SOME CHOLERA CASES AT GRIMSBY.

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CASE I.—H. H., aged 43, a mast and block maker working on the fish dock, was taken ill with pains in the stomach and diarrhoea about 4 A.M. on August 19th. He went to work as usual at 6 A.M., but had to give up at 8 o'clock, when he came to me. When I saw him he had a haggard appearance, with sunken eyes, quick pulse, and subnormal temperature. I prescribed an ordinary astringent mixture and told him to go home to bed. I saw him again at 9.30 P.M.; he had altered much in appearance, in fact I should hardly have known him again; feet and hands cold and blue, skin much wrinkled and perspiring freely; the pulse was about 160, and very small. Patient said he felt much better, had no pain, and the cramps were not so bad. The temperature was now 92° F., the belly retracted. No more rice-water stools were passed. I ordered brandy, hot bottles, and mustard plasters and friction. He died about 4.30 A.M. on August 20th. Duration of illness twenty-four hours. This man was an excessive drinker and had been out of work for three months.

CASE II.—R. C., aged 42, a bargeman on the fish dock. He first complained of pain and diarrhoea about 11.30 A.M. on August 23rd; this continued all day, and gradually got worse. I saw him at 8.30 P.M. The first thing that struck me was the great alteration in the man's appearance; his eyes were sunken, nose pinched, and very dusky. The extremities were blue and cold, skin much wrinkled, and had the appearance of having been soaked in water for a long time. He was vomiting and being purged incessantly; typical rice-water material. The cramps were very severe indeed, causing him to scream out repeatedly, "The cramps! the cramps! they are coming again!" and twice he sprang out of bed and fell in a heap on the floor. The pulse was very small and difficult to count; the belly was much retracted, the voice whispering and husky. He complained of noises in the head, and I asked if I could not hear them. He died at 11.30 A.M. on August 24th. Duration, twenty-four hours. Notified as English cholera.

CASE III.—M. J. P., aged 36 years, came to see me at 3 P.M. on August 29th, complaining of diarrhoea and vomiting; she described the motions as like rice water. She had not much pain, but slight cramp beginning in the fingers. Temperature 97°; pulse 140, very small. Sent her home to bed; ordered brandy, beef-tea, hot applications, etc. I saw her again at 7 P.M.; noticed the same facial alteration as in other cases. The tongue was dry and wrinkled, eyes sunken, nose pinched, voice whispering. Stools and vomit typical rice water. Temperature below 90°; hands and feet like ice, cold perspiration, and skin wrinkled. She was almost pulseless, but she said she felt better. I at once notified the case as one of Asiatic cholera, and wrote the medical officer of health telling him that I was certain that these were cases of true Asiatic cholera, and that it would be necessary to give up the English cholera diagnosis. I also requested him to see the case as soon as possible, as I thought she would not last more than five or six hours. I also got Dr. Allen to see the case and he concurred in the diagnosis. About 11.30 P.M. Dr. Rice called upon me for details, and asked me if I were quite sure of the diagnosis, and if I realised the gravity of it. I took him to see the case at 11.30. She was in the same condition as when I last saw her; the temperature was about the same; she was still purged and vomiting. She sat up, and asked for a drink, and asked if she could get better. At this time she was almost pulseless. At 3.30 A.M. on the following morning she was comatose, temperature still below 90°, breath cold, respiration slow and catchy. Pulse could only be felt in carotids, about 80. The pupils were unequal, left small, right normal. She died about 4 A.M. Duration, thirteen hours. I made a *post-mortem* examination about 7.30 A.M., and removed about 8 inches of the last part of the ileum. The intestines were very warm, and contained typical rice water. Dr. Klein confirmed my diagnosis bacteriologically.

REMARKS.—This patient had washed the clothes of a patient who had had cholera in the same yard. There had been two deaths in the house where the clothes came from. She was a confirmed drunkard.

CASE IV.—C. G., aged 14, sent for me about 7 A.M., Septem-

ber 2nd. She had had purging and vomiting for two or three hours. The stools were rice water. Her temperature was subnormal, pulse 120, face pinched and livid, extremities cold and blue, cramps in limbs and body. I notified it at once as Asiatic cholera. I saw her again about 11.30 with Dr. Pratt, and found her worse. We were informed that the assistant medical officer of health and the sanitary inspector had just left. The patient was lying on a couch in a room about 10 feet square; she was vomiting on the floor, and being purged as she lay on the couch. The rest of the family were having their breakfast at a table not 3 feet from the couch. The sister of the patient got up from her breakfast, mopped up the vomit with a floorcloth, dried her hands on her apron, and prepared to go on with her breakfast. It is interesting to note that she went into hospital on September 7th. Her case and the further history of Case IV is reported by Dr. Watts in the BRITISH MEDICAL JOURNAL for October 7th.

REMARKS.—This patient lived in a backyard where a pump supplied about sixteen houses with drinking water. The cesspool, a large brick one, is about 3 feet from the pump. As we have heard so much of the elaborate precautions taken to prevent the spread of cholera, it may be interesting to mention that all the stools went down the cesspool, and that these people are still drinking that well water.

CASE V.—A. B., aged 45. She lived in the next yard to C. G. (Case IV). There had been a case in this yard a week before which ended fatally, and one which recovered. All the stools from these cases were put into the cesspool, which was even nearer to the well than in the other case mentioned. This well has been in a stinking condition for years (there is a slaughter-house next door), and often has the flavour of creasote, which comes from a yard two streets away. This case was notified as Asiatic cholera. The duration was twenty-four hours. The well was not closed until thirty-six hours after her death.

REMARKS.—I do not think there has been a single case of cholera in Grimsby where the stools have been collected and destroyed; they have all gone into cesspools or privy boxes; the former are nearly all brick ones of about 20 cubic feet capacity, and cleaned out about twice a year. Some of the drains are of the agricultural type; the latter are always leaky, and are emptied into equally leaky nightsoil carts.

THE CHOLERA.

THE diarrhoeal outbreak at Greenwich Workhouse has virtually come to an end: for although cases had been reported almost daily up to Sunday last, the total number of attacks up to and including that day had been only 243, with 8 fatalities. Up to Tuesday night no fresh case had arisen, and no deaths have taken place since we reported in our last issue. The inquest on the bodies of the deceased has been adjourned until November 14th, in the hope that the evidence of experts may be then available, and some light thrown upon the present obscurity in reference to diagnosis of the sickness. Meanwhile the officers of the infirmary have been prosecuting their inquiries, in conjunction with Dr. Bulstrode, of the Local Government Board; and tests have been applied to discover if by any means the suspected well can have received pollution likely to cause the epidemic.

The only other suspicion of true cholera in London has been in the case of a girl admitted to St. Bartholomew's Hospital from Clerkenwell, and who died on Monday night. The Local Government Board stated on Wednesday that information in their possession showed that this fatal attack was in no sense due to cholera.

In the provinces a fatal case of cholera occurred at Keighley on Tuesday, the victim having been in attendance on the previous case, which ended fatally on October 13th, and which had been followed by a death from cholera at Ingrow, Bingley, also in the person of an attendant on the Keighley initial case.

No deaths from cholera have occurred at Hull, Cleethorpes, or Grimsby, during the week ended with Tuesday; indeed, the temporary medical staff of the latter town has been reduced on account of the freedom of the borough from cholera disease.

CHOLERA ABROAD.

Austria-Hungary.—The deaths from cholera in Buda-Pesth are 2 or 3 per