the lower ribs and pubis, and the skin is thus thrown into transverse folds.

The right side of the abdomen is more resistant than the left, and there is some muscular rigidity in the right iliac fossa guarding the tender appendix and terminal loop of the ileum. There will be marked tenderness on deep pressure one or two inches below and internal to MacBurney's point over the congested loop of ileum, and, if the appendix be inflamed, also at MacBurney's point. There is often tenderness over the duodenum.

There is one method of examination by which not only can the existence of stasis be confirmed, but the period of time occupied by the passage of food through any particular portion of the bowel ascertained, together with a good deal of information concerning the condition of the appendix and amount of fixation of the intestines at the kink, and also the state of the mucous membrane and patency of the ileo-caecal valve to backward pressure. This is by means of a bismuth or barium meal with x-ray examination.

Treatment.

In children prevention should be our first aim. The maintenance of the correct posture comes before all else. Should there be at any time from any cause a tendency for the symmetrical posture of rest to be assumed it must be checked. Rest, physical exercises, tonics, change of air, must all have their appropriate use. It is important to impress on the child's mind how to hold himself properly; it is not sufficient to tell him to sit up straight or to put his shoulders back, because in attempting to follow either of these two instructions his mind will be concentrated on one action which does not necessarily produce the correct balance of the trunk. If, however, he be taught to hold the lower rib margins prominent to such a degree that if he accidentally collides with a half-open door that is the part he strikes and not his head, the natural curves of the spine are assumed and everything falls into line. Any sign of mouth-breathing should be investigated and the cause removed, as by enucleation of tonsils and removal of adenoids.

When stasis already exists, and the symptoms of auto-intoxication are recognized, should careful examination point to a congenital cause, such as an appendical control, an operation is called for. The appendix should be removed with its mesentery in such a way that the control is relieved. There should be no delay; the earlier it is done the less will development be interfered with by the toxæmia, the less risk will there be of an acute attack of appendicitis intervening prior to the operation, the more easy will it be to break the habit of absorbing poison which the bowel has acquired, and the fewer adventitious bands and membranes will have formed in conjunction with this form of control.

In the acquired form operative interference should be avoided if possible, but each case must be judged on its merits. There is no disease in which vicious circles within vicious circles are more evident, and the problem of the correct point at which the circle should be broken is not always an easy one. Perhaps the original cause of one case was the loss of muscular tone produced by some acute specific fever which led to the child adopting mouth-breathing and using the diaphragm only; infection of the follicles of the tonsils from air-borne micro-organisms followed, causing hypertrophy of those organs, and post-nasal adenoids, which in their turn permanently established the mouth-breathing. This state existing over a length of time leads to adventitious bands and membranes, producing kinks in the intestine directly producing stasis and autointoxication. The autointoxication produces certain muscular degenerations which set the seal on the chance of recovery of the muscular tone. It is not sufficient here to break the circle at one place and remedy the stasis; the obstruction to nasal breathing must be relieved as well.

Nasal obstruction must be dealt with, and a free airway established through the nose. Liquid paraffin should be given before each meal to act as a lubricant and render the passage of the food more easy. Opening medicine, in the form of aperients, purgatives, cathartics, etc., should be avoided, except in the form of an occasional dose for some special reason. Their action in stasis is like flogging a tired horse—the loop is stimulated by irritation to a special effort, and left more paralysed than it was before.

The objections raised to paraffin are the frequent actions sometimes produced, the leakage of oil by itself soiling the clothes, and the flatulence provoked. It is as well to impress on the parents that frequency of action due to paraffin does not weaken like diarrhoea, and that the remedy for all these discomforts is to increase the amount or number of doses. Two big loose motions a day should be aimed at, one in the morning, and one towards evening.

Agar-agar mixed with semi-solid food is useful when the point of stasis originates at the sigmoid, and is most marked there. It acts by its affinity for water producing a jelly which, intimately mixed with the faeces, forms a bulky soft motion easily passed through the large bowel.

An abdominal support which keeps out of the pelvis the sagged portions of the bowel in which stasis exists is of the greatest use. Most children themselves recognize its value, and refuse to be without it once they have learned to put it on properly, and even face the ridicule of their schoolfellows rather than give it up.

An hour's rest in the recumbent position in the middle of the day will often help in a wonderful manner. A kink is always accentuated in the upright position, and lying down in the middle of the day breaks the long day in which the trunk is vertical and allows the loop to empty its contents, whereas in the ordinary routine the loop would not empty itself until the recumbent position was resumed at night, and many hours of absorption are thus prevented.

Should these means fail or not suffice after due trial, operative measures will be necessary. The abdomen should be opened and the condition dealt with as found. In dealing with and removing the cause of the kinking, the experience, knowledge, and adaptability of the surgeon becomes the main factor, and it is useless to attempt to describe any set operation for this. The onset of any complication, such as arthritis, tuberculosis, bacilluria, jaundice, is generally an indication for operative measures.

It should be very clearly understood that after an operation for stasis has been performed, however successfully the bowel has been freed from all controls, means must be taken to prevent the original cause or causes from becoming operative again.

Attention must be paid to the non-operative treatment where indicated, and always paraffin should be given for six months to a year. Those portions of the bowel where stasis existed will tolerate delay from custom, and, having acquired the habit of absorption, both the custom and the habit have to be broken; in the same way after the enucleation of tonsils and removal of adenoids, it is necessary to break the habit of mouth-breathing, and unless that is done nasal breathing will not be resumed although the airway is patent.

HEALTH RESORTS FOR THE DIAGNOSIS AND TREATMENT OF CHRONIC AND FUNCTIONAL DISEASES.*

BY

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In discussing the function of health resorts there is both their use for the poorer classes and their use for the well-to-do and leisured classes to be considered. Whether there should or should not be any differences in the employment of health resorts for the two classes I cannot discuss here; the differences exist, and must be accepted for practical purposes. I shall deal with the subject only in respect of the well-to-do classes, and as far as possible I will avoid discussing the important points clearly and ably put forward by Dr. C. W. Buckley in his paper before this Society on March 6th of the present year.¹ Some of my ideas may perhaps be at once relegated by my colleagues to the realm of any good or bad "Upoté"† or "Utopia."

* A paper read before the Balneological and Climatological Section of the Royal Society of Medicine.

† An "Upoté," or, as the learned Erasmus suggested, an "Ondé-poté," means a Never Never Land, practically, of course, the same as a *Nowhere Land*, that is, "Utopia" of Sir Thomas More. "Erewhon" of Samuel Butler.

A. Ordinary Uses of Health Resorts.

An almost endless amount has been written concerning the natural indications for the various climatic and mineral water health resorts in different diseases and morbid conditions. It would be waste of time to go over all this again here; there are many textbooks which constitute a storehouse of information on the subject. But what classes of cases are specially attracted to any particular health resort will, I believe, in the future still largely depend on the local doctors. It is the doctor that knows most about the class of case in question (including the natural course of the disorder and its symptoms), who can likewise make use of the special local resources of the health resort to the best advantage for the individual patient. Naturally, therefore, in my opinion, the progressive part which can be played by health resorts in the future in the social life of a great country will depend largely on the general and special medical ability and experience of the local doctors.

B. Health Resorts as Places of Prolonged or Permanent Residence for Invalids.

In pulmonary tuberculosis health resorts are often used as places of residence for the patients, and so also in the case of scrofulous children. Health resorts should also more frequently serve as places of residence for chronic bronchitics, the subjects of chronic rheumatoid arthritis, and chronic invalids of various other categories. Not only will most chronic invalids, if my ideas of future development are correct, be better off, from the medical point of view, at suitable health resorts, where they could always be under the supervision of doctors specially adapted for helping them, but London and other large cities would probably be benefited by their absence. Some chronic invalids might have even two or more health resort homes, residing at one during one season of the year and at another during another season.

Someone may object that chronic invalids often "love to be in London" and that what I advocate would "break up family ties." If health resorts develop in the direction which I indicate, invalids (those who cannot help being invalids) will prefer them to London. At health resorts, more than at any other places, invalids ought to be able to live the fullest life of which they are capable, and I do not forget their mental life. Many invalids are mentally gifted beyond the average. There would be literary, artistic, and scientific "circles," and doubtless cultivated ladies would be found willing to hold *salons*, at which the members of such circles would be specially welcomed. The transactions of the local societies would often rival those of the learned academies of large cities.

But not all at such health resorts would be invalids. The sons and daughters and other healthy relatives and friends would frequently pay visits to the invalid colony, and many healthy persons, apart from doctors and those connected with local business and trade, would carry on the main work of their life there, attracted either by the beauty of the surroundings or wishing to live near invalid relatives or friends. Such places would also always remain suitable resorts for healthy recreation, and would be visited by the young, middle-aged, and old, in need of relaxation and a holiday. For the young and the healthy there would be abundant opportunities for open-air games and sport, as well as for intellectual entertainments, but for mere "loafing" there would be no more encouragement than at any other places.

Members of the learned professions, especially law and medicine, might well spend ample holidays at such places before it becomes too late for them. I feel convinced that many lawyers, physicians, and surgeons die indirectly from overwork. They say that they "cannot" go for a long holiday because their "practice would suffer." It might diminish to some extent, but they are often quite rich enough to afford it; even if some of their clients desert them and their professional rivals become the gainers, the maintenance of their health is much more important to them than such losses. The very clients most dependent on them ought to prefer to lose them for a time than lose them altogether. There are some, I believe, who do not admit that long-continued excess of exciting professional brain work is often a cause of relatively premature death, and I am not aware of the existence of any good statistical inquiry on the subject—for instance, a comparison of the

average duration of life in doctors who have been known to take regular holidays with that in doctors (in the same kind of practice) who have practically taken no holidays at all. The latter is, I hope, numerically a fast diminishing class.

C. Health Resorts as Places for the Diagnosis of Chronic and Functional Diseases.

As the doctors at different health resorts would have extraordinary facilities for the observation of different classes of cases, certain health resorts should become admirable places for the diagnosis of special diseases. In this the doctors would naturally have all the modern laboratory and other aids to diagnosis at their service, including all methods of blood examination, Roentgen-ray apparatus, methods for the examination of the circulatory organs, for the examination of the digestive organs, and so on. At some health resorts there would be special facilities for the investigation and treatment (including psycho-analytical methods) of functional disorders of the nervous system. The psychic factor in the treatment of ordinary cases at health resorts is often large, as has been pointed out and explained by various writers time after time, so that the acquisition of extra psycho-therapeutic knowledge by the local physicians would not be at all out of place.

People, when not obliged to live in them, will, I hope, become gradually more and more inclined to avoid great cities. Holidays will be largely spent at health resorts; and when one member of a family has a troublesome and somewhat obscure chronic or functional disorder, a health resort for the family holiday will be selected at which the local doctors have a great reputation for their correct diagnoses and successful therapeutical plans for the class of disorders in question.

The health resorts visited during the holidays by families will often be those in which special facilities exist for testing the physical and mental abilities of the younger members. There such questions will be answered as the following: "Is he able to play cricket and ordinary games like other boys?" "Will rowing in a race be dangerous for him?" "Is he mentally able to hold his own amongst other children of the same age?" "Ought he to be educated separately or at a special institution, or can he be sent to school with other boys?" "Ought one to take special care in regard to his heart?" "Is the albuminuria in this case merely orthostatic, and, if so, is the boy or girl in other respects sound and of average physical capability?" "Is he physically up to the standard for the army or navy or Indian Civil Service?" At some resorts the effects of various kinds of violent physical effort would be watched by medical experts capable of coming to a correct conclusion as to whether the exertion is too much or dangerous.

If progress were made in the direction I indicate, chronic dyspeptic symptoms and disorders of the digestive system could be thoroughly investigated at nearly all health resorts, because such troubles are very frequent and troublesome, though often not "dangerous." "What's wrong with this youth? Though tall and rather lanky, he is fairly strong in an ordinary kind of way. But he says he cannot play football in the afternoon like other boys, or only if he goes without his midday meal or the portion of it that he most enjoys (the fruit-pie or pudding). When he plays soon after an ordinary meal, a thin tasteless fluid, like warm water, begins to pour into his mouth (reflex salivation) so quickly that he can hardly swallow it; he has a choking feeling in his throat, and he begins to belch up wind like a neurotic subject of aerophagy. He has himself found out that if he then lies down flat on his back all his discomfort rapidly disappears." Such a case could be investigated during holidays at health resorts. The Roentgen ray skiagrams would probably reveal considerable gastropexia; owing to the gastropexia more or less obstruction to the exit of food, together with reflex salivation, may be produced by playing football not long after a fairly copious meal.

I am afraid that these somewhat disjointed remarks form a very inadequate substitute for the address which the President has been unfortunately prevented from giving owing to illness.

REFERENCE.

¹ C. W. Buckley: The Health Resorts and the State. *BRITISH MEDICAL JOURNAL*, 1919, vol. i, p. 517.