The Chiropractor Looks at Infection:
A Supplement to *Rational Bacteriology*

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INTRODUCTION

The Nature of Our Task

No one who peruses the literature of the subject can fail to reach the conclusion that modern bacteriology is a hodge podge. The science, if such it may be called, suffers acutely from the conflict between long cherished theory and demonstrable fact. Confronted with this dilemma, some have sought to substitute, for the more general, orthodox theory, a number of specific theories to fit specific sets of observations. As a result, they have only added to the confusion, for the several theories are not mutually reconcilable. Sometimes the incompatibilities are more apparent than real, but no one has taken the trouble to show why this is so, and the confusion persists.

The exact etiology of zymotic diseases and the nature of the ensuing disease process are matters of paramount importance in modern civilization. Until etiology is thoroughly understood, there can be no rational prophylaxis. Until the disease process is understood, there can be no rational therapy.

The drugless practitioner is constantly called upon to answer the question: "What can you do for syphilis, gonorrhea, diphtheria, etc.?" Such questions cannot be answered with blatant generalities, nor by evading the issue. The whole question has been oversimplified. In the body of our text we have laid the groundwork for grappling with the problem, and with this as a foundation supplemented by highly significant data which more recent research has brought forth, we purpose to analyze the etiology and compare the therapies. Moreover, it shall be our aim to make this analysis so comprehensive as to leave no loopholes; every possibility will be envisaged.

The Problem in Historical Perspective

It will be recalled that Bechamp's researches led him to the conclusion that the cell is not the ultimate unit of life. He showed that it contains microscopic granules, which he called microzymas, and that these are potentially capable of independent existence. He held that the specific activities of the microzymas depend upon the changing factors in the environment which act favorably or otherwise upon the organism, and that under unfavorable conditions cells disintegrate, releasing the microzymas as independent entities. These can in turn initiate similar disintegration elsewhere, under the stimulus of a similar environment. This would account both for the spontaneous occurrence and for the spread of certain diseases regarded as communicable.

It cannot be too strongly emphasized that Bechamp made a sharp distinction between disease originating in this manner and disease associated with the activities of parasites. Thus he points out very clearly, in the classic example of silk worm diseases, that *pebrine* is definitely a parasitic disease, whereas *flacherie* is endogenous in origin, although it may spread as infection.

Pasteur, contemporary with Bechamp, held that all "infectious" disease is parasitic in nature and always exogenous in origin. Thus there were two nineteenth century approaches to the problem of bacterial disease.

About the work of Bechamp there has grown up what amounts to a conspiracy of silence. Despite the eminent position in the world of science to which he rose by virtue of his researches in both chemistry and bacteriology, his name is not even accorded space in the Encyclopedia Britannica. Yet the whole trend of present-day investigation tends toward direct confirmation of Bechamp's major contentions. His teaching that the microzymas are the ultimate units of living matter, and that they can exist either in the organized condition of the living cell or in the unorganized state as separate entities finds corroboration in the discovery that bacteria may be rendered invisible and filterable, and then made to reappear as bacterial cells by modifying the culture medium. His contention that bacterial disease may have a spontaneous, endogenous origin finds support in the virus studies of Rivers at the Rockefeller Institute. In short, a return to Bechamp's theoretical position is a primary requisite for achieving some kind of order out of the chaos of contemporary bacteriology and immunology.

Revolt in Russia

From many quarters of the globe have come protests against the shackles forged by Pasteur, but no one has done more to break these chains than a group of Russian scientists under the leadership of A. D. Speransky, Director of the Department of Patho-physiology of the All-Union Institute of Experimental Medicine. The most striking of his findings are:

1. That the nervous system is supreme in health and disease, and that bacterial disease is no exception to this rule;
2. That bacterial factors are always secondary in importance to neurological factors;
3. That even the incubation period is a neurological phenomenon;
4. That it is possible to trace the relationship between local irritation and symptoms remote both in space and in time, thereby explaining not only anaphylaxis, but various latent neurological phenomena previously regarded as bacteriological, or else left unexplained;
5. That even the specificity of a bacterial infection is neurologically conditioned;
6. That vaccine and serum prophylaxis and therapy are, in the light of these discoveries, highly irrational practices.

We shall have occasion later to refer in greater detail to this monumental work. Let us proceed now with our analysis.

ETIOLOGY

Setting the Stage

The factors which make possible the genesis of communicable disease are infinitely complex. In no case is the dogma of Pasteur (that body plus germ equals disease) tenable. In every case it is necessary that the stage beset first by some special combination of circumstances before bacterial activity can be initiated. Let us consider what factors are involved in this setting of the stage.

In the first place, no two human beings come into the world with exactly the same endowment. The inherent quality of the protoplasm is conditioned by heredity. The sensitivity of nerves to stimulation, tendency to low or high threshold, must accordingly be determined in part, at least, by heredity. The infant shares many of the humoral characteristics of the mother; it has been shown that antibodies, (whatever may be their nature) are transmitted from mother to offspring. We may safely say that every newborn child reflects in some measure the state of health enjoyed by the mother during pregnancy.

From birth on the individual is subjected to a multiplicity of influences: physical, chemical, biological, psychic, and social, which contribute in forming the adult constitution with all of its own peculiar cellular, organic, and neural patterns of behavior.

Nutrition plays a large role. Skeletal development, osmosis, nerve conductivity, blood vessel tone, capillary permeability, and a host of other physiologic phenomena are dependent on an adequate mineral supply. Growth, learning capacity, even life itself, depend upon vitamin intake. Certain vitamins, notably A and C, are intimately related to resistance to infection. Vitamin B1 can eliminate sensitization to foreign proteins. Overnourishment may so overwork the organs of digestion and excretion and so encumber the tissues that optimum physiologic conditions are impossible.

Peculiarities of development may entail a skin that is too thin or nerve endings so close to the periphery that undue nerve stimulation occurs constantly. The nervous system may be too highly or insufficiently organized for ideal integration. Under such conditions it may be impossible for the nervous system to exert the degree of control of the internal environment which must be maintained to prevent undesirable bacterial activity.

Innervation may be further impaired by anatomical disrelation consequent to skeletal asymmetries, faulty posture, occupation, or trauma. The result will be abnormal proprioceptor stimulation, accompanied by alternations of threshold, chronaxie, impulse frequency, and synaptic relationships and the setting up of pathogenic reflexes. In view of the supremacy of the nervous system in health and disease, it is difficult to imagine a more effective setting of the stage for bacterial processes.

Among the physical influences to which we are subjected is that of light. We do not yet know the optimum amount of exposure to this influence. We do know that excessive

exposure will disintegrate cells and pave the way for degenerative and malignant disease of the epithelial tissues. Carcinoma of the skin is more prevalent among those whose skin is subjected to excessive weathering among those less exposed. That an influence as potent as this should not also be one of the factors in “resistance” is inconceivable.

While not ordinarily a major influence, weather also plays a part. Under conditions in which favorable and unfavorable factions are delicately balanced, it might well play the decisive role. Neither extremes of temperature and humidity, nor monotony of stimulus from this source are conducive to physiologic efficiency.

Glandular imbalance, itself the result of such factors as heredity, malnutrition, psychic shock, trauma, and disordered neuro-physiology, so disturbs physiologic mechanisms in general that it can obviously contribute to susceptibility to communicable disease. Crile has shown that the thyroid and the adrenals in particular play a leading role in acute infectious disease.

States of psychic tension have somewhat analogous physical concomitants. Fear tends to paralyze parasympathetic activities, while it overstimulates the sympathetic system, and with it the glands which it innervates. No one who has studied an epidemic at close range questions the magnitude of fear as a factor in susceptibility to infection. This fear is taken advantage of by those who profit by epidemics; they spread the fear.

Fatigue quite naturally limits the range of activity which the organism can undertake in an attempt to modify or adapt itself to unfavorable factors in its internal or external environment-a point which we believe needs no elaboration.

Highly important is the factor of morbid encumbrance. It is a commonplace of clinical observation that the kind of people who get colds, influenza, grippe, pneumonia, etc., arc those who harbor such an encumbrance, while those who escape are generally those who have been handled with the idea of efficient elimination in mind. Furthermore, when we consider the symptoms, it is obvious that skin, bowels, kidneys, and lungs are affected; that is, the organs of elimination. In line with these observations, all schools of therapy, including even the orthodox medical school, employ some form of eliminative treatment: enemas, laxatives, sweating, fasting; physical, mental, and physiological rest. Additional proof that the theory of morbid encumbrance is well founded is furnished by the occasion which frequently initiates the symptoms. Holiday meals, candy, loss of sleep, excesses of one kind or another very commonly precede the onset of symptoms. Temporary cessation of bowel action due to inactivity during train travel may be the precipitating factor. Moreover, no other etiological explanation so well accounts for multiple attacks and loss of immunity as does the concept of morbid encumbrance. It is a cardinal doctrine of the naturopathic school that bacterial activity serves to break up the morbid material which has accumulated, and that such activity, kept within bounds, may be the only way, under certain conditions, of unburdening the body of this load. Zinsser has shown that some saprophytes like the common colon bacillus perform a useful function in the body. May it not be that so-called pathogenic organisms also, in accordance with the naturopathic view, sometimes playa useful role as scavengers?

Finally, we may mention, as probable factors in setting the stage for zymotic disease, a whole complex of elements which might be embraced under the head of irrational therapy and prophylaxis. Many of the symptoms of acute disease are actually manifestations of vicarious elimination, as we will show when we come to consider the nature of the disease process. To suppress these symptoms by the use of drugs Or surgical interference is to preserve the morbid encumbrance; in other words, to keep the stage set for some future flare-up. Pharmacological findings show that certain drugs like nicotine and strychnine inhibit or stimulate the sympathetic or parasympathetic system, or both. Some paralyze motor nerves; others, sensory. This proves that nerve tissue can be specifically affected by drugs. Who is to say. however, that the conditioning of tissue is limited to the phenomena already observed? Who can say whether or not afferent tracts of the spinal cord are being conditioned for tabes dorsalis, efferent areas, for anterior poliomyelitis, or the brain, for paresis? Serological findings show that inoculations produce such neurological phenomena as allergy and anaphylaxis; and the symptoms may be latent for years, becoming manifest only upon introduction of some new agent. This proves that the nervous system can be permanently conditioned by biologicals, and argues strongly against such diagnostic procedures as the Schick and Dick tests, tuberculin and mallein tests.

For convenience of discussion we have listed the various components of the etiological "stage" as though they were discrete items. Actually they overlap and interlock indefinitely. The amount of anatomical disrelation required to produce symptoms will be dependent upon threshold, which in turn depends upon developmental idiosyncrasies and internal chemical environment. An absence of minerals may negate the benefits of an adequate vitamin supply. Fatigue and surplus food contribute to morbid encumbrance, and morbid encumbrance could be the result of disturbed innervation to the organs of elimination. Psychic tension may reflexly create anatomical distortion, or may itself be the effect of abnormal stimulation arising from such distortion.

Behind every case of infectious disease, then, there is a. very complex picture of causative factors, so complex, in fact, that one can rarely sort out all of the components and assign to each its relative importance. Once this is realized, we do not have to trouble ourselves about such terms as primary cause, secondary cause, pathogenic factors, etiological factors, exciting cause, contributing cause, multiple causes, sufficient cause, etc.

Entry of the Germ Upon the Scene

Assuming now that the stage has, by an adequate combination of circumstances, been set for microbial activity, just how does such activity get started? There are five possibilities. Let us enumerate them:

1. Devolution
2. Transmutation
3. Bacterial invasion
4. Inoculation

5. Infestation

By *devolution* we mean Bechamp's phenomenon, the dissociation, granulation, and degeneration of cells with the release of the microzymas and their subsequent evolution into bacteria. This concept is the only one that can adequately explain the conversion of bacteria into filterable forms and reversion. to cell forms, d'Herelle's bacteriophage phenomenon, the spontaneous origin of the viruses postulated by Rivers, the appearance of poliomyelitis in children never exposed to the disease, the enormous multiplication of bacteria in the cadaver within a few hours after death in tissues previously sterile.

Transmutation of bacteria from one variety to another is a phenomenon that has long been recognized in laboratory bacteriology. Bacillus-forms assume coccus-form. The pneumococcus may become streptococcus, and vice-versa. The variability with changes of environment appears endless. If these changes have been observed in the laboratory, there is no reason to suppose that they do not occur in the human body. We may thus conceive that organisms of a beneficial or 11armless nature can acquire noxious characteristics. The typhoid bacillus, for example, may well be a mutation of the common colon bacillus, which it so greatly resembles. In fact, this is precisely the explanation of the origin of typhoid offered many years ago by some of the earlier British students of the subjects.

Bacterial invasion implies the spread of parasitic flora by true contagion. Gonorrhea furnishes the perfect example of this. Such a transfer of parasites was clearly envisaged by Bechamp, "who acknowledged the possibility of both an exogenous and an endogenous origin of zymotic disease

Inoculation is sometimes the manner of implanting the germ. Vaccinia is the example par excellence. If the stage has been set, the vaccination "takes"; otherwise it docs not. The inoculation may be performed by an insect. The malarial parasite is inoculated into man by the mosquito. The act has been imitated, also, for therapeutic purposes in the treatment of paresis, but not all patients so treated acquire malaria. The stage is not always set. Yellow fever, dengue, typhus, and bubonic plague are other diseases acquired by traumatic inoculation. Because of the similarity between some bacterial toxins and snake venom some authorities would put snake-bite in this category.

The fifth possibility is *infestation* by some parasite of an order higher than bacteria: a protozoon, a fungus, body lice, ticks. Syphilis furnishes a good example. Osler rates the spirochete among the protozoa, a true animal parasite. How impossible it is to lump all "infectious" diseases in one category is at once apparent when we attempt to compare syphilis with diphtheria. The differences are striking. Syphilis is always exogenous in origin, diphtheria either exogenous or endogenous. The microorganisms of syphilis are fauna, those of diphtheria are flora. Syphilis is not self-limited, becomes chronic, and leads to no immunity, while diphtheria is self-limited, always acute, and followed by immunity. For syphilis there is no serum prophylaxis, for diphtheria there is. For the one, medicine employs chemotherapy, for the other, isotherapy. There are no non-syphilitic "carriers" of the spirochete, while there are healthy "carriers" of the diphtheria bacillus. In

view of this contrast one can hardly say that the problems presented by these two diseases are identical.

Nature of the Disease Process

A highly characteristic reaction to the presence of foreign matter, microorganisms, or morbid encumbrance is fever. Fever, as Crile has shown, is essentially a neurological phenomenon. Impulses are first discharged from brain to thyroid and suprarenal glands. Following the release of thyroxin and adrenalin, nerve conductivity is increased, heart action is accelerated, water loss is reduced, the temperature increases, and the whole metabolism is stepped up. The environment becomes one unfavorable to bacterial multiplication. Foreign proteins tend to be disintegrated.

A number of processes which may develop are in the nature of auxiliary emunctories. The discharge of chronic nasal catarrh, sinus discharge, skin eruptions, fistulae, abscesses, the inflammatory processes at sites of trauma—are all examples of vicarious elimination. All represent adaptations to the condition of morbid encumbrance. If the encumbrance is kept re-stocked, the pathology becomes chronic. Moreover, if a process like excessive mucus formation is allowed to intrench itself as a tissue habit, then it may be exceedingly difficult to change the habit, even after the stimulus which first prompted it has disappeared. This is a point which may have an important bearing on the course of some obstinate cases of gonorrhea.

Selective tissue destruction may be a characteristic feature of the pathology. We have. for example. the damage to the cerebral cortex which occurs in encephalitis lethargica, the destruction of anterior horn cells in infantile paralysis, the conversion of endothelium into fibrous tissue in endocarditis and of epithelium into scar tissue in ophthalmia neonatorum, destruction of cancellous bone tissue in Pott's disease and of enamel and dentine in dental caries, destruction of the white matter of the cord in tabes dorsalis, lateral sclerosis, and the combined scleroses. Paresis, arthritis deformans, urethral stricture in gonorrhea might be mentioned. The examples are innumerable.

One must not for a moment lose sight of the fact, however, that the disease process is, above all else, neurological. Speransky injected tubercle bacilli into the testis of an animal, took ample precaution to insulate the site of irritation so that none of the injected bacteria could spread, and there after obtained tubercle bacilli from the kidney. Repeating the experiment with streptococci, he found pus in the kidney. The only connection between the organs involved was a neural one. The reflex arc had been conditioned for specific bacterial activity. Speransky himself makes no attempt to explain this specificity, but Bechamp's devolution theory plus the neurological component would adequately account for what happened in these experiments. Further proof of the preponderant role of the nervous system in infection is seen in Speransky’s demonstration that the blood stream can be rid of the spirochete of syphilis or of the plasmodium of malaria by an appropriate stimulus to the central nervous system, and that even the form of the malarial parasite can be neurologically conditioned. (For details see his work *A Basis for the Theory of Medicine*.) No less striking is the assertion of Allen in his article *What Do We*

Know About Syphilis? in the *Medical Record*, that, after the primary stage, no viable spirochete has ever been obtained from the tissues or body fluids of a syphilitic patient. In other word; the disease goes on for years after the microbe has either disappeared or died.

Prophylaxis

We are now in a position to consider how zymotic disease may be prevented. There can be no doubt that the principle of natural selection alone tends to diminish the incidence of communicable disease. Primitive societies furnish the ideal laboratory for observing this. To what extent civilized communities suffer by preserving and coddling the unfit is still a matter for debate. Most thoughtful persons will, at any rate, agree that, at least to the limited extent of their practicability, the principles of eugenics should be applied to human breeding.

The next task, and certainly the most important part of prophylaxis, is to observe the rules of personal hygiene. The factors we have noted under *Setting the Stage* are the factors of hygiene. The problem here is two-fold. On the one hand, there is widespread need to teach people the hygienic life. On the other hand, if such teaching is to succeed, we must have enough social engineering to make certain that those who are taught do not lack the basic economic means to put the teaching into practice. Only in this way can we be sure that the stage is set for health on a large scale.

One element in prophylaxis is more than a matter of hygiene, since it involves something that is, to some extent, beyond the control of the individual. Trauma and accidental reflexes may bring about anatomical disrelation, as already mentioned. When this has occurred, it may take the services of a specialist in the correction of such disrelation (namely, a chiropractor) to restore normal conditions. Periodic attention to this possibility is an indispensable item in efficient prophylaxis.

Finally, there is no reason to abandon those in whom the stage is set for disease, while waiting for them to reorganize their lives along hygienic lines. Common sense dictates that we must avoid sparks in the presence of high explosives. We can and should, therefore, take appropriate measures to ward off invasion, infestation, and inoculation. Mechanical prophylaxis against venereal disease should be a matter of common knowledge. Isolation and quarantine are rational prophylactic measures provided the rules are kept sufficiently elastic to allow for variations in the recovery period under varying therapies. Inoculators, both insect and human, must be combated by every means at our command. Serum prophylaxis and vaccination should be shunned, for reasons which will become more apparent when we come to consider therapy. Beyond the scope of personal hygiene and chiropractic, there is no prophylaxis worthy of the name, except that furnished by the sanitary engineer. Medicine has nothing to offer that can withstand careful scrutiny.

Therapy

If the reader will keep in mind our discussion of the process at work in infectious disease, he will be able to judge what constitutes rational therapy. To interfere with one of the auxiliary emunctory processes and do nothing about the morbid encumbrance is certainly irrational. The use of powerful astringents and cauterizing agents on mucous membranes to check a discharge is a case in point. So also is the use of chemicals to "dry up" a skin eruption.

We have seen that fever is a useful adaptive mechanism. It follows that any method which has as its primary objective the speedy, total eradication of fever is irrational. Hippocrates knew this truth when he said that, given fever, he could cure any disease. Fever has been. employed as a therapeutic agent in the treatment of advanced syphilis. Now it strikes one as inconsistent to prevent the fever diseases of early childhood and yet to institute fever in the cure of later chronic disease. Of course, the suggestion is not being made that fever be permitted or encouraged to run wild and cause irreparable damage. It must be controlled and kept within bounds.

Let us now examine serum and vaccine therapy. There can be but three possible effects of inoculation:

a. No effect
b. Success
c. Injury

The belief that there is no effect in the cases in which the procedure does not "take," or that there is "toleration," is based on illusion. Just as every impression reaching the cerebral cortex affects the mind, everything done to the body is registered in the nervous system, and every inoculation has its neurological concomitants just as truly as do the phenomena of psychology. Speransky has produced the evidence which proves the correctness of this assertion. We can therefore eliminate the first of our three possibilities, that is, "*no* effect," as something never realized in practice.

But what of the cases which appear to yield success? Five possible explanations have been suggested to account for what actually happens:

(1) The germ is embalmed. There is a difference between killing and destroying. A therapy may kill germs, but what becomes of the dead bacteria? According to AlIel'1 (article cited), the symptoms of syphilis are produced by a toxic combination of dead leucocytes with dead spirochetes. That is what we mean by embalming the germ. To be sure, in this instance, what is involved is chemotherapy, rather than serum therapy, but the principle may be equally applicable, for all we know, to serum therapy. Perhaps it would furnish a clue to some of the suppurative processes regarded as the sequelae of acute infectious disease.

(2) Morbid material is preserved, because the bacterial activity which would have destroyed it has been checked. This possibility alone renders the therapy questionable.

(3) The morbid material is "converted"—an explanation which applies to vaccination. It was Pasteur's theory that immunity acquired either by an attack of the disease or by vaccination (a mild form of the disease artificially induced) results from exhaustion of the soil necessary for the growth of the pathogenic organisms. It is synonymous with what Fomon calls the abstraction theory of immunity. In vaccination the morbid material is II converted" by an irrational procedure precipitately imposed upon the body, with what detrimental effects the victim may never know until disaster overtakes him. "Irritation of any point of the complex network of the nervous system," declares Speransky, "can evoke changes not only in the adjacent parts, but also in the remote regions of the organism," and he leaves no doubt in the mind of the reader that he wishes to include under the term "irritation" the procedures of inoculation and vaccination.

(4) The cell is conditioned, "fortified," so that it will no longer react in a specific, characteristic way to a specific germ or antigen. This is a special case of Pavlov's principle of the conditioned reflex (on the cellular level), which now becomes, not a mere toy of science, but the clue to the major risks of serum therapy. The nervous system, which physiologically reacts to insult in an appropriate protective fashion, may be so conditioned that its reaction to a repetition of the insult will be so bizarre that the individual is destroyed (anaphylactic shock). It may not be far-fetched to say that the connection between these two events is analogous to that existing between the repressed emotional experience of childhood and the irrational phobia of the adult induced by a common stimulus, a connection clearly delineated by psychiatrists.

(5) Mutations are promoted in bacteria, in body fluids, and in tissue cells. That the bacteria may undergo mutation is to be inferred from the known fact that they change with changes of environment. Pasteur and Roux bred out the sporing characteristic of B. anthracis, and it was never regained by descendants. Typical bacillus forms have been induced to assume coccus form. Both forms have been rendered filterable. Only under specific environmental conditions and for specific periods do bacteria have any specificity. To bring about some utterly unpredictable change in bacteria within the body is to gamble with consequences.

That body proteins arc altered is now a matter of established fact. Manwaring says: "Immunization to date (1929) has been based on the Ehrlich theory that the inoculation of disease products in sub-pathogenic doses creates antibodies, or defending entities against any subsequent mass invasion. Not only is there no evidence of these antibodies being formed, but there is ground for believing that the injected germ proteins hybridize with the body to form new tribes, half animal and half human, whose characteristics and effects cannot be predicted. . . . Even non-toxic bacterial substances sometimes hybridize with serum albumins to form specific poisons which continue to multiply, breed, and crossbreed ad infinitum, doing untold harm as its reproductivity may continue while life lasts."

"Untold harm!" Yes, those are the words, and who wrote them? Some ignorant fanatic, some religious (rank, a prejudiced cultist, perhaps? No, indeed. Those arc the words of the professor of bacteriology at Stanford University, a foremost authority in his field. His

researches have demonstrated that biologicals induce mutations. And let us not forget that the cancer cell is a mutant cell. It behooves the proponents of serum therapy to show that they are not responsible for the increase in cancer observed today, not to speak of the cardio-renal-vascular syndromes and other degenerative diseases more prevalent than ever before. Why, in this so-called age of science, do we, as adults, have a shorter life expectancy than did our fathers? Those who would assume exclusive guardianship of the public health should be required to give an accounting.

After analyzing all five possibilities that would explain "successful" inoculation, we are forced to the conclusion that the victory is at best a hollow one, for there is no success without injury. Every inoculation does damage, and the damage may be great. This matter deserves attention.

Ever since such scientists as Wallace and Spencer began, many years ago, to criticize the theory of serum therapy, the re have been critics of both the theory and the practice. The clinical observations of chiropractors substantiated the criticisms, but the laboratory indictment of the practice came with the work of Speransky, who in 1935 completed ten years of investigation in the patho-physiological laboratory, showing conclusively that serum therapy is an irrational practice. Ranging from the immediate and disastrous effects observed in anaphylactic death to a latent future termination occurring many years later as the result of neurological dysmotivation, every degree of inconvenience and misery is observable. Speransky has shown that the mere scratch of the inoculating hypodermic needle is often sufficient to initiate a neurological disaster which, once started, nothing is able to stop. Note that neither the needle nor the material introduced is responsible for the dysfunction or dysmotivation which follows. All that is needed is the right kind of stimulus to cause a properly conditioned nervous system to become nihilistic, to go berserk. The earlier inoculation is the "conditioner"; the needle later is the stimulus that sets off the explosion.

There is as yet no suitable terminology with which to describe these recent discoveries of Speransky. The concept is new, and no adequate nomenclature has been evolved. A specific stimulus induces certain parts of the nervous system to take on a form of activity which is not physiological, but which is something more than physiology gone wrong. The resultant action is deteriorating, degenerating, dystrophic, disintegrating, incoordinating, cataclysmic, catastrophic. (Weiant has proposed the term *subcortical psychosis*.) It may be prompt and devastating, as in fatal anaphylaxis, or it may remain latent over a long period of years to terminate finally in nihilistic destruction, often of a malignant nature, in any part of the body. The symptoms may be local, or remote from the site of the initial stimulus. The agent starting the action may appear to be of small moment, but once it is started, the nerve system continues the process until we have a veritable conflagration. This is an indictment of the practice of serum therapy. Disasters in smallpox, diphtheria, poliomyelitis, tetanus, typhoid, and numerous other specific "prophylactic" inoculations have been so numerous that a public scandal would have ensued in any field of human activity other than immunology. The procedure would have been discarded a generation ago, had it not been for the economic factors involved, plus the trusting gullibility of the educated people who allow themselves to be emotionally

conditioned into a state of lethargy, when immunology is shouted at them as "the advance in medical *science*.

The "flare-ups" of which Osler spoke have now been given an adequate neurological interpretation by Speransky's findings. The victim may be doomed to speedy death or to a life of suffering from allergic reactions, skin eruptions, digestive or respiratory disturbances, cardio-renal-vascular disease, malignancy, perhaps, and other symptoms too numerous to mention. Hence the dangers of Schick, Dick, and tuberculin tests; of anti-typhoid serum, toxin-antitoxin, Salk vaccine, and smallpox vaccine. These things are scientific, yes; they are the product of laboratory experimentation and technical skill. but they are none the less irrational. A procedure which is scientific and at the same time irrational may properly be spoken of as sciolism. It has no place in an ordered civilization.

Let us see now how chiropractic rates by comparison. Can the chiropractor guarantee immunity? The answer is that he cannot, for he cannot control all the factors. But neither can the physician, as witness the occurrence of typhoid fever in whole regiments of supposedly immunized soldiers, atypical cases of tetanus following tetanus antitoxin, smallpox following vaccination, polio after Salk vaccine (sometimes fatal), and the high proportion of diphtheria patients who have received toxin-antoxin. (For authorities and statistics, see our *Rational Bacteriology*. For a physician's statement concerning the questionable methods used to coerce the medical profession into accepting the Salk vaccine and expressing grave concern as to its safety, see *The Journal of the American Medical Association* of January 21, 1956, pp. 231-232. Also, for evidence that the polio situation in Canada is not as rosy as we have been led to believe, see the article by a Winnipeg physician appearing in *Medical Times*, July, 1956, and in the same publication of that month note the extensive report of a Pennsylvania doctor on the high incidence of adverse reactions in school children following the use of the Salk vaccine.) Is there, then, any advantage to be derived from chiropractic? Assuredly there is, for, in the first place, chiropractic never harms; inoculations always do. In the second place, chiropractic is co-operative, rather than combative. By normalizing the flow of nerve impulses, it promotes normal activity in the organs of elimination, thus removing the morbid encumbrance.

It controls fever by altering the situation which induced it, and the alteration is brought about, not by an artificial agent, but by purely physiological mechanisms. Because it acts directly on the nerve system, which is trophic to all tissues, it tends to check devolution. and because the nerve system is the dominant factor in the regulation of the internal environment, it controls transmutation. Conceivably invasion might occur, where certain varieties of bacteria are involved, no matter how fortified the body might be (although this is problematical). Even in that case, medical intervention is not indispensable. It is said to be the practice in the Greek army to cure gonorrhea by six weeks of rest in bed. Anyone can apply this treatment. It is reported in Medical Record that warts are being cured by suggestion, even when the warts are infected. Why, then, should the chiropractor feel limited, where infection is concerned? He has the entire resources of the nerve system at his disposal. The keynote in the invasion, however, should be prophylaxis, rather than cure, and this is a matter of education. When it comes to

inoculation (malaria) and infestation (syphilis), if we remember that Speransky cleared up these conditions by a very simple neurological treatment aimed at re-orienting cell groupings in the nerve system, it no longer seems far-fetched to expect that chiropractic may duplicate this performance. What we need is more data on these cases under chiropractic: adequate laboratory checks on results obtained, caution in claims made, and faithful reporting of all cases, whether successes or failures. Facilities should be provided to enable the chiropractor to demonstrate just what contribution he can make toward the eradication of diseases acquired by inoculation and infestation, without subjecting the patient to the risks of chemotherapy. John Tilden, M. D., a physician using only drugless methods, always accepted patients with syphilis and claimed that there is absolutely no difficulty in dealing with this disease.

But what of the cases involving tissue destruction: tabes dorsalis, arthritis deformans, and the other examples to which we have referred in discussing the nature of the disease process? Does not medicine have the advantage here? By no means. Pathology of this sort is irreversible. Not all the king's horses nor all the king's men can change scar tissue to nerve again. Medicine is as helpless under these circumstances as any other therapy. There is, nevertheless, a legitimate place for chiropractic in the handling of these complications. The chiropractor can hope to arrest the further progress of the pathology. He can assist the body to adapt itself to and compensate for the existing defect. Moreover, he can perform the humanitarian service of relieving pain without recourse to narcotics. Spinal adjustments lessen the peripheral irritation, decrease the frequencies of afferent impulses, minimize pain, create a sense of ease, even though. the prognosis may be bad.

There are six criteria by which to judge the value of a therapy and to estimate the relative merits of differing therapies, namely:

Is it logical?
Is it effective?
Is it scientific?
Is it rational?
Is it peerless?
Is it infallible?

Applying these criteria to chiropractic, we find:

(1) Chiropractic is logical. It makes no unwarranted assumptions. It acknowledges the supremacy of the nerve system. It maintains that anatomical disrelation is all but universal in disease, that such disrelation is a potent factor in disturbing nerve function, and that the correction of such disrc1ation normalizes nerve function, thus facilitating recovery. Moreover, it proposes a perfectly feasible and intelligent plan of action for applying the principle.

(2) It is effective; for there is no other way to account for its rapid rise and progress over a period of nearly half a century, or for its vigor today. Millions of people throughout the

world in every walk of life (not excepting the medical profession itself) and in all social strata place unqualified confidence in [he ability of chiropractic to solve their health problems.

(3) It is scientific, for it depends directly upon the data of anatomy, physiology, neurology, and pathology in analyzing every case, and it uses radiography and other scientific techniques in the examination of the patient.

(4) It is rational, because it is not content to be scientific. It takes into consideration all the consequences. It eliminates the element of risk and damage. It blocks none of the innate protective mechanisms of the body. It liberates the adaptive processes, recognizing that health is always successful adaptation to environment. It establishes no objective that is not wholly desirable.

(5) It is peerless, for it thrives on the failures of other methods. Medically "incurable" patients have been transferred from the State Insane Asylum of North Dakota to a chiropractic institution with the result that fifty per cent of them were restored to normal health and returned to their homes within a year. Hundreds of victims of infantile paralysis have regained their health or experienced marked improvement after medicine had failed. It would require volumes to tell the whole story on this score.

(6) As for infallibility, this is a criterion which cannot be satisfied by chiropractic 'Or any other method, and the reason must now be obvious. We have seen that irreversible pathology is a possibility. It may have occurred before the chiropractor ever gets the case. Moreover, while the nerve system, with which the chiropractor works, is supreme, it is not everything, and its normal functioning is dependent upon factors other than freedom from mechanical interference. Not only the work of the chiropractor, but the mode of life of the patient must conform to some extent with nature. By conscious or unconscious self-destruction the patient may defeat the best efforts of the best chiropractor.

When we apply the same criteria to scrum and vaccine therapy, we find these methods illogical, because based on unproved assumptions. No one knows what an antibody is, or even whether it exists. Moreover, their effectiveness has not been demonstrated. Supposed results have not been checked against untreated control groups, or have not made allowance for the cyclic character of epidemics and the advantages derived from improved hygiene and sanitation and widespread chiropractic in the last half century. While scientific, the procedures are irrational, since they entail unpredictable dangers. Finally, they are certainly far from being either peerless or infallible.

The comparison unquestionably gives the verdict to chiropractic as the superior method. We call upon educated people everywhere to aid in diffusing the information here presented, and to assert themselves as rational beings with a public conscience, wherever the issue of compulsory immunization looms to threaten the life and liberty of fellow human beings.

FOR FURTHER INFORMATION

For detailed elaboration of the matters presented in this pamphlet. with full documentation. the reader is referred to Rational Bacteriology, by Verner. Weiant, and Watkins. a book of 350 pages, now in its second edition. Here you will find presented the essentials of modern bacteriology, a rational explanation of immunity and immunization, the truth about poliomyelitis, an analysis of vaccination and smallpox data, and a thorough discussion of the Pasteur-Bechamp controversy and its aftermath. The book also contains specimens of State Board examinations in bacteriology. The price of the book is $7.50 postpaid. Orders. may be sent to. Dr. C. Weiant, Dempsey Building, Peekskill. N. Y. Special rates on quantity orders.