

their duration also, stand in inverse ratio to the vital power of the patient. The mortality is in inverse proportion to the age of those attacked by the disease.

With regard to treatment, our efforts should be directed—

1. *To prevent the early access of exhaustion.* I have named this as one especial point, in order thereby to place very much stress on the necessity of thorough rest: for the adult, rest mental and physical; for the child, enforced abstinence from movement as far as possible. I have seen repeatedly increase of local mischief after even slight exertion, and nausea and faintness readily supervene. In all cases where it can be done, the recumbent or semirecumbent posture should be maintained; and the sufferer sedulously waited on—not even in trifles allowed to attend to his own comfort.

2. *To uphold and increase general power.* To this end, the room should be well ventilated by direct entrance of fresh air, if the season will allow of it; if not, then a good fire, with care in preventing direct draught, but in no case shutting up the patient either with antiquated close-drawn curtains or in an ill-ventilated room, thus allowing him to breathe over and over again air vitiated by the ordinary products of respiration and the special organic impurities of the disease.

Abundant and frequent supplies of nourishment should be given: meat, in whatever form it can best be taken; and stimulants. Perhaps, of these, port wine is best; next to it, brandy and water. By some patients, malt liquor is better taken. But yet I would make this the cardinal rule: give food from the first. The disease has a time when nourishment will not, cannot be taken; and, unless liberal supplies have before this been given, the patient will of necessity sink.

As diphtheria answers, in very many of its characters, to the type of a blood-disease, those remedies are most indicated which tend to improve the circulating fluid: the preparations of iron as a whole, specially, and perhaps in a measure from its local influence, the tincture of the sesquichloride has appeared to me to answer best. I have not unfrequently given it in combination with chlorate of potash, or with quinine. Some, who cannot take iron well, will derive advantage from the compound tincture of bark with hydrochloric acid. Ammonia has seemed to me to be of doubtful efficacy. Emetics, depressing remedies, and mercurials, have still their advocates; but neither from what I have seen, nor from the reported cases, should I be disposed to resort to the use of these agents.

3. *To arrest the local affection, and bar its extension from foci already existing.* The very common application of the nitrate of silver, I have little trust in. Its effects are not sufficiently marked in the clearing away of existing deposit, or in the prevention of its recurrence; while the white coating consequent on any free use of the salt materially obscures the condition of exudation. In the more severe cases, where there is much coincident and surrounding redness of tonsils and uvula, I would *once* freely apply the hydrochloric acid. As a subsequent application, or indeed as of primary advantage, I have had reason thoroughly to believe in the efficacy of Beaufoy's chloride of soda, used undiluted with a large camel-hair brush two or three times a day, and more frequently as a gargle made up with glycerine and water—one part to six or eight parts of water. This application I learnt last year from Dr. Budd's comprehensive paper (*BRITISH MEDICAL JOURNAL*, June 1st, 1861), and each succeeding case makes me more confident in its power as a local agent.

I would close my paper by urging the propriety of the medical attendant personally, so far as he may, applying these and other local remedies, and also seeing to the thorough carrying out of the plans for giving medicine and food. In this disease there is no time to be wasted.

Bad nursing will destroy many a sufferer; and remedial means powerful enough for good will prove simply nugatory, if inefficiently used.

CASE OF FATTY HEART.

By E. T. R. TENISON, M.D.

I THINK the following case worthy of notice, showing, as it does, how most serious heart-disease may exist without any marked disturbance of the circulation or respiration, or exhibiting, save in a very mild form, the symptoms usually accompanying cardiac affections.

On the 25th December last, I was hastily summoned to see Isaac Hoare, aged 57, living at Starch Green. He was reported to have "choked himself" by a morsel of food "going the wrong way." I found the patient in profound collapse, covered with cold sweat; respiration was performed by gasps, with long intervals between each breath; he was pulseless as high up as the axilla. On being placed in the horizontal position, he died without a struggle. On inquiry, I learned that the deceased had suffered fourteen years ago, from "inflammation of the chest," which confined him to bed five weeks, and from which he slowly recovered. Since that time, he had been unable to lie, save on his back, without an uneasy sensation, amounting sometimes to pain, referred to the heart; this being more annoying when he attempted to rest on the left side. Otherwise he made no complaint, seeming to enjoy good health, and being able in all weathers to pursue his ordinary work as a road-labourer. On sitting down to dinner on the 25th, he appeared as well as usual; but almost immediately afterwards fainted. I saw him a few minutes later, and found him as described above. I may mention here that the brother, sister, and son of the deceased all died suddenly; and, as far as I could make out, of heart affections.

Post mortem examination, eighteen hours after death. The larynx and trachea were, as I expected, quite free from any foreign body. The muscles of the chest were pale and covered with fat. Some old but unimportant pleural adhesions existed; but the lungs were healthy. On opening the pericardium, I found that cavity filled with dark coloured fluid blood. The heart was almost converted into fat; and a rent three-fourths of an inch long occupied the posterior portion of the apex of the left ventricle, from which no doubt, the blood contained in the pericardium had escaped. Besides this, the walls of the heart were thinned, especially those of the ventricles; the muscular structure was pale, greasy, and easily torn. The valves were healthy; except the aortic, which permitted some regurgitation. The ascending portion of the arch of the aorta contained several patches of atheromatous deposit.

INFLUENCE OF OZONISED AIR UPON ANIMALS. Dr. Ireland says: "These experiments were most carefully performed, and all sources of complication avoided as carefully as possible; and, as I felt satisfied of their correctness, I saw no reason to sacrifice the lives of more animals in repeating them. I submit to the reader the following conclusions:—1. Ozonised air accelerates the respiration, and, we may infer, the circulation. 2. Ozonised air excites the nervous system. 3. Ozonised air promotes the coagulability of the blood, probably by increasing its fibrine. In the blood, however, ozone loses its peculiar properties, probably entering into combination with some of the constituents of the circulating fluid. 4. Animals can be subjected to the influence of a considerable proportion of ozone in the air for hours without permanent injury; but in the end ozone produces effects which may continue after its withdrawal and destroy life." (*Edinburgh Med. Jour.*)