to which the sufferers were exposed either fungoid spores or marsh malaria.

Once more I would add, that I have had the privilege of conversing familiarly with medical and other residents of Sierra Leone, Cape Coast Castle, Rangoon, Birmah, Fernando Po, the Gold Coast, the aguish districts of South America and the United States, the worst part of the West Indies, the fen districts of Cambridgeshire, and the worst parts of Italy. Some of my informants have had ague repeatedly; others have seen every one around them, including negroes, down with fever (I do not refer, of course, to yellow or other contagious fever), whilst they have escaped wholly during a residence of five years on the same spot.

The experience thus obtained is not to be despised, even although I have no personal knowledge of other malarious districts than those of Cambridgeshire and Italy.

THOUGHTS ON THE MANAGEMENT OF INCURABLE CHRONIC HEART-DISEASE.

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I HAVE been induced to jot down a few passing reflections on the subject of this paper, from the circumstance that, while the treatment by drugs has undergone an almost exhaustive investigation by writers on heart-disease, its general management by moral and hygienic suggestions has been proportionately overlooked, and its paramount importance scarcely recognised.

The first question, then, that occurs to me—and a very important one it is—Do we, as practitioners, sufficiently inform our patient suffering from the consequences of an incurably diseased heart of the nature of his malady, with a view to his adopting such measures in the conduct of himself as may tend to ward off a suddenly fatal termination? The result of the daily inquests that are held will, I think, give a negative answer to this question.

A man uses sudden, and perhaps violent, exertion; falls; dies; an inquest is held. His usual medical attendant states that he has known (for some years possibly) that the individual has been the subject of an organic disease of the heart, and a verdict of death from natural causes is returned. The question arises, Had the patient been made aware of the precise nature of his complaint, and of its fatally hazardous character under the influence of sudden exertion? Too frequently, I believe, the individual undertakes the hurried movements which result in death in entire ignorance of his precarious condition; whereas, had he understood it, he might possibly, by his own prudence and care, have postponed the fatal termination. I am sure that we must all have been familiar with cases of sudden death from heart-disease, in which the patient, from a kind, but mistaken, feeling on the part both of physician and friends, has been left in absolute ignorance of his danger, or with only a vague conviction of something being wrong, yet without the remotest idea of what he should himself do to prevent a suddenly fatal catastrophe. The fear lest the shock, on being informed of his dangerous condition, produce the very result that we wish to avoid is, I believe, an altogether mistaken one. I am satisfied that no one with heart-disease will die one moment sooner for having been *properly* made aware of its existence; and I feel that we are all in duty bound, as honest responsible practitioners, and as Christians, to adopt the golden rule of doing as we should wish, under like circumstances, to be done by. If the patient be gently and kindly told by his medical attendant that, although his heart is seriously affected, still, if he carry out implicitly in his own person the rules laid down for his guidance, he may hope with confidence to have his life prolonged, I do not believe that anything but good can accrue from adopting this course. I am convinced that these suggestions have hitherto been very culpably neglected or insufficiently enforced, and that, if they were generally adopted, many cases of heart-disease now terminating with such painful suddenness might have life prolonged, and thus afford to the patient and to his family a lengthened interchange of social happiness. If, then, we admit the propriety of enlightening our patient as to his condition of danger, we have next to consider the especial influences which he will be called upon, for his own safety, to resist.

The first that will present itself to our minds will be the careful avoidance of sudden and hurried motion. Nothing is so likely to cause sudden death in advanced heart-disease as this. Hurrying to catch a train, attempting to walk rapidly up hill, especially in the face of a strong wind; dragging or lifting weights, and many other movements which will occur to the medical attendant to interdict, must be sedulously avoided by the patient. In cases of regurgitant aortic disease and great thinning of the ventricular walls, as well as in fatty de-

generation of their structure, this injunction will be doubly necessary. I believe that prolonged travelling by train may be highly prejudicial, and tend to a fatal termination by exhausting nerve-force. I have seen two cases of sudden death follow upon a railway journey, which I could only explain in this way. Both were subjects of advanced valvular disease.

Another very necessary precaution, and one not to be neglected by the patient without the greatest hazard, is the avoidance of partaking at any one time of a large distending meal, even though the food taken be of an easily assimilable character. This is a fruitful, but not a sufficiently recognised, cause of sudden death in heart-disease. This senile syncope, as it has been called, may be generally traced to the filling the enfeebled stomach beyond its power of disposing of its contents. Undigested food, acting as a foreign body, irritates the stomachal nerves; and, thus irritation being reflected upon the cardiac nerves, they in their turn fail to influence sufficiently the coronary vessels, and hence the cardiac syncope, and, if not relieved, fatal termination. In all cases of organic heart-disease, the meals, let it be remembered, should be small in quantity, of easy assimilation, and of frequent repetition; so that the heart may not be pressed upon by a distended stomach, on the one hand, or its due supply of nerve-force exhausted by prolonged abstinence, on the other.

Cold liquids, if taken in excess, and especially if quickly followed by exercise, and more particularly if this exercise be up an ascent, are very likely, by exciting nerve-irritation, to produce cardiac syncope and sudden death. In these days of almost universal tea-drinking, and at all hours, it requires some courage to inveigh against the popular custom; neither is it my intention to do so, beyond a few observations bearing upon the especial subject under our consideration. I think that the discrepancy in the minds of medical men in regard to the effects of tea, and the diametrically opposed opinions which are so freely enunciated, are much to be deprecated. Tea acts chiefly as a nerve-stimulant, and, when taken in moderation as to quantity, and not too strong, it can in no wise be injurious in heart-disease. When taken under these circumstances, it exhilarates and restores, and may often well supply the place of alcohol, with its subsequently depressing and intoxicating effects. With some persons, it should be remarked, tea will be found to act as a powerful nerve-irritant, amounting almost to a poison, and producing cardiac feebleness, flatulence, irregularity of the heart's action, and the many nervous disturbances which we must all have witnessed, even if we have not in our own persons experienced its discomforts. In such idiosyncracies, the use of tea and coffee must be strictly prohibited.

Another question arises, as to how far a patient labouring under serious heart-disease should debar himself from sexual intercourse. I believe, as a rule, that it should be absolutely forbidden, especially in the more serious conditions of heart above referred to.

A very troublesome symptom, difficult to combat, and attended with extreme hazard, is the great restlessness of some patients, the subjects of advanced valvular disease. If the patient have been in the habit of frequent travelling when well, we shall find the greatest difficulty in keeping him at home. Now, sudden death away from his own family circle, as I have more than once seen, is by no means unlikely to occur. The disturbed circulation, affecting the brain, and producing great irritability, renders these cases peculiarly trying and difficult to manage. Firmness, kindness, and the most truthful admission of the real condition of the sufferer, while the attendant dangers are distinctly set before him, will alone avail to influence him, and to keep him at home.

Passive carriage-motion is good; but, as a rule, it will be better, I believe, to debar the patient from horse-exercise. Early hours must be enjoined; and, if the patient be wakeful at night, nourishment in the shape of beef-tea with brandy must be taken, and especially in the early morning, when the nerve-force is at its lowest ebb. Milk, with rum or brandy, may also be taken shortly before rising. In all cases of advanced heart-disease, the patient, as a rule, should invariably carry a small flask of brandy in his pocket.

In reference to medicinal treatment, it is not my intention to dilate further than to state that, in mitral valve-disease, aperients freely given, with a view to unload the venous capillaries, will afford the most relief. In aortic regurgitation, I have often seen much advantage derived from the infusion of senega, with henbane and spirit of nitrous ether, as recommended by the late Dr. Barlow.

In senile syncope, the result of an overdistended stomach, no time must be lost in emptying this organ by an emetic, to be followed as quickly as circumstances will admit by the administration of full doses of brandy with hot water. In those cases of advanced heart-disease in which dropsy is superadded, and in which diuretics often signally fail, temporary relief may sometimes be obtained from full doses of quinine.