Edema in Intermittent Fever.

Please mention everything that has been printed or published about the medical history of your district, any topographical account or histories of particular epidemics, and say how far your own observation enables you to vouch for facts therein presented.

Geological and physical charts are very desirable, as well as descriptions of peculiar features of country or city.

Please mention all epidemics of which you may have any knowledge, being particular to assign limits of time and space as exactly as possible, giving, in connection with each disease, the peculiar features of the country, city, ward or street where it prevailed, with slope of rocks, character of soil, meteorological records and observations, altitude above the ocean or adjacent bodies of water, character of the water, artificial changes as by cultivation, cutting down or planting of trees, sewerage, drainage, &c. &c.

Any supposed causes of disease, peculiar symptoms, post-mortem appearances, prevention, therapeutical influences, and all details of age, sex, nativity, occupation, &c., of individuals, and of the duration and severity of disease at different periods, proportion of mortality, &c. &c., should be given.

An early answer to this communication is desired.

[This circular will be signed by the respective members of the Committee of the several States through which it is to be distributed.]

Oedema in Intermittent Fever.

Reported by James B. Colegrove, M.D., Resident Physician, Buffalo Alms House.

The frequency of occurrence of any disease, especially if it be difficult of cure, or fatal in its character, is perhaps reason sufficient for the publication of any record of cases, the particular mode of treatment employed, and the results thereof.

I do not doubt that every physician whose eye falls upon this page, has seen and treated edema. Whether successfully or not, he may have comprehended fully the nature of the disease, its pathology, and the modus operandi of those means employed for its removal. I propose to detail, briefly, the history of a few cases of edema, which have come under my observation and treatment, in the Buffalo Almshouse, having occurred in connection with, or subsequent to, a long course of intermittents. It is by no means seldom or uncommon, to see the feet and legs, as far as the knees, very considerably oedematous, while the patient is, or has been for some months, shaking three or seven times a week with ague chills. This condition exists very frequently in the case of the foreigner, who perhaps suffers the disease to run along one or two months before it is treated. His diet is miserable, principally salt meat and dry bread. Poverty obliges him at last to seek the charity of an almshouse. So we find him broken down, with no appetite, and a quick pulse. The physician gives him good diet, and plenty of quinine and stimulants, and anticipates an easy cure. This he tries

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for a fortnight. The ague yields; the appetite improves, but the edema remains the same. This he follows up with diuretics in divers shapes, but accomplishes little, especially if the patient be two score and ten. Sometimes the edema relapses into general anasarca, which is more difficult yet. I insert the following record of three cases.

Case I.—Thomas Turrell, aged 25, Irish, laborer, two years in America. Entered about Sept. 1st, 1854, with intermittent fever, for which he was treated. The disease had existed forty days. The feet and legs as far as the knees were edematous. On the 15th, the ague had subsided, and the patient was put upon diuretics. On the 1st October, I found him with general anasarca; loss of appetite; ague chills (having recurred) three a week; some head-ache and back-ache. Prescribed: Brandy, 3 ii.; quinine, D ii. M. Dose, one drachm to be given alternately before the chill. This treatment was continued, and I watched the patient closely every day. On the 12th, the ague ceased. I then discontinued the quinine and gave in its place tonic bitters, consisting of a decoction of Peruvian bark, orange peel, columbo, juniper berry, cinnamon and gentian, which I continued until the 20th. At this date the patient was unable to sit erect. Pulse 100; tongue slightly coated; appetite, and general anasarca had supervened. The urine was exceedingly scanty and high-colored. In connection with the above treatment he was given a diuretic pill of ipecac, rad. scilla, digitalis pulv., aa. one gr.; et blue mass, ½ gr. Not the slightest effect was visible from these pills.


Nov. 11th.—The condition of the patient is precisely the same. I should have observed before, that the bowels were continually constipated. At this period it was deemed advisable to resort to purging, notwithstanding the excessive debility would seem to forbid it. Accordingly, we gave, hyd. sub. mur., aloes pulv. et jalap pulv., aa. gr. v. Mix. Take one every evening. The effect of this dose was so slight that we found it necessary to double the quantity, and gave it every other day.

Dec. 1.—The excessive debility of the patient induced us to discontinue purgatives, and again we resorted to diuretics. Infusion of juniper berry and cream tartar were given freely, with little or no apparent benefit.

Dec. 10th.—Symptoms unchanged. At the suggestion of Dr. Hill, the head physician, I have made several examinations with reference to disease of the heart, but cannot discover any unnatural sounds, nor irregularity in its contractions. The anasarca is diminished, and the belly is somewhat distended with water. I had some notion to make a few punctures in different parts of the body for the purpose of drawing off the serum, but concluded that such a course would ultimately prove deleterious. Continued above treatment.
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In this manner we continued to treat the patient, alternating in the administration of diuretics and cathartics, while no improvement obtained until Jan. 5th, when he was seized with typhus fever, to which he succumbed on the 12th. Accidentally, no post-mortem was made. I have given the history of this case in detail, because it is nearly the exact counterpart of numerous others which have occurred under my own observation. It is perhaps a question whether the means employed were proper, and whether they were best calculated to remove the difficulty. There was remarkable torpidity of the digestive apparatus, as evinced in the fact that large doses of cathartic medicines were required to produce a single evacuation of the bowels, while not the least effect was discoverable from the administration of diuretics.

Case II.—James McIntosh, Irish, aged 35, a brick-layer by trade, entered Hospital Oct. 12. Has had intermittent fever every day for five weeks, and now has œdema of both feet and legs as far as the knees. This man was evidently very healthy (with the exception of the ague which had not been treated), and having a strong constitution, I anticipated an early cure.

I commenced by administering quinine daily, in doses of 5 grains each. The ague and fever yielded to this treatment in twelve days. I then put the patient upon tonic bitters and commenced giving diuretics in the form of pills, as above. This was persisted in for the space of twenty days, without improvement. The pulse 85; appetite good; urine high-colored and scanty. The œdema was confined to the feet and legs.

Nov. 20.—Ordered a cathartic of salts and senna to be given every other day for ten days. This was followed by tinct. colchicum, in doses of 20 drops, three times a day. Scarcely any improvement observed. Feet and legs both greatly distended with serum.

Dec. 15.—I bandaged both feet and legs as far as the knees, and ordered them to be kept wet with tepid water. Gave to the patient infusion juniper-berry and cream tartar freely.

Without pursuing the minutiae of this case any further, I will simply add, that very little, if any benefit was derived from this treatment. If I had really lost sight of the actual cause of the difficulty—if there was organic disease of the heart or liver, whatever may have been the fault, certain it is, the patient did not derive benefit from the continual use of diuretics and cathartics. During the whole time he was kept upon good nourishing diet. He went away Jan. 1, cured of the ague, but scarcely improved otherwise; was afterward re-admitted, having been treated by one of the physicians in the city of Buffalo, a month without benefit.

Case III.—James Campbell, Irish, 41 years old, laborer, admitted to Hospital June 10, 1855. Says he was ill with intermittent fever two years; was treated by a physician during the whole time; and that the disease was controlled so far, that it was broken up several times. Feet and legs have been swollen for a
year. Had pneumonia in April last, from which he entirely recovered.

At this date the oedema extends to the thighs; the breathing is short, quick, and somewhat difficult; pulse 100, and wiry; tongue dry; considerable general fever and thirst; bowels constipated. We administered tinct. colchicum, twenty drops three times a day. To this Dr. Hill directed me to add tr. ferri mur., gtt. x., and infusion juniper et bitart. potass.

June 13.—Patient is restless; dyspnœa is increased, and no improvement in the other symptoms. We gave half a teaspoonful of the infusion of sanguinaria, with 1 grain of morphia once in four hours. Under this treatment the patient rested well.

June 20.—Face swollen and oedematous; also hands and arms. The scrotum is distended with serum; dyspnœa greatly increased; pulse 120; bowels constipated. A cathartic of aloes, jalap and cream tartar was given, which was followed by a slight evacuation.

June 23d.—The scrotum and prepuce are excessively distended by the effused serum, and the patient implored me to open them, for he declared "the water was killing him." Dr. Hill punctured the scrotum, but with little benefit, as it immediately filled, causing the patient, if possible, more pain than before. We gave him a cathartic of twenty-four grains jalap and two drachms cream tartar, which operated briskly; but he continued to grow worse until July 3d, when he died.

There was no disease of the heart. The liver was slightly enlarged, otherwise healthy.

These two cases were the only ones attributable to anasarca as a cause of death, among many; but no disease could have resisted more effectually all means employed for its removal. Errors may have been committed in their treatment, either in a failure to comprehend the main cause of difficulty, or in an improper administration of those remedies which hitherto have proved successful in similar cases. I apprehend that the previous intemperate habits of these persons had much to do with their incurability.

I annex a table of fifty-eight cases, which occurred in the Buffalo Alms House, in the five months, from Oct. 1, to March 1, in which it will be seen that by far the greater number were of previous intemperate habits; and also, that the number in which there was oedema, is in proportion to the length of time that the fever had existed.

<table>
<thead>
<tr>
<th>Of the 58 cases, 54 were of foreign birth, and 40 had not been in America more than five years.</th>
<th>Temporary habits.</th>
<th>Intemperate habits.</th>
<th>Under 50 yrs. of age.</th>
<th>Over 50 yrs. of age.</th>
<th>Feet and legs oedematous.</th>
<th>Total.</th>
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</thead>
<tbody>
<tr>
<td>Number of less than 30 days standing,</td>
<td>3</td>
<td>14</td>
<td>13</td>
<td>2</td>
<td>3</td>
<td>17</td>
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<tr>
<td>Number of more than 30 days and less than 60,</td>
<td>12</td>
<td>8</td>
<td>10</td>
<td>6</td>
<td>7</td>
<td>22</td>
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<tr>
<td>Number of more than 60 days and less than 90,</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>12</td>
<td></td>
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<tr>
<td>Number of more than 90 days and less than 120,</td>
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<td>2</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td></td>
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<tr>
<td>Number of 120 days and upwards,</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>5</td>
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<tr>
<td>Total,</td>
<td>16</td>
<td>42</td>
<td>36</td>
<td>22</td>
<td>22</td>
<td>50</td>
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Buffalo, Aug. 23, 1855.