distinctly feel the abdomen of the child.

I immediately found one foot, turned, and delivered. To my surprise, however, I found the neck of the foetus so firmly encircled by another funis that the tissues were actually cut through and the head almost separated from the body. Judging from the advanced state of decomposition, death must have taken place a very considerable period before. The face was perfectly black and much swollen, the eyeballs protruded, and the scalp was emphysematous.

After a very short interval, a few sharp pains brought another child into the world. It was also dead, slightly larger than the first, but not nearly so decomposed or macerated. Strange to say, in this instance, too, I found the cord of the first child encircling