# Early Research Papers

Edward Bach

"The Relation of Vaccine Therapy to Homoeopathy" was published in the British Homoeopathic Journal in April 1920. "Intestinal Toxaemia in its Relation to Cancer" was published in the same journal in October 1924. "The Problem of Chronic Disease" was a paper presented by Dr Bach to the International Homoeopathic Congress in 1927. "The Rediscovery of Psora" was addressed to the the British Homoeopathic Society on November 1st 1928, and published in the British Homoeopathic Journal the following January. "An Effective Method of Preparing Vaccines for Oral Administration" was published in the Medical World on 24th January 1930.

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### A note from the editor

The articles and papers collected here are drawn from the ten years between 1920 and 1930. At that time Edward Bach had only recently (March 1919) started work at The Royal London Homoeopathic Hospital. His first reading of Samuel Hahnemann's *Organon of Medicine* would have been fresh in his mind, and we find him here busy exploring the parallels and correspondences between Hahnemann's work and his own research into vaccine therapy.

The writings of this period will be mostly of interest to students who want to know more about Dr Bach's homeopathic work, and less relevant to students of his flower remedy system. But already we see the faint outlines of that new approach, which would become his sole focus from 1930 until his death.

The Bach Centre, 2016

## The Relation of Vaccine Therapy to Homoeopathy

published in the British Homoeopathic Journal April 1920 Mr PRESIDENT, - May I by way of introduction tell you how proud I am to be invited to read a paper before your Society? Though a comparative junior, I have been studying allopathic medicine for thirteen years, and have been practising with one of the foremost hospitals in London for seven years before I was appointed here last March, so that I have had a fair chance of studying allopathic medicine and its possibilities. It is impossible for me to tell you how deeply I have been impressed with the science of homoeopathy and with the results you obtain.

As one who has had the opportunity of witnessing the results, and even working with some of the present foremost physicians of the old school, and as one who has seen enough of medicine to realize value, and as one who has had enough experience to make one sceptical of all things, may I offer my allopathic offering at the altar of your science by saying that you accomplish cures undreamed of by the profession at large; that a large class of cases considered almost hopeless by the allopaths are amongst the most brilliant of your successes; that your results are such as no other London hospital can attempt to equal; and lastly, that words fail to describe the wonder and genius of Hahnemann, a giant in medicine whose equal has never existed.

It seems incredible that one man alone, in the dark ages of medicine a hundred years ago, could have discovered the hitherto inconceived science of the like remedy, not only also the power of the potentized dose, but, in addition, the perfect method of administering doses.

It seems equally incredible that any medical scientist could read the *Organon* of Hahnemann without realizing that he was reading the work of a great master. The shrewd observation of facts, the faithful recording of results, and the masterly deductions arrived at therefrom, deductions which science is rediscovering today after a century's work, would make the *Organon* an extraordinary book if it had been written at the present time.

This evening I want to discuss the relation of vaccines to homoeopathy. Before I start I want to mention two things. First, I do not in any way wish to make any comparisons between homoeopathic and vaccine therapy. My sole wish is to show that vaccines are a modem branch of medical science extraordinarily closely related to your own methods, and, on account of the good results obtained, may be worthy of consideration as a modem confirmation of the truths of homoeopathy. Secondly, I do not want to judge vaccines by the general opinion of them as they are used today. Broadly speaking, they are a hopeless failure compared with what they should be, and this is due to the following causes. The preparations of vaccines are so often undertaken by those who are ignorant of the correct methods, and the result is a very inferior article. As an example, take the trade vaccines, made by the large firms on an enormous scale; these are generally made from what are known as sub-cultures, that is organisms which have been grown primarily direct from the pathological lesion on to culture media; they are then regrown on other culture media, often many times in succession, the object being, of course, to obtain a greater yield. A tube of organisms may come from Paris or America and be sown on to hundreds more, until the organism has been so badly treated by these unnatural methods that the organisms of the last cultures would hardly recognise those of the first culture, so altered have the become - not in shape, but in virulence and pathological possibilities.

Now, the expert knows that primary cultures alone - that is only cultures grown from the pathological material - are of the best value. Such as I have mentioned and other gross errors enormously reduce the efficiency of vaccines as supplied to the medical market. Then, again, the practitioner using the vaccine often knows nothing of the laws and indications of vaccine therapy. He obtains the dose from a chemist or bacteriologist, with the minimum of directions, blindly pushes in doses which would make the expert tear his hair, repeats the wrong dose either too soon or too late, and, to say the least of it, gets a very poor result, and sometimes even it would have been better for the patients had vaccines never been invented. When you consider that vaccines require every bit as much care and expert management in while such a hopeless confusion exists, that the results are such as to give grave doubts of their value to the profession. The case is similar to your telling an allopathic physician to give arsenic without giving him further instructions.

The resemblance of vaccine therapy to homoeopathy is very close, so close that it is more a question: are they not identical? I want to discuss the resemblance according to the following heads:

- (1) The nature of the substance used.
- (2) The dose.
- (3) Isopathic or homoeopathic.
- (4) Necessity for like remedy.
- (5) The types of remedies.
- (6) The methods of use.

#### NATURE OF THE REMEDY

Homoeopathic remedies are of three types:

- (1) Animal and insect poisons.
- (2) Vegetable juices.
- (3) Inorganic substances and their salts.

Let us take No. 1 first. The poisons of animals and insects are practically certain toxic substances which are derived from protein, generally split up into its highest derivatives. They are albumoses and proteoses. Such substances we now know to be extremely similar to or identical with the toxins of bacteria. It would be quite impossible chemically to distinguish between the proteose poison of the snake and the toxin of diphtheria. These poisons may account for anaphylaxis, and can cause death more rapidly when suitably administered than strychnine or prussic acid. Thus this class of remedies we see to be extraordinarily close to or identical with the toxins of bacteria.

The second class, vegetable juices. Here also is ground for thought. Bacteria are protein in nature, moreover vegetable protein, so that again there must be a close relationship between vegetable juices and vaccines. It is not inconceivable that the remedy of a particular case may be the drug which most closely corresponds to the toxin causing the disease, and in some way neutralizing the poison or stimulating the body to overcome its effects. The third group are more difficult to allocate or classify.

Whilst several elements, as sodium, potassium, carbon, &c., are represented in bacterial protein, there are some, as zinc or lead, which, as far as is known, never enter into the composition of vaccines. Even here the discrepancy may not be as much as first appears, since elements like phosphorus present in protein may represent its group, including arsenic and antimony. Hence, with the exception of the comparatively small number included in group 3, there is at once a striking resemblance even in the compositions of remedies and vaccines.

#### THE DOSE

Vaccines have been proved to have a beneficial effect when potentized; this applies not only to autogenous vaccines when prepared for special cases, but also stock remedies such as influenzinum, medorrhinum, tuberculin, &c. When so used the size of the dose is homoeopathic, thus vaccines are able to effect their cure in such doses. In vaccines given in the usual way by hypodermic syringe, the dose is larger, but even then the total amount is very small. For instance, the total weight of *B. coli*,

given as a usual initial dose, would be about 1/200000 mgm, which would correspond to about the 7 or 8x potency of arsenic. Again, by the method of preparing vaccines it is impossible to avoid potentizing them to a certain extent, and, as I have just said, to about 7 or 8x, so that potentization plays some part. Another resemblance is the point that the perfect dose varies greatly in different cases; one case of septicemia, for instance, may react perfectly to a dose of 5 mill or 10 mill streptococci, another case similar in other respects, requiring 20 or 30 mill, or more. Also in chronic diseases some patients react markedly to 1 mill of their intestinal organisms, even alarmingly, others requiring 10 or 20 mill to give the same response.

#### HOMOEOPATHIC OR ISOPATHIC

It is open to much argument as to which of the above classes vaccines belong. They are certainly not isopathic, because in their preparation they have lost certain characters of their original state; the organisms are unable to reproduce, or to produce toxins, &c. (2) The organisms in a vaccine are so changed that they are unable to produce the disease which they originally caused, although, like homoeopathic remedies, they are able to produce certain symptoms. No matter how much typhoid vaccine was given to an individual, the disease would not be produced, although headache, backache and temperature would arise from a comparatively small dose. (3) Again, organisms very closely allied to the causative germ of a particular disease may give benefit when used as a vaccine, thus any of the large number of varieties of the streptococci will be beneficial in an infection with a particular streptococcus, so much so that stock strains are almost always used in acute cases, though the different varieties have different characters, as may be shown in their size, shape, and their fermentation when tested on different sugars. Again, immunizing with typhoid organisms produces a certain amount of resistance to paratyphoid and other closely allied bacilli, and the blood of patients who have had typhoid or have been inoculated against it will agglutinate the sera of dysentery or paratyphoid bacilli.

#### NECESSITY FOR LIKE REMEDY

In vaccine therapy, as in homoeopathy, the remedy must be like. It would be useless to use a streptococcus to cure typhoid, or a staphylococcus for dysentery; the vaccine must contain germs identical or very closely allied to the causative organism.

#### THE RESULT OF A DOSE

Here we see the most striking analogy between the sets of remedies. (1) The reaction to a dose is enormously greater in susceptible than in non-susceptible patients. If a medicinal potentized dose of sepia be given to a normal individual, practically nothing happens, but in a patient suffering from sepia symptoms the same dose will have a profound influence. So in vaccines a normal individual can tolerate a dose of 100 mill streptococci with little or no discomfort; but if a patient suffering from streptococcic pneumonia were given a similar dose he would have a violent reaction, which in many cases would be fatal. In typhoid, 500 or 1,000 mill bacilli are given to the normal individual as a prophylactic dose, but in treating a patient with the disease a hundredth, or even a thousandth, of that dose would be used. (2) In disease also our comparison holds; the results of a dose of vaccine is: If dose is too small nothing happens, or a slight amelioration; if dose is perfect, complete amelioration; if slightly too large, small aggravation, then amelioration; if much too large, continued aggravation. If a hundred cases of pneumonia received a usual first dose of vaccine, in some the temperature would fall to the normal in six to eight hours, the perfect dose for those cases; in some there would be a slight rise, then fall; in some a small fall of temperature only, and in some no change.

In vaccine therapy we know that any of the above sequences depend on the size of the dose, and all we have to do is to find the perfect amount; there is no question of the wrong remedy when the vaccine is prepared from the patient, or the organism has been identified. Any such result may follow a homoeopathic dose. In vaccines we have one important sign which materially assists in judging the correctness of a given dose, namely, the local reaction, that is, the hyperaemia which occurs at the site of inoculation, and which if perfect is about the size of half-a-crown; a local reaction of less that this usually means an overdose; if larger, the converse. This local reaction also assists in determining the time for repeating the dose, since as long as the local reaction continues to be visible it may be taken for granted that the dose is still working. In acute cases any rise of temperature will be associated with the disappearance of the local hyperaemia.

In vaccines one of the greatest difficulties is to estimate the initial dose, because the size necessary to give the perfect result varies widely in different cases. It is therefore wise always to give a dose which is likely to be on the small side, because we know no antidotes, should a severe reaction occur. It is always easier, if after a few hours the primary dose is seen to be too small, to repeat a larger dose than to overcome the effects of an overdose.

#### METHODS OF USE

Again here the laws are identical, and if all bacteriologists would closely adhere to the rules laid down by Hahnemann, vaccines would be infinitely more beneficial than given, alas! as they so often are, by some routine method, as once a week or some every ten days. The guide in repeating a vaccine dose is "Never repeat until certain that improvement has ceased, whether it be after ten or twelve hours or so in acute cases, or after weeks or months in chronic disease." It is through ignoring this fundamental principle that many a practitioner has given up vaccine as useless.

The physician who repeats a pneumonia vaccine whilst the temperature is falling as a result of the first dose, does so not only at the risk of losing all value of dose number one, but often takes the chance of the patient's life. In chronic disease, many a promising case which has started to definitely improve has had all the chances ruined by hasty repetition. Then, again, vaccines in acute cases, if there is need for repeating, may be given every eight hours, or so, whilst chronic cases, weeks or months must elapse before repetition can be safely undertaken.

#### TYPES OF REMEDIES

There are two distinct types of vaccines, acute and chronic. In acute diseases the organism necessary for the cure is the particular germ found in the local lesion causing the disease. Thus in pneumonia the sputum provides the correct germ; in cystitis the urine, in abscess the pus, and so on; and the inoculation of a vaccine made from the source will effect the cure providing the case has not advanced too far.

In chronic disease it is totally different; in such cases we are dealing not only with local lesions, whatever they may be, but also with a profound underlying cause which renders the individual susceptible to prolonged disease. This cause is found in a chronic poisoning from various organisms which live in the intestinal tract, so that in disease the aim is to rid the individual of the intestinal organisms and their toxins. It is remarkable in old cases how, after such toxins have been removed by a vaccine, the chronic illness disappears and local lesions of ten or many years' standing entirely clear up. How like this is to the types of homoeopathic remedies.

Bacterial intestinal toxaemia is most interesting and important. If the stools of individuals suffering from disease are examined, certain organisms are found which may be considered to be abnormal, and from various symptoms of the patient one is able to predict to a certain extent what type of organism would be isolated. Thus, individuals having unusual fears, such as dread of fire, heights, crowds, traffic, have almost invariably an organism of the paratyphoid group of bacilli. The highly-strung, nervy person with anxious expression, often with a fixed look, frequently has a bacillus of the proteus group. The patient who at a casual glance appears to he in perfect health and yet has some serious chronic disease such as tubercle, often has organisms of the coli mutable group. The folk who bruise and bleed easily

generally possess a dysentery type of germ, and so on. If a vaccine of the organism isolated from one of these patients be given, the result is typically homeopathic, as follows.

A latent period of four hours to six or seven days follows the dose, then the reaction or aggravation of every symptom present in the patient results, lasting from twelve hours to four or five days, or sometimes longer. This is followed by amelioration of all symptoms, commencing with those which were the last to appear during the disease, though during this period older symptoms in the history of the case, which may for a long time have been latent, may manifest themselves, finally to disappear. In cases of rheumatoid arthritis and neuritis, I have several times seen pains come out during this period which the patients state they have not had since childhood; such symptoms enable one to tell the patient with confidence that a complete cure is at hand. To take epilepsy as an example, after the first dose, although it be given at a time when by previous experience no attack is anticipated, a fit usually results corresponding to the aggravation, or, as we call it, reaction; this is followed by an interval which is longer than usual for the patient to be free from attacks, and the second dose is not given until an attack or threatened attack takes place.

There are also points in common as regards the aggravation between vaccines and remedies. After a vaccine the ideal reaction is a short one; no reaction, generally speaking, means no response and no curative value; a prolonged reaction always means that the case is going to be of a difficult nature. I do not know your opinion as regards the following point, but after vaccines I personally always prefer to have a short aggravation rather than to have an instant amelioration, as with few exceptions I believe the cure in the former case to be more complete.

Intestinal toxaemia corresponds in the most remarkable manner to the Hahnemann psora. All that wonderful list of symptoms, such as weariness, loss of appetite, pallor, loss of energy, nervous twitchings, which he describes as being present in an individual who is not ill, according to the general sense, and who on going to a physician would be that he was neurotic and only wanted a change of air, being constitutionally sound. All those symptoms, which are really precursors and symptoms of early definite disease can be proved to be due to this chronic poison from the intestine; and when the poison is removed the patient rapidly loses all these minor symptoms. Moreover, in disease itself, if this underlying toxaemia can be cut off, there is no need for tonics, stimulants or rest; providing the disease is not too far advanced, nature, freed from the poison, will be soon quite capable of eradicating all the lesions.

It is surprising in cases of chronic disease how, after two or three doses of a vaccine obtained from a single organism in the intestine, the whole condition improves and the patient becomes well. I have seen a case of psoriasis of seven years' standing disappear after two doses, and an epilepsy of twenty years' standing, having attacks every month, go for over twelve months free of attacks as a result of one inoculation. It is vaccines of this type that correspond most closely to your long-acting antipsoric drugs. In acute disease, of course, there is need for an antipsoric remedy, but, like you, the patient has to be saved from the acute state by quick-acting vaccines, that is vaccines made from the local lesion; and afterwards attention can be paid to the longacting vaccines as a precaution against further infection. It would be quite useless to give one of these intestinal toxic vaccines in pneumonia, for example, because the patient would probably be dead long before the benefit of the vaccine could be felt. But having saved your patient by an inoculation of pneumococci or streptococci made from the sputum, after convalescence it is well to find the intestinal organism and give doses which will raise the general resistance against disease in all forms. Thus I have attempted to point out to you the extraordinary resemblance of the most modem branch of medical science to the teachings of homoeopathy: in composition; in the size of the dose; in the result of a dose; in the methods of use; in the types of remedies. All through we see that there are so many characters in common. Science may go further yet. It may prove that the remedies of your school correspond in ways yet unknown to the various poisons of the body in disease; it may show that the particular remedy for a certain set of symptoms is the one most closely corresponding to the toxin or poison causing these symptoms; it may even show in time in what manner the remedies act and how they are able to neutralize, or stimulate the body to neutralize, the poisons.

Meanwhile it should be realized that science in a totally different manner is confirming the principles of homoeopathy. To Hahnemann should fall all the honour for having anticipated science by more than a century.

The attitude today of the medical profession in general is one of regard towards homoeopathy; but when, as is shortly certain to happen, it is generally recognized and appreciated that all modem research at the hands of the allopaths is rapidly proving and drifting in the direction of Hahnemann's laws, then will homoeopathy be acknowledged to be the wonderful science that it is.

Let all the members of your Society see to it that they are proud to be amongst the pioneers; let them see to it that they do not err one jot from the fundamental laws of their great founder. For science is proving him in detail - the like remedy, the single dose, the danger of hasty repetition.

It is going to be a struggle between the old homoeopathy and the new; see to it that the old receives its due share of credit, that its standard is kept high, and, true to its teachings, that it is not swamped in the flood of science which is merely following in the wake of Hahnemann.

## Intestinal Toxaemia in its Relation to Cancer

published in the British Homoeopathic Journal October 1924 This is a paper on intestinal toxaemia, in its relation to diseases, not excepting malignancy, and I hope that the points that I shall put before you may not only be of interest, but worthy of your consideration.

Intestinal toxaemia is no new subject. For the past hundred years an enormous amount of work has been expended upon it, both medically and surgically, in an effort to counter its ill effects, and even back to the early days of our profession we find treatment and drugs which had as their object, their one and main object, the cleansing of the bowel. But as the importance of this condition is being recognized, and as further work is being done, so we are better able to understand the details of its nature and the more exact conditions by which it obtains its deleterious results. The powerful and far-reaching effects of intestinal toxaemia are as yet only beginning to be understood. Its wholesale ravages upon civilization, ravages the more difficult to understand because of its insidious nature, have yet to be realized. The sure, steady lowering of resistance, and the predisposition to disease, and the benefits that accrue from its removal, in the vast majority of all diseases, is yet to be

appreciated by the profession.

The primary cause of this abnormality is essentially diet, and secondly, infection, which is able to take place only through incorrect food, and in this paper I am going to attempt to give you some scientific and practical reasons, and show how important a part these play in most diseases and that the predisposing causes of cancer are no exception.

Food is the fuel of the human engine, supplying the need of every minute cell of that most wonderful of all machines, the human body. But, as I shall show, if the fuel is deficient in its necessary characters, it not only becomes a source of diminished energy, but allows another host of possibilities in the production of poisons and deleterious substances fatal to the perfect working of the individual. We have had cranks and theorists throughout all time debating the varied value of different foods, and any who deviate from the custom of their particular society are considered eccentric. I am hoping to relate to you today the beginning of research whose further advance will demonstrate accurately the correct and normal diet for the human subject.

There cannot be the least doubt that civilized diet is radically incorrect, it being out of all reason to suppose that our present methods of cooking and general treatment of food are in any way compatible with the laws of nature.

Primarily, intestinal toxaemia owes its origin to errors in diet, and secondly, to infection which can only occur when the conditions of the gut are abnormal. This condition is present in almost all, if not every individual living on diet such as we eat. Its presence may not give rise to symptoms for months, years, or until old age, as disease depends considerably on the individual to resist poisons, though to a certain extent on the variety of the organisms connected with the toxaemia.

Abnormal diet may begin at birth, as in the case of artificial feeding, more commonly at the end of the first few months.

Considered from a natural history point of view, the human species was undoubtedly intended to live on the fruits and products of a vegetable nature of the tropics, and possibly on the flesh of the smaller animals, but whether man was intended to be a vegetarian or a carnivore one thing is certain, that our present cooking, storage, and tampering with food were not allowed for in the universal order of things.

Thus we shall see later an abnormal content in the bowel begins with us early, and persists throughout life.

It is possible that given the normal diet from birth abnormal organisms in the intestines would probably fail to become permanent residents although they are so universally present.

I am offering this paper to you for three reasons:

(1) That an enormous number of chronic diseases can be treated successfully on these lines.

(2) That the benefit obtained is due to a general improvement in health and not to local treatment.

(3) That 25 per cent of all cases of definitely advanced inoperable cancer treated by these methods show a temporary improvement and relief of symptoms, and generally have a more comfortable time.

If 25 per cent of advanced cases of cancer show even the least sign of benefit, and it is possible to claim more than that, it appears that this line of thought and research should be worthy of further investigation.

We will now consider these points in detail, and give an outline of the results.

The deficiencies in natural food: (1) Absence in essential products necessary to health, such as vitamins, &c. (2) The lack of substances necessary for the bacterial content of the intestines to ensure cleanliness. (3) The presence of substances from which toxins can be readily made.

(1) The deficiency of vitamins and substances necessary to health is so accepted and has been so proven, that it is not necessary to discuss them in detail, bearing in mind the outstanding cases such as rickets and scurvy, and yet when more research has been done it will probably be shown that minor deficiencies extending over a long period of time have a serious effect on the general metabolism.

(2) For the intestines to be kept clean, certain organisms are necessary, and these can only exist when provided with proper food. The cleansing bacteria of the gut are the lactic acid bacilli, as from the acids they produce they prevent putrefaction, and cause a healthy and comparatively sterile excreta. Starch is essential for this process, as it is necessary to have sugars, or sugars and starch, in the caecum to effect this process.

The average diet contains a deficiency in starch. Cooking further reduces the small amount present to be unavailing, by causing rupture of the cellulose capsule, and partial hydrolysis of the carbohydrates, so that the caecum is hopelessly deficient in sugar from which the acid reaction may be drained. (3) There is present an excess of flesh protein from which poisons of a toxic nature can be so readily produced.

The comparison between the faeces of those living on an average diet and of those taking a large amount of raw material has been very interesting and very striking. The average colour is darkish brown, whereas it should be pale brown. The average smell is what is described as faecal, whereas there should be no odour, or at the most a slight smell as of sour milk.

The average reaction as described in textbooks is given as alkaline, whereas it should be strongly acid to litmus.

Chemically, most of the putrefactive bodies such as skatol and indol are absent, and finally, the bacterial content differs enormously in the two. The ordinary specimens being composed mostly of *B. coli*, streptococci, spore-bearing bacilli and abnormal bacteria, which I shall describe later, whereas the only organisms found in a healthy stool are the lactic acid bacilli and *B. coli*.

This great contrast alone should be sufficient to convince anyone of the advantages of correct diet, and the benefit the individual must obtain from the absence of all the usual putrefactive material. But there is even more than this, because in the healthy intestines that I have described abnormal bacteria can only exist with difficulty, and are unable to produce their toxins readily, whereas, the alkaline medium, as has been realized for many years in all laboratories, is an excellent breeding-ground for the majority of pathogenic bacteria, and in which alone they are unable to produce toxins.

Moreover, the natural scavenging organism of the intestine, the lactic acid bacilli, practically dies out when the caecal content is alkaline.

We now come to those abnormal bacteria which are mostly responsible for toxaemia. These organisms are found almost universally in civilization. They are bacilli of the Gram-negative type, which do not ferment lactose. A large number of varieties of them have been worked out in detail, but the number of the different forms is so enormous that it is impossible to classify them all, and it is sufficient for the present to put them into groups. These organisms are not pathogenic in the ordinary sense of the word, in that they do not produce disease, although they may occasionally be responsible for local conditions in the intestines, but their danger lies in their prolonged, continued action, and the toxins which they are slowly producing throughout life, gradually and insidiously lowering the vitality of the individual, and giving increased susceptibility to both acute and chronic disease. According to the virulence of the toxaemia, and possibly equally important according to the resistance of the host, so depend the number of years necessary before symptoms are developed. In most cases the human subject becomes infected early in life, and so commonly are these organisms found, not only in the adult, but also in the child, that they might be considered, as they even are in some laboratories, as more or less normal inhabitants, were it not for the dramatic results obtained in the treatment of chronic disease by their removal.

Once having gained entrance to the body, they appear to live in the region of the gall-bladder and bile-ducts, and the Americans have amply demonstrated this by obtaining them in a large percentage of cases by passing a bougie down through the mouth and stomach into the duodenum. Treatment consists of two distinct parts, with the object in view of removing the intestinal toxaemia. On the one hand the diet should be so arranged as to contain the least possible amount of material from which toxins can be manufactured, and most suitable for the growth of scavenging bacteria and inhibition of abnormal organisms; and, secondly, to remove the toxinproducing bacteria from the patient. The diet consists in removing all forms of cooked flesh, as it is from this poisons are so readily produced, and keeping the patient almost completely on a vegetable, fruit, nut, and cereal diet.

This alone enormously reduces the amount of toxins produced in the intestines; also, if continued for a long period, ultimately tends to remove pathogenic bacteria, but unfortunately in the majority of cases this process takes years to accomplish, as the toxins appear to obtain hold, probably in the gall-bladder and bile-ducts, exactly in the same way as has been so frequently proved in typhoid carriers.

The removal of these organisms is therefore not easy. Intestinal antiseptics for a time have beneficial results, but not of a permanent nature.

Correct diet, as I have just said, is a very long process. Vaccine therapy appears to give the best results. For this purpose vaccines must be given with the greatest caution, as they have a very profound effect on the system, and unless given in a scientific way may do harm.

After the dose, which should be the smallest possible which will give a result, there should be an aggravation of all symptoms, which under ideal conditions last one or two days, but in more profound cases may persist for a month. After this aggravation improvement should occur, and so long as any improvement whatever is taking place, even if it be a year, no further dose should be administered. On these lines it is extraordinary, even in severe cases of chronic disease, how a few doses may effect a cure.

I have given you an outline of the conditions of a toxic intestine. The difference of the average excreta and the clean wholesome faeces of a natural diet, without putrefaction or odour, obviously must have an enormous influence on the individual, also the completely different flora which is to be found, must be convincing; but to be really able to appreciate the importance of the removal of a toxic condition it is necessary, as many have done in the last several years, to witness many cases so treated and the remarkable benefit obtained.

This condition is not the actual exciting cause of disease, but by its insidious action, extended over months or years it lowers the vitality and resistance, allowing the possibility of infection due to the presence of the true exciting cause. The removal of this condition allows the body to fight in a most efficient and surprising way even advanced disease itself. The tubercle bacillus is mostly accepted as the cause of consumption, yet how little has the discovery of that germ helped to fight the disease, except by guarding from infection.

The tubercle bacillus itself is unable to become dangerous except under the conditions of a lowered vitality, and in most cases of consumption much benefit is obtained, even after the disease is well established, by the removal of the underlying toxaemia. So as in consumption, this applies to a large number of the chronic diseases, the general treatment being to improve the condition of the patient, and the individual will then cure himself of the local condition, and one of the surest methods of raising resistance and causing a general improvement is by cleansing the intestines and relieving the body of the poisons so usually generated therein.

It will interest you to know that from experiments that have been done many remedies of a more deeply acting nature have a profound effect on these abnormal bacteria of which I have been talking, and it has been demonstrated that their action is similar in every way to the result of an injection of vaccine.

The benefit obtained on the lines I have described in chronic disease is too widely established, and has been practised and observed over many years by too many medical men to be any longer in doubt. And now for malignant disease.

There is a growing tendency throughout the laboratories of the world to suspect diet as a predisposing cause to cancer; many various modifications of food have been tried, in some cases with distinctly favourable results; my own experience during the last eight years, on those cases which I have had the opportunity of treating, is that without claiming a single cure, 25 per cent of advanced, and mostly very advanced, cases received temporary and definite benefit.

Our object is not to cure cancer, our aim being to prevent. And if the removal of intestinal toxaemia can so improve even the most advanced cases, how much more should its absence throughout life completely prevent the occurrence of this dread disease? Most of the cases with which I have dealt have been in the last stages, and in many also diet has been impossible for economic reasons when connected with institutions, so that if one took the percentage of benefit in private cases only it would be very much larger.

I will now give you a few examples of some of the best results that have been obtained; nothing miraculous, but you must remember that they were all terminal cases, and that the consistency of the results has been far too steady to make any chance of coincidence possible.

*Case 1.* - Mrs F.C., aged 37. March, 1923. Had breast removed two years previously. Present condition, growth in both lungs and liver. Effusion in both pleurae. Sternum markedly bulging; continuous vomiting: pulse 130; respirations 32. First dose, March 16: Marked benefit after twenty-four hours. General improvement continued for three weeks. Second dose, April 5: More marked improvement; patient able to get up. Improvement continued, and after a few weeks patient leading an almost normal life. Respirations and pulse becoming normal; and the fluid diminished. No increase in size of growth. Third dose, June 15: Steady improvement through June, July, August and September. Patient did moderately well till the middle of December; she was taken suddenly ill December 27 and died on the 28th.

*Case 2.* - Mr J. B., aged 63. Solicitor. Carcinoma of gall-bladder and liver. December, 1919, patient in great pain and distress. Huge mass of liver. Morphia necessary for pain. First dose, December: Relief of pain within forty-eight hours. General improvement followed during the next three weeks. At the end of a month patient up and about, and resumed his duties which he continued until July. During this time the growth slightly diminished in size; but the pain and distress entirely disappeared. Two further doses were given. In August the patient was suddenly taken ill with apparent heart failure, and died within three weeks.

*Case 3.* - Mr W.S., aged 72. Carcinoma of the tongue. Tongue had been removed and an extensive growth in the floor of the mouth and the glands of the neck. Considerable pain and frequent small haemorrhage from the mouth. First dose, November 7: The pain and haemorrhage both ceased twenty-four hours after the dose. The growth became cleaner. Other doses were given on December 14, January 29, and February 18. There was no further pain nor haemorrhage. The growth remained stationary until February, when it started to enlarge slightly. Patient died suddenly on March 1.

*Case 4.* - Mrs M.R., aged 66. Advanced carcinoma of the cervix. Considerable haemorrhage and some pain. First dose, October 25: Haemorrhage and pain ceased until December. Second dose, December 9: General condition improved. Slight haemorrhage January 15. Third dose given: General improvement up to May. Not quite so well. Fourth dose, June 5: Patient still alive and slightly better.

*Case 5.* - Mrs E.M., aged 62. Advanced carcinoma of the cervix. Confined to bed. Considerable pain and distress. Sedatives being given. First dose, February 15: Considerable improvement. After a week patient was able to be about. Second dose given in March and the third in June. Patient's condition is still very fair, and she is able to be about and assist in the doing of ward-work.

It would be possible to continue citing such cases indefinitely, and such are the average results of those cases which respond well: diminished pain, frequently completely absent, and an improvement of all symptoms, with a more or less shrinkage in the growth, the patient being rendered more comfortable, and the end when it comes generally being sudden or after a short relapse.

The fundamental points which I want to bring home are:

(1) That civilized diet is unnatural, deficient in necessary properties for health, and also to ensure the intestines being able to be kept in a clean state.

(2) That the conditions which arise in the bowel as a result of this allow an abnormal flora, an absence of the purifying organisms, and the presence of toxin-producing bacteria, with the result that the faeces are objectionable and dangerous.

(3) That removal of this condition, and cleansing of the gut, causes a most remarkable improvement in the general health, and usually also in most chronic diseases, without any local treatment.

(4) And finally from the work done there seems to be hope that this most simple remedy would reduce the incidence of malignant disease, and even be useful, when more thoroughly worked out, in the treatment of the disease when established.

Intestinal poisoning is no longer the vague apparition of the past, when stasis alone was supposed to be the main cause. We now know the necessary diet to eliminate the foods from which toxins are most readily formed, the bacteria concerned in its production and the toxins themselves can be isolated.

Toxaemia depends not so much on stasis as the content of the gut; if no poisons be present, even when stasis exists, naturally there can be no absorption; but if the faeces are foul no matter how rapidly they pass there will be a certain amount of absorption into the bloodstream. Usually when the condition of the intestinal content becomes clean, there is such an improvement in muscular tone and general health that constipation ceases.

## The Problem of Chronic Disease

## presented to the International Homoeopathic Congress 1927

From the earliest records of medical history we find evidence that what we know today as intestinal toxaemia was consciously or unconsciously recognized, as evidenced by the drugs and remedies used by the earliest physicians, many of which were laxative and liver stimulating and hence intestinal cleansing in their effect. Throughout the ages of medical science similar efforts by different methods have been attempted, and even today much of modern treatment by diet, drugs, and even surgery is based on similar conceptions.

The alimentary canal must of necessity be of the utmost importance. Its superficial area is greater than that of the skin surface of our bodies; moreover, it has the power of absorbing from that in which it is bathed - a property not possessed by our external surface in any similar degree; you may sit in a bath of potassium cyanide with no ill-effects, a very small amount of which would be fatal in the stomach; you may wash in water loaded with typhoid or diphtheria or other bacilli without harm, but if a microscopical amount enters the mouth the result may be serious or fatal.

The content of the tract is the fluid in which we live; from which we obtain our fluid and our food; it is to us similar to the water in which the unicellular amoebae moves. It is essential that it should be pure and contain the necessaries of life, and free from any substances which if absorbed may be harmful to the body and against which there is no protective mechanism.

It is surely one of the marvels of Nature that she has been able to cope with such diversity of intestinal content as that with which different races have tested her powers of adaptation. Consider the varying diets of different countries; think of the vastly varied composition of the intestinal content as a result; and yet the races, generally speaking, survive. As yet the penalty is not death - merely disease; not extinction - merely degeneration.

In all probability the human race was originally intended to live on raw material, the fruits and foods of the tropics, and the human alimentary canal was evolved to deal with such a diet; yet offshoots of that race have migrated to temperate climes and many nations live almost entirely on food which has been cooked, completely altering the intestinal content - and yet the race survives; but humanity does not escape entirely. It may live, but it suffers; it suffers from a hundred and one diseases, from a lowered standard of health and strength and a loss of physical vitality.

It is against all probability that human nature will for some time if ever retrace its steps and return to a primitive condition, and even if that ultimately is the result it does not concern us; we are interested in those countless millions of this, our age, and the age of the near future, who will demand to live as we do today and yet cry aloud for health and relief from suffering. We have to meet present needs, not stand idly waiting for an ideal future.

When a race lives on unnatural food, the intestinal content changes chemically, physically and bacteriologically. All these factors matter, but in people such as those with which we are dealing the bacteriological change matters most.

The chemical and physical characters can be brought somewhat within range of normal by a diet not too far removed from that of civilization by the addition of fruit, salad, &c., and by such means the extreme variance from the normal in both the chemical and physical condition can be remedied even within the limits of diets which are not incompatible with the modern possibilities of private home and public restaurants. I mean that it is possible to lunch and dine daily at many restaurants and select such food as will keep the intestine reasonably clean without being considered mentally deranged or even very exceptional. But although this may be accomplished it does not of necessity follow that it is in itself sufficient to cure disease.

In a few cases it may be so, but where there has been an infection of long standing, or where the infection is deeply seated, the bacterial element will resist for at any rate a long time the improvement in the intestinal content, and other methods have to be devised to hasten its removal; hence the greater importance of the bacterial infection as opposed to the abnormal chemical and physical state, owing to the greater difficulty in correction.

Has it ever occurred to you what difference there is between the content of the large intestine of an individual living on raw food and one living on cooked food? In the latter instance such as is met with in civilized people the content is foul in odour, dark in colour, alkaline in reaction: containing many products of putrefaction such as indol, and the bacterial content is composed of *Bacillus coli*, streptococci and spore-bearing organisms. Contrast this with the healthy individual who lives on raw material.

The large intestinal content is of no odour, light in colour. acid in reaction; free from putrefactive products. and the bacterial content consists of the lactic acid bacilli together with some *Bacillus coll*.

To any conversant with this contrast it is in itself grounds for serious thought.

In many cases cure can be accomplished without alteration of even an unnatural diet, where no amount of dieting would give marked benefit, though I do not deny that the combination would be better and more lasting.

The essential point about a suitable diet is that whilst supplying the needs of the body it should tend to keep the reaction of the large intestine slightly acid - instead of alkaline, as is much more usual in western civilization. The acidity depends on the growth of the lactic acid bacillus, and this organism, again, needs the presence of starch to ensure its multiplication. Ordinary forms of starch are converted to sugar long before the colon is reached, but uncooked oatmeal, or better still, crushed nuts, are convenient means of supplying a starch that remains largely unconverted to sugar in the upper part of the bowel.

I do not feel that it is yet proven that the class of bacteria which is the subject of this paper are the cause of disease. I am not certain. They may be the result, but I do maintain that this group of organisms of which I am about to speak are persistent in patients; that they are associated with chronic disease, and that by the use of preparations made from these bacteria themselves we have a most powerful weapon in the fight against chronic disease of all types.

I turn now to the consideration of these organisms, indicators of potential, if not of present, disease whenever they are found, and found they can be in the vast majority of our fellow citizens. It may be asked why, if they are so deadly, is disease not always demonstrable? The answer is that their immediate virulence is small, and bodies that start with a reasonable measure of health can face their toxins for years without apparent inconvenience. But as life advances with all its various stresses the strain of keeping back these organisms, or possibly the conditions which give rise to them, begins to tell, and presently there is a breach in the defences and obvious illness declares itself. It is because a breakdown can normally be deferred until middle age, when the next generation is launched, that resistance to these organisms is not a very active power, for it remains often true that Nature, if careful of the type, is careless of the single life. In a similar way the long latent period of tuberculosis led to the belief held for many years that it was not infective.

The germs of which I speak are bacilli - Gram-negative, of the great coli typhoid group; the important point being that they are incapable of fermenting lactose - a point which distinguishes them from the *Bacillus coli* itself.

They are not pathogenic in the ordinary sense, as are the typhoid or dysentery or paratyphoid bacilli, and have in the past been mostly regarded as of no importance. They are not identical with but closely allied to these organisms, and belong to their class.

Their number is probably enormous, possibly infinite. It is possible to investigate a hundred without obtaining two identical strains.

We can, however, put them into groups, though even this is relatively a crude classification, as it must be understood that each group contains a host of varieties, differing from one another in some minute detail.

For the purpose of this work these non-lactose fermenting bacilli have been attached to one of six groups, namely:-

Dysentery. Gaertner. Faecalis alkaligenes, Morgan. Proteus. Coli mutahile.

They are grouped according to their powers of fermenting certain sugars, and only a few sugars have been used so as to keep the number of groups small. If an autogenous vaccine is used the exact definition of the organism is of no importance for treatment, and the polyvalent throws a very wide net and contains many representatives of each class.

These, then, are the bacilli which for the most part are considered harmless, but which are really the indication and, if properly used, a means of cure of chronic disease.

The clinical evidence of the power to cure is too well established to admit of doubt, and will be referred to presently, but the laboratory is accumulating evidence of a non-clinical nature which demonstrates the connection between these organisms and disease.

By daily examinations of the faeces of a patient it is possible, by recording the percentage of organisms present in the form of a chart, to show the relation between the condition of the patient and the percentage found.

By percentage I mean the ratio between the abnormal nonlactose-fermenting organisms and the number of *Bacillus coli* present. Generally speaking, it is considered normal for coli alone to be present, but these abnormal bacilli may be found in anything from 1 to 100 per cent. of the total colonies obtained.

From the alteration in percentage during treatment it can be ascertained to a certain degree how well a patient is likely to respond.

As a general rule the organisms found remain true to type for any given case. That is to say, Gaertner does not seem to change to a Morgan or a proteus.

If a patient's faeces are plated daily and the percentage of abnormal bacilli charted, it will be found that these are not uniformly present, but that they occur in cycles. Perhaps for a period the specimens are free, and then the organisms appear, rapidly rise in numbers, remain at the highest point for some time, and then diminish until they disappear. The intervals of freedom from them, the periods of the positive phase of their presence, the highest percentage of them reached, vary in different cases, but the clinical condition of the patient bears a certain relationship to the curve of organisms present in the specimens.

This relationship is not yet sufficiently worked out to lay down definite laws, as more than one type of curve exists; but I can assure you there is a definite relation between clinical conditions and bacterial percentage, and as an example of this the most brilliant result after vaccine treatment occurs when there is a short negative phase followed by a higher and more prolonged positive phase than that which is the patient's usual routine. Generally speaking, those cases where there is little or no alteration from their usual type of course do not do so well.

Much work has still to be done on these lines and it will lead to a profitable result.

It is extraordinary how rapidly the bacterial content may alter. Perhaps after weeks of negative plating, within thirty-six hours the specimens may contain as high as 100 per cent. of these abnormal bacilli.

What happens to produce this result we do not yet know; whether these organisms kill off the normal coli, whether the coli become altered to the abnormal type, whether it is a changed condition of the intestinal content or of the patient himself that causes this change gives room for much research, and when that problem is solved we shall have made a great advance towards the knowledge of the cause of disease. But whatever may be the explanation, it is already established that the percentage of these bacilli in the specimens bears a direct relation towards the condition of the patient in his varying phases from a clinical point of view.

Another curious feature is the stability of a particular type of bacillus in a given subject, to which I have already alluded. Over several years, no matter how often examinations be made and whatever the condition or disease of the patient, the particular type remains true. Moreover, it is rare to find more than one type in the same case, although this may happen in a small percentage.

There are certain symptoms which occur more frequently with one type than with another, and it is not improbable, when further observations are made, that it will be found there is a close relationship between certain disease symptoms and definite types of these organisms.

Whether these organisms be the cause or result, they are associated with chronic disease, and an enormous amount of benefit can be obtained by the use of vaccine made from them. This has certainly been proven conclusively during the last twelve years.

I have previously referred to the fact that the clinical evidence of the value of this method of treatment is sufficient to leave no room for doubt. That statement must be justified.

Hundreds and thousands of patients have been treated on these lines, by a considerable number of practitioners; by both hypodermic and potentized preparations. Eighty per cent of those patients have shown improvement (to place it at a moderate figure), some only a little benefit, the majority very definite relief, a good many brilliant results and about 10 per cent practically miracles.

It is not without years of experience and experiments, not without the observation of thousands of cases, that I place this proposition before you; not without the co-operation and observation and experience of practitioners throughout the British Isles, who will support this evidence.

Patients may be treated with vaccines of these organisms given by hypodermic injection, as has been done now for a considerable number of years. This does not concern us today, but I may refer you to our book, "Chronic Disease," for details.

The point I wish to stress is that as good, and I and others believe better, results are obtained by potentized preparations of killed organisms.

These have been in use for about seven years, and extensively for the last two years, by homoeopaths and allopaths alike, and there are allopaths who have discarded the syringe for their use.

These potencies may be of two varieties, autogenous and polyvalent. I want to make this point quite clear.

An autogenous preparation means that the bacillus of a particular patient is potentized and used for that patient.

A polyvalent implies collecting organisms from some hundreds of patients, mixing together and potentizing the whole. It is this preparation which has been submitted to you on previous occasions, as a nosode worthy of your consideration.

The autogenous is of use only for the subject from whom it was prepared, or possibly any patient having an identical infection. The polyvalent, on the other hand, is prepared with the object of covering as many cases as possible.

Of the relative merits of the two more experience is yet necessary before we can draw definite conclusions, but that is not of the utmost importance at this point, because even if the autogenous should he shown to give a higher percentage of good results, the polyvalent variety is so successful as to be a nosode worthy of consideration as an additional nosode for the homoeopathic materia medica, and the results obtained by any who try this will be sufficiently good (I can say with confidence) that if it ever fails they would probably be stimulated at least to try the autogenous, and thus comparative experience will accumulate in a sufficient degree to be able to draw conclusions.

Work is being done on this subject at the present time, but it will be some time before a definite statement can be made. It is hoped that by various tests it will be possible to ascertain whether the polyvalent, autogenous, or even a mixture of two or three strains, will be the perfect form of administration for any particular patient.

It is necessary that I should delay you for a moment, that this paper may be complete, to give you the exact technical details of preparation so that any competent bacteriologist can prepare these potencies.

Faeces are plated on MacConkey's ribipel agar, incubated sixteen hours. When this is done organisms grow as red or white colonies. If they ferment lactose with the production of acid, that acid reacts on the neutral red in the medium to give a red colony; if they be non-lactose fermenters no acid is formed, no action on the neutral red and the colonies grow white. Hence the only interest is in those colonies which after incubation are white in colour.

Cultures made from white colonies, rejecting the coloured, on agar slopes, incubated fifteen hours and sugar reactions determined to group the organisms.

One culture washed up in 2 cc distilled water.

Sealed and killed at 60 degrees C. for thirty minutes.

Triturated with milk sugar, the whole in 9 or the whole in 99 grm. of milk sugar.

This makes lst decimal or 1st centesimal potency, according to the amount of milk sugar used. Further potencies are made by trituration up to the 6th c or the 12th x, and thereafter with the usual fluid mediums.

Special care is necessary in sterilizing all apparatus used to free them of a previous potency. Dry heat of at least 140 degrees C. for 15 minutes is probably more effective than steam or moist heat.

The polyvalent nosode is obtained by collecting cultures from several hundreds of cases; by adding them as they are obtained to a sterile bottle, and when a sufficient number has been reached 1 cc of the whole well mixed and shaken is potentized as above.

As far as my knowledge goes there is nothing in this nosode contrary to the laws of Hahnemann, and as a single remedy I believe it is more comprehensive than any other single one known.

It is a link between the allopathic and homoeopathic schools; discovered by a member of the allopathic vanguard, it is found to be in line with homoeopathic principles. I submit this nosode to you as a remedy worth including in your pharmacopoeia; useful especially as a basic remedy in cases which fail to respond to ordinary drugs, or where no remedy is especially indicated, though its use need not be restricted to these cases.

Much work has yet to be done; experiments are now being conducted to attempt to find whether these organisms are the cause or effect of the patient's condition.

The nosode I submit to you is being tried in both America and Germany, and in this country it is being used by a considerably larger number of allopaths than homccopaths. Some of the former, who for years have been getting good results with the hypodermic variety of the vaccine, have completely discarded the syringe in favour of the potency.

I believe that the proper use of this nosode is to regard it as a basic remedy, and I have no doubt that the most brilliant results will be obtained when it is followed by homoeopathic treatment, matching the symptoms with the appropriate remedy.

The nosode is capable of removing a greater or less amount of a really profound basic trouble. It, so to speak, purifies the patients and tends to clean them up until they clearly express one simillimum, and renders them much more responsive to their remedy. Hence, brilliant though the results are which have been obtained by allopaths, in your hands they should be even better.

I appeal to you to give the nosode a trial - to use it on cases who have failed under other treatment and in those cases where a remedy is not clearly indicated. I can speak with confidence that you have only to give it a trial to find it very valuable. I am not laying too much stress on the autogenous because I know that the polyvalent as a nosode will appeal to you more readily. In the case of giving vaccines hypodermically it is almost essential to have an autogenous to get the best results; here 95 per cent. of the patients do much better on their own vaccine and only about 5 per cent. respond more definitely to the polyvalent; but in the case of this potentized variety it is yet too early to make any such claim, and such is the success of the polyvalent that I am inclined to think in some cases it is better than, and in a large majority of cases equally as good, as the autogenous, though there probably will be always certain cases that will only respond to a personal nosode prepared from their own organisms.

The nosode, the remedy prepared from the material of disease, antedated bacteriology and the vaccine; but the relation of the latter to the former is obvious. To your school, pioneers in the clinical use of disease to cure disease, I offer a remedy which is, I believe, potent against the deepest of all diseases, that chronic toxaemia which the genius of Hahnemann divined and named. If I believe that I can make its nature clearer than was possible for him, I take no jot from his glory - rather I believe I am confirming and extending his work, and so paying him the only homage he would desire.

## The Rediscovery of Psora

## addressed to the the British Homoeopathic Society 1<sup>st</sup> November 1928

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The object of this paper is to continue the discussion of the problems presented to you by Dr. Dishington at your last meeting on certain nosodes prepared from abnormal organisms in the intestinal canal, which have been brought before your notice on different occasions during the past eight years. I want to describe to you how these nosodes have been developed and evolved, and the processes of thought, reasoning and practice which have placed them in the position they now hold.

Three main principles had to be realized before the present effective state of these nosodes could l)e obtained: (1) The discovery of the group of bacilli which formed their basis; (2) the value of Hahnemann's laws with regard to repetition in the application of the doses; and (3) the fact that the nosodes would be effective in a potentized state.

About 1912 it was recognized that there were to be found in the intestinal content of both apparently healthy as well as diseased people a class of bacilli which had hitherto been considered unimportant, but which were then proved to be associated with chronic disease. These organisms were the various types of non-lactose-fermenting bacilli belonging to the great coli-typhoid group, very closely allied to such organisms as the typhoids, dysenteries and paratyphoids, yet not giving rise to acute disease and, in fact, not associated with any specific morbid conditions. Since there was not this connection, they had in the past been regarded as of no importance, and had been disregarded by bacteriologists and clinicians. About this time, owing to the frequency with which these bacilli were found to be present in such a large percentage of cases when no other abnormal or pathogenic organisms could be isolated, it was decided to try the use of these in vaccines to see if any benefit could be obtained in cases of chronic disease, and it was found that in spite of them being non-pathogenic in the ordinary sense of the word, great benefit could be obtained when they were used as a therapeutic agent in this manner. It was shown that by such vaccines a mild exacerbation of all the symptoms in a chronic case could be produced, and that in favourable circumstances a definite improvement followed. Cases of good results were recorded when patients were so treated, but in those days the percentage of these was comparatively small, owing to the fact that the injections were given much too frequently and at stated intervals, such as a week or ten days, with a consequent result of serious over-dosing and interference with the starting of a beneficial reaction. At the present time several bacteriologists and a considerable number of clinicians can testify to the undoubted connection that exists between these organisms and chronic disorders and between them and intestinal toxaemia with its consequent morbid results, so that there no longer remains the least doubt as regards this relationship. Some hundreds of practitioners have proved this point from the clinical results that have been obtained by the use of preparations made from these organisms, and the evidence has now grown so large that there is no longer any room for doubt on this point. A certain amount of laboratory evidence has also been accumulated to prove that there is a relationship between these groups of organisms and disease. If specimens of a patient are plated out day by day for a considerable period, it will be found that these abnormal organisms which are the subject of this paper are not persistently and constantly present, but that there are negative phases when they are entirely absent, and positive ones when they are present in varying proportions. Moreover, the total numbers during the positive phases vary from day to day. If we start plating during a negative phase, after a time they begin to appear in the specimens, at first in small numbers, then steadily rising each day until the maximum is reached, when the percentage again falls until they disappear. Both the maximum percentage and the length of the positive and negative phases may vary very considerably in different subjects, but the interesting point is that the health of the individual, whether in disease or in an apparently normal condition, varies directly with these phases. Most commonly in cases of chronic illness the symptoms are worse towards the end of the negative period and are relieved when there is an output of the abnormal organisms, and generally speaking the greater the output the more benefit the patient receives. In the apparently healthy if there are any times when the individual tends to be below the normal standard and is not up to his usual form, these generally occur at the same period of the cycle. Boyd and Paterson in Glasgow are proving further points of relationship between these states and the condition of the patient.

The result of a vaccine is usually to cause a greater and more prolonged output to the benefit of the patient. If daily charts of the results of the examinations are kept, it is generally possible to know from these the condition of the patients and how they are progressing, and they have very often been a useful guide in selecting the correct time for the repetition of doses. Thus, from a clinical and a laboratory standpoint, there can no longer be any doubt that these groups of organisms bear a distinct relationship to chronic disease.

The next step - the discovery that the doses should be given not at stated intervals, but according to the response of the patient - came as follows: In the laboratories at University College, in treating cases of pneumonia with vaccine, it was found that better results were obtained when doses were given according to how the patient reacted to the injection, and that if after a dose the pulse rate and temperature fell, the results were much more satisfactory if no further treatment was given as long as this improvement continued, repetition only being made when the pulse-rate and temperature tended again to rise. The cures occurred more quickly and with a higher percentage of successful results, and considerably fewer doses of vaccine were required. After this had been definitely realized and proved, it logically followed to try the same method with all types of acute febrile cases, and the same beneficial results were found to occur. When this had been definitely established, it occurred to the same workers that this law which appeared to apply to all acute diseases might possibly be the same for cases of a chronic type. So it was tried, and the results again were more than had been anticipated.

In chronic cases a minimum interval of three weeks was allowed to elapse before a dose was repeated, because it was found that in some instances benefit did not begin much before that time, and if at the end of three weeks improvement had stalled no further dose was given until every trace of improvement had ceased, and that either the condition had become stationary or there was a tendency to relapse. On these

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lines it was found that the period of amelioration varied in cases from two or three weeks to intervals as long, in rare examples, as twelve months, and that by refusing to repeat during the time of improvement enormously better results were obtained and a higher percentage of good results occurred, while of course a much smaller amount of vaccine in each case had to be given. Such was the success that this method has been persevered with up to the present time.

At this stage, therefore, we had arrived at two conclusions: (1) That this particular group of non-pathogenic non-lactose-fermenting bacilli of the intestine were undoubtedly associated with chronic disease, and (2) that vaccines made from them were very valuable curative agents, if given according to the laws of Hahnemann and studying the response of the patient, and not, as had hitherto been done, at regular intervals.

It was at this stage that, coming to your hospital as your bacteriologist, one was introduced to the science of homoeopathy. On reading Hahnemann's "Organon" for the first time one instantly realized the fact that the work of the modern immunity school was merely the rediscovery, by a different method, of facts that had been realized by him a century before, and in conjunction with some of your physicians homoeopathic principles were at once applied to these various groups of bacilli and preparations made from them, potentizing them in the same way as you do your remedies. It required only a very short time to prove that nosodes so prepared were of very great therapeutic value, and the further research of the last eight years, in which many hundreds of cases were treated, has more than justified the earlier hopes. To-day, not only in England, but to an even greater extent in Germany and America, and also to a lesser extent in France, Holland and Switzerland, these nosodes are being used.

Looking at it from the homoeopathic point of view, the first important point to be considered is whether these preparations are in accordance with the laws of Hahnemann and whether it is an extension of his work. Many of us feel that this is the case, as the founder of homoeopathy in more than one instance uses the morbid product of disease as the basis of a remedy, and one has little doubt that if he had been in a position to isolate these organs they would have been used. Moreover, it is still uncertain whether these organisms are the cause, the result or an attempted cure of disease. We can do little more at the present time than say that there is an association, but its exact nature it is impossible as yet to determine. It is not at all improbable that these bacilli are a variation of the Bacillus coli, and the latter, from its universal presence in our modern civilization, not only in men, but in animals, birds, &c., must be considered more or less as a normal inhabitant of the intestine. Experiments tend to indicate that during great basic fundamental changes in the body the intestinal flora may alter, as if attempting to keep in harmony, for it is not impossible that these groups of bacilli are the normal B. coli altered to meet certain needs, compelled to do so by the altered state of the host, and that when the bacteria are in this condition they are undoubtedly valuable therapeutic agents when potentized. Science is tending to show that life is harmony - a state of being in tune - and that disease is discord or a condition when a part of the whole is not vibrating in unison.

In a differentiation of these organisms it is interesting to note that the sugar lactose is used. Lactose differs from the rest of the sugars in that it is an animal product, the others being vegetable. Recent research indicates that for a ferment to be able to act upon a substance, the ferment must be able to vibrate in tune with the atomic weight of the substance which has to be fermented. Hence, it means that organisms capable of fermenting lactose are able to vibrate in tune with animal tissue, whilst those which are unable to do this are equally unable to be in harmony with substances other than of the vegetable type. If this theory is able to stand the test of time, it will get us a considerable way towards the understanding of things of fundamental nature, and it means that we have here a method of differentiating organisms which are beneficent from those which are adverse to the human subject. It is at such a time as they are adverse that we choose to potentize these products and use them as therapeutic agents in the cure of disease. On all other points, of course, the nosodes are identical with homoeopathic remedies, and their preparation is exactly in accordance with the laws of materia medica.

No one who has studied intestinal toxaemia to any extent can possibly fail to see the similarity between this and the basic, fundamental disease described by Hahnemann as psora. I am not going into this in detail to-day, because I understand that Dr. Gordon, of Edinburgh, is going to draw this similarity for you at length at some future date, when he will point out to you the indubitable provings of the nature of intestinal toxaemia which Hahnemann classified under the name of psora.

There is one point of interest which I may mention here in relation to this point, namely, that Hahnemann lays great stress on the impossibility of having more than one disease at the same time. This we find in regard to the work on intestinal flora; it is surprising that only in the very rarest cases does one find more than one abnormal type of organism present in one individual, another point of confirmation of the theory that the two states are identical.

In spite of there only being one type of organism present at a particular period, this type may certainly be changed by means of a vaccine, or nosode, or remedy administration, indicating that the type of organism depends on the condition of the patient, and that it varies its nature in conformity with the soil in which it has to live. Generally speaking, in people who have not been treated by homoeopathic methods, the organism remains much more constant to its type over a prolonged period of time.

The next point which has to be emphasized is the extent to which the allopathic school are at the present time adopting homoeopathic methods. Quite apart from the work of which I have been speaking this evening concerning these nosodes, which are being used by quite a large number of allopaths in different parts of the world, most of whom have been more or less instructed in the proper principles of repetition, so that no harm is likely to be experienced on that score. There is another school which has quite independently worked out the administration of oral vaccines and is now on a large scale using low potencies of these and giving them by mouth. So far these workers, who are now represented in every country in the world, have not used dilutions above the 4x. During the past few years Besredka and others have done an enormous amount of work proving the efficacy of giving vaccines by mouth, both as prophylaxis against and also as a cure of disease. Large numbers of experiments have shown that animals can be rendered immune against live

organisms to which they are very susceptible by a few doses of dead emulsion of the same bacteria given by mouth. Moreover, tests done among troops have very hopeful results as to the power of the same preparations to protect against infection from typhoid, dysentery, &c., in ordinary life, so that at the present time, both for prophylaxis and treatment, the oral vaccine is becoming an established factor and firms are engaged not only in this country, but on a much greater scale on the Continent, in the manufacture of these preparations in large quantities. The suspensions are not potentized in the full sense of the word, but owing to the minuteness of bacteria the total quantity present is very small indeed and probably corresponds to about a 2x or 3x of a homoeopathic remedy: hence they are very closely allied to your potencies. This work, which is rapidly growing and extending, comes of course entirely from the allopathic school and has no connection with homoeopathy. It has been developed quite independently through scientific laboratories of the old school. Unconsciously, again, Hahnemann's work is being rediscovered, and a vast number of remedies prepared, though only in low potencies. An attempt is being made by the old school to form a complete materia medica, using as their base the various types of organisms, of which of course there are very numerous varieties.

To give you an example, the following is a quotation from the quarterly bulletin of one of our leading firms:-

"The vaccine-therapist claims a multiple variety of cases in which the use of vaccines by subcutaneous injection is contraindicated. Acute febrile cases and nervous patients who are hypersensitive may be mentioned as the more important examples. "It is not generally known in staphylococcal and streptococcal infections oral vaccines, administered by the mouth in the same way as ordinary medicines, are equally if not more effective than vaccines given by injection. Frequent visits for injections are unnecessary as the patient can easily take the oral vaccines at home at the times ordered by the practitioner. In the treatment of boils and carbuncles some striking successes have been obtained."

Another aspect which it is necessary for every homoeopath to understand is what Hahnemann realized well enough - the incompleteness of materia medica and the fact that it could not cover all existing diseases. Moreover, he saw that new illnesses might arise owing to altering circumstances of civilization and that new remedies would have to be sought. Again, his genius comprehended the fact that in Nature might be found an infinite number of remedies to meet all occasions that might arise. The following paragraphs quoted from the "Organon" will show you his realization of the necessity for more remedies, and the enormous amount of work that must be done by his followers to improve on his original findings to keep pace with disease in its ever-varying characteristics:-

"Since the number of medicines exactly tested in regard to their positive action is as yet only moderate, it sometimes happens that only a smaller or greater part of the symptoms of a case of disease can be found in the symptom-register of the most suitable medicine. Consequently this incomplete counter-disease force must be employed for a lack of a complete one" (para. 133.)

"If the drug first chosen actually corresponds to the disease in its entirety, it must cure it. But if, owing to the insufficient number of fully proved drugs and the consequent restriction of our choice, the medicine selected is not exactly homoeopathic, then it will arouse new symptoms which will in their turn point the way to the next remedy likely to prove serviceable" (para. 184).

"Truly only a considerable supply of medicines thus accurately known in their positive modes of action can serve our turn, and enable us to discover a remedy for every one of the innumerable natural cases of disease.

"When thousands of exact and tireless observers, instead of one as hitherto, have laboured at the discovery of these first elements of a rational materia medica, what will it not be possible to effect in the whole extent of the endless kingdom of disease! Then the art of medicine will no longer be mocked at as an art of conjecture lacking all foundation" (para. 122).

Then again, his realization of the enormous possibilities in the variety of disease is illustrated in the following:-

"Every epidemic or sporadic collective disease is to be regarded and treated as a nameless, individual disorder, which has never occurred before exactly as in this case, in this person and in these circumstances, and can never in this identical form appear in the world again" (para. 60).

"Every disease epidemic in the world differs from every other, excepting only those few which are caused by a definite unchangeable miasm. Further, even every single case of epidemic and sporadic disease differs from every other, those only excepted that belong to the collective disease noted elsewhere. Therefore the rational physician will judge every case of illness brought under his care according to its individual characteristics. When he has investigated its individual features and noted all its signs and symptoms (for they exist in order to be noted) he will treat it according to its individuality (i.e., according to the particular group of symptoms it displays), with a suitable individual remedy" (para. 48).

The last point on which one wants to lay stress is that Hahnemann also visualized the inexhaustible supply of remedies if only efforts were taken to obtain them. Quoting from him again:-

"On the other hand, the disease-producing powers usually termed 'drugs' or 'medicines' can be used for purposes of cure, with infinitely greater ease, far more certainty and with a range of choice almost unlimited; we can give to the counter-disease thereby aroused (which is to remove the natural disease that we are called to treat) a regulated strength and duration, because the size and weight of the dose lie at our command; and as every medicine differs from every other and possesses a wide range of action, we have in the great multitude of drugs an unlimited number of artificial diseases ready to hand, which we can oppose with decisive choice to the natural course of the diseases and infirmities of mankind, and so, swiftly and surely, remove and extinguish natural disorders by means of very similar diseases artificially produced." (Para. 37.)

There is no doubt that these nosodes are going to play a large part in the future treatment of disease, and if they are essentially homoeopathic they ought to be distributed to the world through homoeopathic channels for two reasons: (1) That any extensions of Hahnemann's work should be added to that of his which already exists as a natural respect to his genius; (2) a point of far greater importance, these nosodes can only be a perfect success when combined with other homoeopathic treatment. It must not be forgotten that these nosodes probably only represent one branch of disease, that included by Hahnemann under the name of psora, and that as a part their action is limited and restricted to a certain phase in the treatment of disease, and cannot be expected under any conditions to cover anything like the whole picture. Therefore, the successful prescriber must also have at his command all other remedies which are at present in the Pharmacopoeia or which may in the future be added to it, so that he may be able to deal with the totality of any one or more cases, and whilst the allopathic school is perfectly willing to accept nosodes, or, as they are called, oral vaccines, of bacteria of all forms, it limits the new pharmacopoeia to this region of remedies, and will not have the benefit of the hundred years of experience of all the various herbs and natural remedies so completely tested out by your school.

These nosodes may be looked upon as great cleaning powers improving the condition of a patient and in certain cases effecting a complete cure, in others so cleaning up the whole state that the patient, who before gave no response, now receives marked benefit from other remedies. Again, the fundamental factor in using this treatment is the very careful repetition of the doses entirely according to the response of the patient, a law with which all homoeopaths are familiar but which it will take a long time for allopaths to appreciate. If these nosodes are launched on the profession through the allopathic world, their chance of success is very small in comparison with what it might be if contracted through your channels, because of these two points, the lack of the complete materia medica and the at present comparatively unknown law of the correct repetition of doses.

Such has been the success of the practical results of these preparations, that already more allopaths have used them than there are homoeopaths on the Register in England; some of them have entirely discarded the syringe and the old hypodermic method of injection for the use of the nosode, and one can see a distinct danger ahead if this practice spreads too widely without the control of a ruling body, as it should be used only by men who have had distinct training. The existence of homoeopathy in this country depends to an extent on its ability to cure cases where allopathy has failed, and the possession of these preparations enables the allopath who uses them properly to compete to a much more considerable extent than previously, and you can be sure that if this work is taken up by the other school and the proper interval between doses acknowledged, it will be claimed by them as entirely their own discovery. You have to-day in Dr. Paterson, of Glasgow, your own pathologist working on these nosodes, preparing them and actually doing further research on the subject, so that you are from an internal source proceeding with the work.

In conclusion, I want to remind you of paragraphs which ended a paper I read to you in April, 1920, which are as follows:-

"Meanwhile it should be realized that science in a totally different manner is confirming the principles of homoeopathy. To Hahnemann should fall all the honour for having anticipated science by more than a century.

"The attitude to-day of the medical profession in general is one of regard towards homoeopathy; but when, as is shortly certain to happen, it is generally recognized and appreciated that all modern research at the hands of allopaths is rapidly proving and drifting in the direction of Hahnemann's laws, then will homoeopathy be acknowledged to be the wonderful science that it is.

"Let all the members of your Society see to it that they are proud to be amongst the pioneers; let them see to it that they do not err one jot from the fundamental laws of their great founder. For science is proving him in detail - the like remedy, the single dose, the danger of hasty repetition.

"It is going to be a struggle between the old homeopathy and the new; see to it that the old receives its due share of credit, that its standard is kept high, and that, true to its teachings, it is not swamped in the flood of science which is merely following in the wake of Hahnemann."

I wish it were possible that we could present to you seven herbs instead of seven groups of bacteria, because there always seems to be some reticence in the minds of many to use anything associated with disease in the treatment of pathological conditions. Possibly this is a narrow-minded outlook, and in this age we are too inclined to want to keep medicine perfectly pure and have swung a little to the opposite extreme, possibly as reaction from the practices of the Middle Ages and the vivisection of to-day. Moreover, it may be that the organisms we are using are beneficent to mankind and not adverse.

We are making every endeavour to replace the bacterial nosode by means of plants and have, in fact, matched some of them almost exactly; for example, ornithogalum in its vibrations is almost identical with the Morgan group, and we have discovered a seaweed which has almost all the properties of the dysentery type, but there is yet one thing lacking, and that one point keeps us checkmated in the effort to avoid using bacterial nosodes. This vital point is polarity. The remedies of the meadow and of nature, when potentized, are of positive polarity, whereas those which have been associated with disease are of the reverse type, and at the present time it seems that it is this reversed polarity which is so essential in the results which are being obtained by bacterial nosodes. Perhaps at some future date a new form of potentizing may be discovered, which will be capable of reversing the polarity of the simple elements and plants, but until that time comes we have no alternative.

The beneficial effect of these nosodes is now accepted internationally, and the daily amount of good which is being accomplished in the fight against disease is on an enormous scale, so that it does not seem that this benefit should be withheld from humanity until such time as we may have found a particular method of combating the psora of Hahnemann by a means which will fit in with the aesthetic mentality of the most fastidious type. Infinitely more important it is that this work should be acknowledged as a continuation of that of Hahnemann and, though not in itself perfect, as leading the way to further discovery. Its growth and development should be watched and directed by the homoeopathic school, and not be allowed to fall into abuse in the hands of men who do not understand the fundamental principles on which it is established.

## An Effective Method of Preparing Vaccines for Oral Administration

published in the Medical World 24th January 1930 During the last ten years a new method of preparing vaccines for oral administration has been thoroughly explored, extensively used and beyond all doubt proved to be of great therapeutic value in cases of chronic disease. A large number of practitioners in the British Isles, America, Germany, France and other countries can testify to the value of this method to such an extent as to leave no doubt that an important therapeutic agent has been added to the materia medica of our science.

There are such definite advantages in the oral method of administration of vaccines that any advancement in this direction must naturally be welcomed by practitioners and public alike. Firstly, one of the great drawbacks of hypodermic injections is the necessity of adding antiseptic, a substance which all of us would wish to avoid introducing into the tissues. Secondly, very many patients have a distinct antagonism to vaccines in the usual form and are thus debarred from the benefits of this form of therapy; they have, however frequently no objection whatever, when the preparation is given orally. Thirdly, the pain and swelling of local reaction is entirely avoided, and in most cases general reaction is markedly less, a matter of considerable importance to those of low vitality and to the aged. Fourthly the danger of sepsis or of accidental infection, though of course this is extremely rare, is completely removed. Fifthly, these preparations are much less costly, and their use may be extended to those who cannot afford the expense of an autogenous hypodermic vaccine.

Up to the present time, although a certain amount of work has been done on acute disease with every promising results, attention has been mainly concentrated on all forms of chronic disease in which intestinal toxaemia has been wholly or in part the cause, and several hundreds of cases have been investigated. The relation to chronic disease of the non-lactose-fermenting organisms found in the intestinal content has now been so and accepted definitely established SO universally bv bacteriologists that no further comment on this point is necessary in this paper. The acceptance is of a two-fold nature: firstly, that these organisms play an enormous part in predisposing the patient to chronic disease of almost every form; secondly, that vaccines of these bacilli are valuable therapeutic agents and that great benefit has been obtained by their use. Suffice it to say that a vast amount of disease, heretofore considered hopeless, has been brought within the reach of cure.

The number of varieties of these non-lactose-fermenting bacilli is great - certainly amounting to thousands, if they are examined in minute detail according to the sugar reactions etc., but from the point of view of therapeutic administration of oral vaccines it is sufficient at the present time, at any rate, to divide them into seven main groups, classified according to their reactions on four sugars, as in the following table:-

	GLUCOSE	LACTOSE	SACCHAROSE	DULCITE
Faecalis alkaligenes	Alkaline	-	-	-
Dysentery type	Acid	-	-	-
Morgan type	Acid & gas	-	-	-
Gaertner type	Acid & gas	-	-	Acid & gas
Proteus type	Acid & gas	-	Acid & gas	-
Coli mutabile	Acid & gas	Late Acid & gas	-	-
No. 7 type	Acid & gas	-	Acid & gas	Acid & gas

For the purposes of treatment there are two requirements: (1) a bacteriological investigation to ascertain if the patient has an infection with any of the above types of organism, and (2) an autogenous vaccine, or the polyvalent vaccine of the particular group to which the infecting organism belongs.

To determine if any intestinal infection is present, the faeces of the patient are plated in the usual way, using McConkey's neutralred-bile-salt-peptone-lactose agar. If white colonies are present, these are picked off and cultures made, which are tested on the four sugars, as shown in the table above, to ascertain into which of the seven groups they fall. It must be borne in mind that these abnormal organisms are not persistently present and that positive and negative phases occur, exactly as they do in the case of typhoid carriers, so it is often necessary to make daily examinations until a positive result is obtained. As a rule three or four examinations are sufficient, but occasionally it is necessary to continue for a few weeks; a longer time than three weeks is uncommon.

The method of preparation is as follows: An 18-hour incubated agar slope of the organism is washed up in 2 c. c. of distilled water, and the emulsion killed in the ordinary way in the water bath at 60 degrees C., except that thirty minutes is sufficient, instead of the usual hour. 1 c.c. of this emulsion is added to 99 grammes of milk sugar in a mortar and the mixture is vigorously ground with a pestle for twenty minutes. The resulting powder is the first strength of the vaccine. 1 gramme of this powder is then added to 99 grammes of milk sugar and similarly ground for twenty minutes: this gives the second strength. 1 gramme of this is then added to 99 grammes of milk sugar and similarly ground to give the third strength, then 1 gramme is added to 99 c. c. of distilled water and vigorously shaken in a bottle; this gives the fourth strength. The process is continued by adding 1 c. c. of this mixture to 99 c. c. distilled water and again well shaking; and so on for any number of times, with repeated dilution and succussion. (One-half or one-quarter of all these amounts may be taken, if found more convenient, provided the proportion is maintained.) The strengths which are most frequently used are the twelfth and the thirtieth.

For the preparation of a polyvalent vaccine it is necessary to obtain a large number of cultures of the particular group, keeping these until at least a hundred have accumulated, thoroughly mixing them, and then taking 1 c.c. of the mixture and treating it as above. Thus it is possible to have a powerful vaccine of each of the seven groups pure to strain. Method of Dosage.

It has been found that with old people and debilitated subjects, or with cases where a definite reaction is undesirable, it is better to commence with a dose of the twelfth, but with the more vigorous it is quite safe to begin with the thirtieth strength. The dose consists of 3 or 4 drops taken from the stock bottle and added to 1 oz. water; this should be given in two halves at four hours' interval, preferably before food. It is then essential to await the result, allowing at least three weeks to elapse before deciding that no benefit has been obtained. If any improvement occurs, no matter how slight, no further dose should be given under any conditions whatever as long as the least progress is being made, even though this may mean waiting weeks or months only repeating when the condition becomes definitely stationary, or there is a tendency to relapse.

Illustrative Cases.

*Case 1.* Miss N. G. aet. 35. Epilepsy. Attacks started at six years of age, averaging one a week. Mother epileptic; father alcoholic. Bacteriological examination of faeces gave 20 per cent. of an abnormal bacillus of the Morgan type.

October 28, 1927. First dose of twelfth strength. Improvement followed. No sign of any trouble for a period of almost six weeks, when a very mild attack occurred.

December 7th, 1927. Dose repeated.

February, 6th, 1928. Very mild attack. Third dose given.

The case is still under observation. In all, twelve doses have

been required in nearly two years, the last being given in May, 1929. There have been five definite attacks during that period the last one being on November 21, 1928. During 1929, the most serious symptoms have been slight giddiness and depression on four occasions.

*Case* 2. Mr. J. L. aet. 44. Chronic colitis of five years standing; frequent loose stools with much mucus exacerbations with attacks of diarrhoea every three or four weeks. General debility with marked depression and frequent headaches. Bacteriological examination of faeces gave 90 per cent. of an abnormal bacillus of the proteus type.

June 22, 1928. First dose of thirtieth strength given. Rapid and marked improvement, with disappearance of all symptoms by the end of July. Patient remained well until March 1929, when there was a slight return of symptoms. The dose was repeated, again with rapid improvement, which has been maintained.

*Case* 3. Mr. C. J. aet. 50. Nervous breakdown due to overwork and business strain; marked depression and inability to concentrate, steadily increasing during one year; nervous dyspepsia, pain and flatulence following food. Bacteriological examination of faeces gave 5 per cent. of an abnormal bacillus of the Morgan type.

August 8, 1927. First dose of thirtieth strength. Steady improvement, and by the middle of August patient able to resume light duties. Progress continued, and by the middle of September patient considered himself unusually well.

October 1, 1927. No further progress, so second dose given. Still further improvement. and condition better than for some years.

Owing to slight relapses four more doses were given during the next eight months, the last being on June 22, 1928. Since then there has been no necessity for any treatment.

*Case* 4. Mrs. B. aet. 62. Severe headaches, debility, and other symptoms of chronic renal disease. Blood pressure 232.

Examination of urine showed albumen and casts present.

Bacteriological examination of faeces gave 10 per cent. of an abnormal bacillus of the faecalis alkaligenes type.

January 3, 1928. First dose of twelfth strength. General improvement. headaches less frequent and severe. Blood pressure fell to 209. Amount of albumen diminished.

February 4, 1928. Second dose given, as condition appeared stationary.

A further three doses were given in 1928, and two in 1929. The headaches have almost entirely disappeared since April, 1928, and the general health has been good, the blood pressure keeping about 200 and the percentage of albumen slight.

*Case* 5. Mrs. C. aet. 44. Very severe headaches for eight years, one a month, necessitating at least one day in bed.

Bacteriological examination of faeces gave 2 per cent. of an abnormal bacillus of the Morgan type.

January 14, 1928. First dose of thirtieth strength.

The February attack was missed.

March 8, 1928. A mild attack necessitated a second dose.

Since then six further doses have been given, the last one being on April 19, 1929. For the last twelve months the attacks have been very mild and have now practically ceased.

It will readily be seen that the great advantages of this method of administration apply not only to the patient, but also to the physician, because once good stocks of polyvalent vaccine have been prepared, they are practically inexhaustible. Hence the cost is reduced, and the administration is easily carried out by any practitioner. The only necessary preliminary is a bacteriological examination to determine the type of the infecting organism.

So many medical men can now guarantee the efficacy of these preparations that all doubt as to their value has been removed. Hitherto hypodermic vaccines of these abnormal bacilli have very considerably increased our power of cure in cases of chronic disease, and now we have at our disposal an equally effective, but simpler method of treatment, which can be extended to those who have objections or prejudices to the hypodermic method.

Space forbids, in an article of this description, any discussion of the physical properties of these preparations, but the work of modern physicists is tending to show that certain properties are released and that very active substances are present in these dilutions.

This work is being further elaborated by Dr. T. M. Dishington of Glasgow, who has spent several years in patient research on this subject, and it is hoped before long to be able to publish the symptoms peculiar to each particular group of organisms, so that prescribing will be possible on symptomatology alone, without any need of the laboratory. It will be quite obvious to many of our readers that the method adopted in the preparation of these oral vaccines is identical with that used by the Homeopathic school for the past century in preparing their remedies, and the knowledge that bacteria so treated prove an invaluable therapeutic agent must form a link between the advanced school of Immunity of to-day and that of Homoeopathy, which has existed for a hundred years. And although Homoeopathy needs no support other than that given by the effective cures obtained through its science, this link must be of great value in demonstrating to members of the allopathic school the confirmation of one of Hahnemann's discoveries by this different point of view which has now been effected in the laboratory.