

Hydrochloric Acid Therapy

Its Role in Overcoming Infectious and Degenerative Disease

*A Series of Articles by Medical Pioneers
In Hydrochloric Acid Therapy*

Degenerative Disease And Its Etiology

By Walter B. Guy, M.D., St. Augustine, Fl. (1930 Publication)

It has been customary up to this time to look upon the degenerative diseases so common in advanced life as a group of separate diseases rather than as a distinct entity and to say this man or this woman is afflicted with or died as the result of several different affections or complaints. In a recent case, that of Mr. Edison, the famous inventor, we read in the daily press that he was suffering from the results of diabetes, arteriosclerosis, heart disease, nephritis and so forth. It is the writer's intent to take up the subject of **degenerative disease and endeavor to show that this group, so increasingly prevalent is, in reality, not many separate affections, but one in substance**, arising from one general cause and differing only in its mode of manifestation and in the tissues involved. In this group, the writer includes arteriosclerosis, hypertension, nephritis, affections of the heart, tuberculosis, diabetes, neoplastic growths, senile insanities and many other affections that are caused by degeneration of the varied tissues of the human organism.

In organic life, we have, in order, birth, adolescence, maturity, decline and death. At birth, the constructive forces are in the ascendancy; in maturity the constructive and destructive are in balance; in the senile the destructive force is in excess. **If health were perfect, the organism would complete its full life cycle with probably an average of 120 years' duration**, but the destructive agencies, destroying the balance between the constructive forces of life and invading micro-organisms and other injurious factors, bring about premature decay and death.

Cancers or neoplastic growths are seemingly increasing; at least statistics claim so. Also arteriosclerosis, diabetes, nephritis, senile insanities are increasingly prevalent, so that this subject is well worth considering, and if but a small beam of light can be thrown on this enigma, a big step forward can be assured. In the first place, let us consider the protective agencies of the animal organism; but instead of talking about antibodies, vaccines, antitoxins, immunity of blood serum, diet and so forth, let us rather go to rock bottom and consider the very essential mineral elements of which our body is composed.

Suppose that today we first consider an element that has been but little studied, yet is **probably the greatest disinfectant, antiseptic, germicide**, deodorant and preservative -that nature has ever produced; viz., **chlorine**.

It is generally believed that organic life began in the saline ocean many eons ago, and that the chemical formula of that ocean, of the blood serum and temperature of the body has not changed materially since that time.

That the ocean is always free from corruption, no matter how many of its animals die within it, is probably due to its chlorine content; not only to sodium chloride, but also to the chlorides of magnesium, calcium and other minerals present. It is to this chloride group of minerals that I wish to direct your attention, for in the proper concept of the role of the chlorides in the human organism we shall find, I fully believe, the key to long life and health; and the reason why, in the treatment of degenerative disease, the best indicated remedy fails to relieve or inhibit the ravages of disease.

First of all, let us study the part that chlorine plays in the digestion of food and its absorption into the body tissues. In Prof. A. E. Austin's "Manual of Clinical Chemistry" he says: "**Chlorine may be found free, as hydrochloric acid, in the gastric juice, or combined with albumin and albumoses, or it may be found united with sodium, chiefly in the fluids of the body, and with potash in the solids.**"

Under "Potassium" he writes: "Potash is also found as a chloride by preference in morphological elements like blood corpuscles, muscle cells, etc." Under "Calcium" he says: "Calcium chloride is found in the gastric juice, as a secondary product." Also, he says hydrochloric acid favors the excretion of the calcium phosphates.

Concerning the amount of hydrochloric acid in the gastric juice a very important factor, as I shall later point out to you, Prof. Austin says the **normal gastric juice in man is from 2 to 3 parts in 1000**. In healthy dogs, 5 parts is found. That a healthy dog can eat septic meat and if its stomach is opened one-half hour later, this foul, odorous meat will be found sterile is a well-known truism, showing conclusively the germicidal power of free chlorine in the process of normal digestion. Too often, however, **acidity of the stomach is not due to an excess of hydrochloric acid, but rather to an excess of lactic acid, and if the contents of the stomach is alkaline, oxybutyric, diacetic and other acids due to putrefactive processes are present**. This can readily be determined in practice by giving a few drops, well diluted, of dilute hydrochloric acid, when usually relief will quickly be obtained.

We are, however, concerned at this time in the consideration of progressive degeneration, and whether or not the normal production of free chlorine in the gastric juice is involved in the cause of progressive degenerative disease. **In healthy digestion, Austin further says, that in half an hour after eating of food, all lactic and other acids should have disappeared, owing to the inhibitive action of hydrochloric acid**. Further, he says that what is true of lactic acid is also true of the other organic acids, butyric, formic, and acetic, all of which are especially abundant where there is stagnation of gastric contents due to pyloric obstruction.

What, then, may we expect to occur when this fundamental, normal, sterilizing acid is deficient, or absent, and what, then, are the causes of its inhibition? The answer to these questions opens up a vast field of research; but enough data are already at hand to supply us with sufficient information to make us realize, if we study them carefully, that an absence or deficiency of this acid is a large factor in the etiology of degenerative diseases. The first question is readily answered: **Hydrochloric acid is the only normal acid in the animal economy; all other acids, such as lactic, uric, carbonic and so forth, are waste products, to be eliminated as quickly as possible**, and the normal acid is truly the chief factor in their removal or destruction, for **if we have a too great excess of carbonic acid, we have coma**, as in **diabetes** or later stages of **pneumonia**; **if uric acid, deposits in valves, arteries and articular surfaces** and so forth.

When this hydrochloric acid content of the gastric fluid is deficient or absent, grave results must gradually and inevitably appear in the human metabolism. First of all, we shall have an increasing and **gradual starvation of the mineral elements** in food supply. The food will be incompletely digested and failure of assimilation must occur. Secondly, a **septic process of the tissues will appear; pyorrhea, dyspepsia (imperfect or painful digestion), nephritis, appendicitis, boils, abscesses, pneumonia, etc.** will become increasingly manifest. Again, a normal gastric fluid demands activity of the gallbladder contents and of the pancreas for neutralization. Deficiency of normal acid leads to stagnation of these organs, causing diabetes and gallstones. In other words, an absence or a great deficiency of HCl gives rise to multitudinous degenerative reactions and prepares the way to all forms of degenerative disease.

That **this normal acid is nature's true antiseptic** has been clearly demonstrated by Dr. Burr Ferguson, of Alabama, who injected hydrochloric acid, 1-1500, intravenously and subcutaneously, **causing rapid repair, in many septic infections, such as abscess, osteitis and tuberculosis**. The writer has proved in several cases, such as septic induration (hardness) following gunshot wound, delayed repair following operation that this acid, given by mouth, well diluted, **hastens delayed or absent phagocytosis and repair of injured tissues**.

What, then, are the causes of its disappearance in the gastric fluid, following eating of food? First, Prof. Austin says most conclusively that "hydrochloric acid secretion may be completely suppressed by emotion or worry." In these days of emotional worry and distress, loss of homes, business, incomes and money, (the Great Depression of the early 30s) we may well fear that in the near future a great increase of degenerative disease, such as cancer, nephritis, cardiac, nervous and mental affections "must assuredly occur unless man can rise above worldly affairs and find the true and only source of contentment and happiness. To this state, the true physician must continually point, first himself finding and then showing it to others. As long as mental depression envelops like a dark cloud the soul of man, so long may we search in vain for the indicated remedy and relief of our patient's distress. Shall we, then, fold our arms and give up the fight? Not by any means. The remedy the doctor prescribes is it not, in a spiritual sense, the symbol of a healing force? Nature's recuperative powers? Yes, and the patient's faith must be present to reinforce the doctor's knowledge.

But how much better for the physician's own abiding faith if a truer concept of the nature of disease and tissue pathology can be truly visualized, and **this necessary acid and the deficient minerals be restored to the starving tissues, feeding and cleansing the vital fluids!** To do this, no massive doses of inert, sterilized minerals are required. Rather an ionized dilute solution of these elements will quickly bring about a change of the impaired metabolism. The writer is using, after months of study and research, helped along by brilliant results, again discouraged by absolute failures, an acid solution of arsenicum, ferrum, potassium and chlorine. This, properly diluted, can be used intravenously or by mouth.

NOTE: These are old style 1932 apothecary symbols and the copy was not clear. Translator was not able to translate the symbols into usable numbers.

Rx

Liq. potass. arsenitis (Fowler's) (illegible in my copy)
Tr. ferri chloridi fluid drams iss
Sol. potass. chloride (10%) fluid drams iij
Sol. acid. hydrochlor. (3%) ad fluid ounces j
M. Sig?.: gtt. v to xx well diluted three or more times daily.

Colon Cancer Case. One remarkable case may be quoted here, of a colored woman more than 80 years age, with an enormous **adenoma of colon**, who was found with complete stoppage of bowels, vomiting and gas pains. Instead of the use of an opiate, a solution of mineral chlorides was given intravenously, with complete relief in 6 hours. Four more injections were given, followed by treatment by mouth. **Within 4 months, all traces of growth had disappeared.** Eighteen months later, a hard sarcomatous growth appeared in the right tibia. The chlorine solution was again given by mouth and at this date, **2 months later, the growth has almost disappeared.**

Tuberculosis, especially of bones and in lungs, rapidly improved, while septic boils disappeared.

Hypertension, by removal of toxins, becomes normal; and, strange to say, the erythema of skin seen in excessive hot weather is rapidly relieved by injections of these acid mineral chlorides. In diabetes, thirst and sugar are rapidly reduced to a minimum. **All cases of arthritis are helped** by giving this normal acid in addition to other remedies.

When one considers that this normal acid is derived from the tissues of the stomach or gastric membrane and not directly from the sodium chloride of the blood, one readily realizes that **an ample supply of sodium chloride alone is insufficient to restore normal gastric acidity.** Rather that it is, instead, a complex process, the sodium atom being picked up and combined with the phosphorus atom, giving rise to sodium phosphates to be eliminated, thus allowing the chlorine atom to be set free to combine with the potassium and other minerals and albumins in the gastric acid cells and to be made ready for future digestive functions.

That the removal or breaking down of toxic products found in impaired metabolism is best accomplished by an acid is very well demonstrated by considering methyl guanidine, the deadliest toxin yet recovered from animal tissues. A few minims of this toxin, when injected into the tissues of an animal, cause convulsions;

a slightly larger dose, immediate death. Yet, **when hydrochloric acid is combined with it, it becomes a harmless food substance.**

This paper would not be complete without reference to malignant growths already mentioned. So far, search by studying cell growth has ended in complete failure. **Not in cell life is the secret to be found, but rather in the media in which the cell lives and the nerves control.** That cell growth is materially influenced by the nerve centers of the spinal cord is undoubtedly true, as shown by the rapid wasting of the cellular tissue when involvement of the anterior horns of the spinal cord occurs in infantile paralysis and progressive muscular atrophy. Such being the case, a toxin causing destruction of the inhibiting control of cell growth probably present in the posterior spinal nerve centers would allow wild growth of cell life; therefore neoplasms in all their multitudinous forms and a general failure of the antiseptic powers of the blood serum will bring about what is known as malignancy.

In the writer's limited experience, cancerous growths seem to appear when the blood pressure is low, indicating beginning failure of the adrenal system to combat toxemia. When hypertension is present, the other group of degenerative diseases makes itself evident. In youth, **a deficiency of normal gastric acid may allow tuberculosis to become active**, for all are probably infected, but only those deficient in natural immunity develop this disease.

Of dietary causes, one naturally considers **the great excess of sugar now eaten, which produces a surplus of lactic acid**, and an excess of egg proteins, making an unbalanced diet. But the worry, fatigue, failures and despair of our present civilization, I believe, are the greatest factors of all. Austin has clearly shown the absence and deficiency of hydrochloric acid in gastric fluids in pneumonia, consumption (tuberculosis) and cancer, as well as in those mental states previously mentioned.

In "Neoplastic Disease" by Prof. James Ewing, page 73, writing on probable causes of cancerous growth, we find: "It has been shown that the presence of **lactic acid is dependent on impaired motility and deficiency of HCl**. Since these conditions are present very early in cancer, the test for lactic acid is of considerable diagnostic value." On page 71, we find that **deficiency of HCl causes alkalescence**, and this is **found in cancerous disease**.

CONCLUSIONS

- **That normal hydrochloric acid is necessary for complete, healthy digestion.**
- **That deficiency of this acid tends to sepsis, suppuration and general toxemia.**
- **That if adrenals are inactive, degenerative forms of disease usually appear.**
- **That if the adrenals are impaired, malignant neoplasms may be expected.**
- That neoplasms are most likely caused by failure of the inhibitory nerve controls, probably located in the posterior nerve centers of the spinal cord.
- That emotional **worry, grief, anxiety, depression**, are factors to be considered as **causes of acid deficiency of gastric juice** and thus give rise to many conditions causing degenerative processes and alkalescence so commonly found in cancerous disease.

The writer, after administering this acid solution of mineral chlorides to over 100 of chronic diseases of many types, including cases of diagnosed cancerous growths in the digestive system, feels confident that this method is without doubt a reliable and satisfactory one for such conditions and also a method of preventing cancerous disease. If cases are too advanced for hope of recovery, this treatment ameliorates symptoms and prolongs life. Also, above all else, it opens up a new field of research which he believes will lead to ultimate victory over the degenerative progressive diseases so.

NOTE: This was one of a series of articles published in Medical World, now defunct, in about 1930-1935.

THREE YEARS OF HCl THERAPY

AS RECORDED IN ARTICLES APPEARING IN THE MEDICAL WORLD
WITH INTRODUCTION BY HENRY PLEASANTS, Jr., A.B., M.D., F.A.C.P.

To present the essential features of the articles and case reports reprinted in this volume,
revisions have been made and sections not directly
related to the subjects have been omitted.

By W. ROY HUNTSMAN
Philadelphia, Pa., 1935

TO: Dr. Burr Ferguson and Dr. Walter Bryant Guy whose monumental efforts in the advancement of knowledge regarding the principles of hydrochloric acid therapy have stimulated the interest and won the respect of their colleagues.

CONTENTS

Editor: These are not links below, but titles of articles. And not all articles are on the website -- yet. It has been a terribly time-consuming operation from scanning very poor copy the readable text. There are many errors, without doubt. But it is interesting.

Introduction: By Henry Pleasants, Jr., A.B., M.D., F.A.C.P

Original Articles by Burr Ferguson, M.D.

The Metchnikoff Idea

Hydrochloric Acid and the Phagocytes

Hydrochloric Acid and Oxygen Content of Red Cells

Quinine and Chlorides

"Favorite Medicine"

Intravenous Hydrochloric Acid and Blood Transfusion

Stronger Solutions of Hydrochloric Acid

Does Hydrochloric Acid Intravenously Harden Arteries?

Hydrochloric Acid as a Germicide

Sinus Infection

Acne Vulgaris and the White Blood Cells

The Healing of Wounds

Original Articles By Walter B. Guy, M.D.

Degenerative Disease and Its Etiology

Acid Mineral Chlorides in Treatment

Toxemia and Alkalosis

The Conquest of Cancer

Relation of Iron to Neoplastic Disease

Treatment of Cancer

A Further Report of Cases

Acid Mineral Therapy in Cancer

Original Articles of Other Contributors

Dilute Hydrochloric Acid Intravenously and Intramuscularly -- Therapia Sterilisans Magna? By Desiderius de Beszedits, M.D.

Nature is the Best Doctor, by William I. Howell, M.D

Hydrochloric Acid Injections Produce Leucoocytosis-- By William Howell, M.D.

Hydrochloric Acid Injections in Acute Infection? By William I. Howell, M.D.

Hydrochloric Acid Intravenously as a Therapeutic Measure, with Report of Cases, by W. G. Brymer, M.D., Ph.D.

The Use of Hydrochloric Acid Intravenously. by M. A. Craig, M.D.

An Attempt to Rationalize HCl Therapy, by A.M.Allen, M.D.

Case Reports and Comments:

Erysipelas-Streptococccous Infection-Hay Fever-Arthritis By F. J. James, M.D.
The Use of Hydrochloric Acid in the Treatment of Cancer. By O. P. Sweatt, M.D.
The Use of HCl in Hodgkin's Disease. By M. M. M.
Reactions to HCl Injections. By R. L. Bills, M.D.
Hydrochloric Acid Intravenously in the Treatment of Puerp"
Infection. By R. S. Ingale. M.D.
Treatment of Malta Fever. By C. W. Baynharn, M.D.
Hydrochloric Acid in Puerperal Septicemia. By O. F. Marcotte, M.D.
The Hydrochloric Acid Intravenously. By L. D. Jackson, M.D.
HCl Applied in Nose. By A. Bursell. M.D.
Hydrochloric Acid Intravenously. By Alphonso F. Raynes, A.B., B.S., M.D.
A New Treatment for Burns. By C. W. Baynham, M.D.
HCl Intramuscularly. By P. L. Gordon. M.D.
Miscellaneous Reports and Comments
Picking A Winner
Conclusion

FOREWORD

The demand for reprints and previous issues of THE MEDICAL WORLD containing articles by various contributors on the subject of hydrochloric acid therapy exhausted the supply of material available. In order to meet this increasing demand, we have collected in one volume the original articles and minor comments which have been published in this magazine during the past three years.

This collection of reprints is a unique feature of medical journalism and should be of valuable aid to any physician who desires to review the literature on this subject. It must be remembered, however, that this volume covers but 3 years ending early in the summer of 1935, and that some extremely important contributions have been published since that date.

It is to be hoped that this volume will fill a long felt need, and that it will stimulate further individual research on this most interesting development in therapeutic procedure.

INTRODUCTION

The awakening of interest on the part of the medical profession in the **use of dilute hydrochloric acid intravenously, intramuscularly, orally and locally in the treatment in many disease conditions** warrants a condensed outline of the principles upon which this therapeutic measure is based; a resume of our own experiences with it in certain cases; a frank discussion of its limitations, and a general outline of its possibilities. The fact that this agent is so inexpensive; that it is not an exploited compound put out by pharmaceutical manufacturers, and that its usefulness was developed by two practicing physicians, working independently along entirely different theoretical lines, brings this remedy into a position of economic importance that should not be disregarded.

Since the days of Hippocrates, medicine has been seeking for some remedy which would be efficient in stimulating the resistive forces of the human body to combat disease. Even following **the discovery of bacteria as the cause of most of the diseases to which human beings are susceptible**, the effort to stimulate personal resistance went hand in hand with the effort to discover a germicide which would destroy the bacteria without producing harmful effects on the patient.

Metchnikoff in the early years of this century presented his theory that the resistance of the body to disease depended upon the activity of the phagocytes of the blood, the polynuclear leukocytes. It was not long after this that Ehrlich announced his discovery of "606," an arsenical preparation which would destroy the spirochete of syphilis. He believed that it was possible, through chemistry, to evolve remedies which were of

tremendous sterilizing power. Without attempting to explain the intricate features of the “opsonic theory” of Metchnikoff, and the “side-chain” theory of Ehrlich, the fact remains that the scientific workers of the profession split into two groups, each supporting one of these theories, although granting the logical importance of the other. In 1931, however, the theory supported by Ehrlich was allowed to pass into the discard as being untenable.

. . . Dr. [Burr] Ferguson [of Birmingham, Alabama] studied the influence of various drugs on phagocytosis. The effect of the intravenous injection of mercurochrome [mercury] was particularly powerful as a phagocytic stimulant, but its toxicity was dangerous. The same was true of other remedies. His observations showed that alcohol was an active phagocytic stimulant, but the ability of the phagocytes to combat the bacteria was lessened. He also found that nearly all of the physiotherapeutic measures, from mustard plasters and cantharides blisters to the most modern radio-thermic appliances, were of very definite value in producing a marked leukocytic and phagocytic response. The same was true of bleeding transfusion, injections of whole blood, injections of sterile milk, leukocytic extracts, bacterins and other similar measures. Their value in certain cases was unquestioned, but their action depended solely upon the principle that was as old as Hippocrates, namely the stimulation of individual resistance.

The problem before Dr. Ferguson now was **to find some remedy which would be successful in stimulating phagocytosis, yet non-toxic.** In 1927, he heard Dr. Granville Hanes, a noted proctologist, and studied this surgeon's technique in **treating pruritus ani by injections of 1-3000 hydrochloric acid.** Apparently, this acid could be used in strengths of 1-500 without any evidence of toxic effect, yet with uniformly good results clinically. Dr. Ferguson attributed this absence of toxicity to the fact that hydrochloric acid is one of the very few inorganic acids which are normal constituents of the human body, and he determined to experiment upon himself in order to discover whether it could be used safely by intravenous injection. Upon his return home, he instructed his technician to take several leukocyte counts; then give him an intravenous injection of 10 cc. 1-500 solution hydrochloric acid. There was no severe reaction, as in the cases which had received arsphenamin, mercurochrome, donor's blood; and the leukocyte count increased very considerably with a definite increase of polynuclear percentage. With this encouragement, he gave several doses of this preparation to some of the most seriously ill patients who had failed to respond to other forms of treatment. The effect was so spectacular that he continued his efforts, and reported his observations in *Clinical Medicine and Surgery*.

Considerable skepticism was expressed by the leaders of the medical profession not only as to the value of such a simple procedure, but also as to the veracity of the reports of clinical improvement. Strong criticism was voiced against intravenous injection of such a powerful acid, even in dilute form. Many men refused to give it clinical trial on this ground; and on several occasions, Dr. Ferguson was refused permission to publish articles on the subject or to discuss the matter before medical gatherings.

THE MEDICAL WORLD gave honest support to Dr. Ferguson and permitted the publication not only of articles submitted by him, but also by other physicians, including Dr. Walter Bryant Guy of St. Augustine, Florida, who was approaching the same subject of hydrochloric acid therapy from a somewhat different angle, and whose research was of equal importance. His work deserves a brief description at this point.

Dr. Guy formulated a theory that most disease conditions, acute infections, anemias, metabolic disturbances and malignant cell overgrowths are the direct results of changes in the hydrogen-ion content of the lymph of the body which produces blockage of the lymph channels. In his studies of the growth of **corn and other forms of vegetable life**, he had been able to demonstrate that the absence of sufficient potassium salts in the soil would result in stunted growth, and evidence of precipitation of minute particles of iron and other substances in the stalks. When potassium was added, the growth proceeded normally; **when dilute hydrochloric acid was also added, the growth was further stimulated.**

He studied the lymph of a large number of patients suffering from carcinoma, and found that these cases showed a **hydrogen-ion much higher** than normal individuals. **He also found that by administering the salts**

of potassium in combination with dilute hydrochloric acid, either orally or by the intravenous route, these patients made remarkable clinical improvement, and the hydrogen-ion content of their lymph became normal. The publication of his series of articles in THE MEDICAL WORLD was followed by a large number of case reports by practicing physicians who greeted the new therapeutic procedure with great enthusiasm. Dr. Guy published his first book on this subject in 1934, and a revision in 1935.

Having thus far presented a brief summary of the prodigious work of Ferguson and Guy, it may be well to call attention to the fact that **Ferguson was approached by one of the largest pharmaceutical houses and offered a large sum of money to cease his efforts** to place his discovery before the medical profession except through the medium of products of this concern. Although in actual financial distress, he refused this offer, and has continued in general practice, thereby exemplifying the spirit of the Hippocratic Oath as few men have done. Similarly, Guy presented to the profession all of the results of his research, including his formulae and continued his work in general practice. These two instances of utterly unselfish devotion to the interests of humanity are an object-lesson to every practitioner.

While no attempt has been made to claim for hydrochloric acid therapy that its use intravenously produces the effect described by Ehrlich as "Therapia Sterilisans Magna," which he claimed for his original compound "606", it is interesting to note that **laboratory research showed very definitely the actual germicidal properties of dilutions of this acid. Cultures of staphylococci and streptococci and other "organisms" were destroyed within a few minutes when mixed with dilutions 1-1000.** This observation led to the use of the solution as a **local application in pustular skin affections.** The effect was so spectacular that its importance is no longer questioned.

Ferguson demonstrated its efficacy as a **urethral antiseptic in gonorrhoea** by being able to **obtain negative smears in from 2 to 3 days**, and by being able to **alleviate the distressing symptoms of burning and tenesmus (spasmodic contracture of the bladder sphincter with pain** and persistent desire to empty with involuntary ineffectual straining) in even less time. Even bladder irrigations of solutions as strong as 1-500 were tolerated satisfactorily by the patients, and there was no evidence of the destruction of normal tissue cells which often attended the use of other antiseptic solutions such as the silver salts, potassium permanganate and the like. Most interesting of all was the report by Ferguson of his success in the treatment of a most aggravated case of pustular syphilides (secondary stage).

The attitude of the medical profession toward the work of Ferguson and Guy has been highly amusing, and deserves a word of comment. Many of the leaders of research, whose observations coincided with the clinical results obtained by practitioners, refused to allow their names to be used in connection with the work done. Others openly ridiculed the whole theory as preposterous, and refused to allow this simple therapeutic measure to be employed in their clinics.

However, it has been found that the makers of sterile ampules admitted frankly that the demand for ampules of hydrochloric acid dilutions vastly exceeded the demands for all other preparations, and the largest consignments were delivered in the city where most of the open criticism and ridicule was heard! In other words, the leaders of the profession in many places were giving the measure a full trial and finding it efficacious, yet were unwilling to admit the fact.

The story of this revolutionary episode in medicine grows more interesting and more dramatic day by day. The suffering patients in the country districts, far from the well-equipped clinics and hospitals, have at last found that something can be done for them. Whether or not it meets with the approval of the solons interests them not at all. They ask for relief - and they get it, where the applicability of the measure to their complaint is obvious.

It would be unwise and unfair to both the medical profession and the public to discuss the merits of hydrochloric acid therapy and fail to call attention to its limitations, and to the actual dangers attending its use in certain cases.

We have called attention to the fact that **the use of the acid intravenously was followed by a considerable increase in the leukocyte count.**

A patient who had been suffering from myelogenous leukemia, with a leukocyte count of 84,000 (the normal count being 6,500) was inadvertently given several venous injections of this preparation, with the result that the already high count rose to the unbelievable figure of over 400,000. Obviously, it is poor medical judgment to give a remedy that can only aggravate an existing condition.

Another important -- vitally important -- consideration affecting the administration of hydrochloric acid is one which depends upon accurate and painstaking investigation of the individual by the practitioner. Since this measure has the effect of stimulating the defense mechanisms of the blood, it is plain that the sudden increase of "phagocytes" at the focus of infection will be followed by the formation of pus, which, after all, is but an effort on the part of nature to attack invading bacteria. Should this sudden increase of the defense forces take place in an area where the drainage is poor, an abscess may result. For instance, a patient may have a diseased appendix which has been quiescent; there has developed in that patient a balance between the defense elements and the infecting organisms. A sudden marshaling of the phagocytes at this point may stir the sleeping dog into a first-class battle, with the result that the patient will require immediate operation. Similar situations may develop in other parts of the body, particularly in closed spaces such as the middle ear and sinuses, and the patient must be watched closely for the development of acute symptoms that might require surgical treatment.

From a prognostic standpoint, the inability of the patient to respond to stimulation is of grave significance. This is readily determined by the blood counts made at frequent intervals during a course of treatment; in fact, it is highly essential that progress of every case be watched by an intelligent and observant physician. While astonishingly good results have been obtained by hit-or-miss methods in country districts by physicians who are without laboratory facilities, it is reasonable to assume that more care is mandatory on the part of those whose facilities are greater. The fact that there have been no reported cases of death as the immediate result of this medication speaks volumes for the safety of this measure.

Spectacular Recoveries. It may be well to discuss in simplest terms the essential differences between the methods of hydrochloric acid medication used respectively by Ferguson and Guy. There is little to be added to what we have said in the preceding paragraphs regarding Ferguson's technique and the principles upon which his reasoning has been based. He is essentially a man of practical, rather than theoretical, ideas. He proved to his own satisfaction that intravenous **injections of dilute hydrochloric acid stimulated phagocytosis and produced spectacular recoveries from apparently hopeless infections without harming the patient.**

A Cheap Germicide. Furthermore, **dilute hydrochloric acid was a practical and cheap germicide**, of greater potency and less destructive action than anything thus far discovered. Why, how, when and where its action occurred were of less importance than the fact that the patient got well. Dr. Guy was more scientifically minded. Although also a general practitioner, he was determined to discover, if possible, a basis for the formation of a theory. He was a student of biologic chemistry, and from his knowledge and observation of plant life and its behavior under the influence of hydrochloric acid and the salts of potassium in the soil, he believed that certain similar principles applied to the growth and nourishment of human beings.

Lymph Circulation. Most important of all, he based his hypotheses on the observations of Hawk, that **lymph circulation, which is the medium by which nourishment carried to every cell in the body, is of as great importance as the blood; and any condition, whether chemical or physical, which interferes with the flow of lymph produces a profound effect on the cells of every organ in the body.** He has reduced his theory to simple and easily understood terms by a full explanation of the significance of the acid-balance of the human body, and the necessity for a proper maintenance of this balance for the preservation of health.

Under normal conditions, **the hydrogen ion concentration of human lymph should be slightly on the alkaline side.** Should this reaction vary too much, either on the acid or alkaline side, the patient will develop conditions known respectively as "acidosis" or "alkalosis," either of which may be fatal.

The Acid Balance. In health, the acid balance is maintained by the normal production of hydrochloric acid in certain cells of the stomach; **should this production fall short of bodily necessity, the balance must be made up. Other acids, which are the products of decomposition in the human body, such as lactic acid, fatty acids, carbonic acid, uric acid and others, are called in to fill the deficiency.** These however, being abnormal constituents of the great chemical laboratory of the human body, are **ill-adapted to the requirements,** for they are unable to keep in solution many of the salts which must be thrown off as waste matter in bodily excretions, the sweat, the expired air, the urine and the feces. In the effort of the body to provide acid of some sort, these harmful acids become a "monkey-wrench in the machinery," and the condition known as "**acidosis**" results with symptoms of general systemic poisoning.

Conversely, **when the hydrogen-ion concentration of human lymph falls into the acid side, due to excess production of lactic acid, fatty acids, carbonic acid, uric acid and like poisons, there is an effort on the part of the body to neutralize these with alkaline salts, such as calcium, sodium, potassium, ammonium and others.** These also, being foreign to bodily economy, produce the condition known as "**alkalosis,**" the general symptoms of which are similar to acidosis, but often attended with general collapse.

The Importance of Potassium Salts. Dr. Guy has claimed that the mere **administration of hydrochloric acid to a patient would not fulfill the necessary requirements.** In his opinion, **potassium salts, often lacking in the patient's food are a necessary adjunct in the treatment aimed at bringing about a normal acid-base balance.** Excess of potassium may be harmful, and the ingredients of the formula which he advocates are the result of close clinical observation by himself and others. The case reports following this line of treatment have demonstrated improvements and recoveries which, in many instances, would seem miraculous, if it were not for the basis of sound reasoning along bio-chemical lines upon which the treatment was founded.

Furthermore, if these reports were offered by the protagonist of such a system therapeutics himself alone, skepticism would be justified; but the fact remains that from all parts of the world come infinite numbers of similar reports from men in active practice - shrewd and experienced physicians on "the battle line of medicine."

Actual and prompt clinical results to such men mean bread and butter. Satisfied means an increase in clientele. These men are willing to leave research to the workers in heavily endowed laboratories. Their patients are more interested in being cured than in the scientific aspects of the disease from which they are suffering. These patients ask them to "do something"; and they know that unless something is "done" they will drift into the hands of some charlatan who will at least give evidence of some definite form of active treatment, even though hopelessly misdirected.

Lymph Fluid. The application of the principles of the hydrochloric acid therapy, or the "acid-mineral therapy" to various metabolic disturbances such as diabetes mellitus, arthritis and many obscure conditions, is deserving of serious consideration. The most elementary lessons in chemistry in our public schools teach that various substances may be held in solutions of given degrees of acidity or alkalinity. When the proportions of the ingredients are perfectly balanced, the solution may be as clear and colorless as water; but let the acidity or alkalinity change a minute fraction of a degree and a turbid fluid will result, with the accumulation of a precipitate at the bottom of the container. With this explanation, it is by no means difficult to understand how **the normally clear and colorless lymph of the human body might, by a change in its chemical reaction, begin to become cloudy, and to deposit the salts, such as calcium, which should be held in solution.** The deposit of these salts in joints must, naturally, interfere with the free and well-lubricated action of these joints. Could not such a change in chemical reactions explain the enormous deposits of lime salts in old arthritic patients?

Similarly, **if the lymph should become turbid and sluggish, is there not reason to infer that the lymph channels would become blocked, and the normal amount of nutrition be denied such structures as muscles, bones, cartilage, skin, in fact every other component of the body?** By the same line of reasoning, is it not likely that the **products of decomposition** which should be removed by the lymph, would remain in the tissues and **act as poisons** to the delicate individual cells? On this basis, can we not explain the **atrophies of muscles which are so characteristic of arthritis?** With so many of the cells of the human body becoming degenerated, is it not inevitable that the blood-making cells should also be affected? **Anemia** is a characteristic symptom of arthritis.

Diabetes Mellitus. The applicability of the theory of Guy to **diabetes mellitus** is still under consideration. If it be true that by appropriate medication, it is possible to restore the acid-base balance of the blood or lymph, the possibility of ultimate cure in these cases seems not unreasonable. Certainly it seems within the bounds of probability that the tendency to acidosis from the absorption of harmful metabolic products would be lessened; conversely, the tendency for the development of hypoglycemia and alkalosis from over-dosage with insulin would be minimized. At best, insulin is but a crutch upon which the diabetic patient leans heavily, and the medical profession is still seeking some form of treatment which will correct the abnormal metabolic disturbances which have produced this distressing condition. We can see most clearly, however, that it must be **the interference with the circulation of the blood and lymph in the extremities which brings about diabetic gangrene.** Even a slight improvement in this circulation would be productive of much relief to the patient.

Cancer and pH. The most startling possibility in the development of the acid-base balance theory -- one which we approach with the same feeling that one approaches the spot where a treasure chest is said to be buried, is that it might be the key to the vault in which lies the secret of cancer. Research foundations, notably the department conducted at the University of Pennsylvania by Dr. Ellice MacDonald, have been working for years on the theory that the **development of cancer has a definite relationship to the pH of the blood plasma.**

Dr. Guy goes one step further in holding that **the lymph is the responsible factor**, and that in cancer patients, the hydrogen-ion concentration is much higher than in normal individuals. It is necessary to give very large doses of appropriate acids to these patients in order to bring the acid-base balance to normal. When this is done, in his experience, remarkable changes are seen in the new growths, some of which seem to disappear, and the lives of the patients are prolonged in comfort. He carries his theory further by claiming that there seems to be little doubt that the water supply bears a distinct relation to frequency of occurrence of this disease in certain areas or "cancer belts." He is studying this problem at the present time . . .

Encephalitis Case. A patient, suffering from some obscure cerebral disturbance, and in coma upon admission, lay unconscious for several days. Spinal drainage showed a pressure so high that on several occasions, it could not be recorded. The Wassermann (test for syphilis) was negative, the cell count was 225, sugar 2-plus, and globulin 4-plus, culture negative. There was choking of the discs, but definite localizing symptoms were difficult to determine because of the man's stuporous condition. Soon after admission, even in the absence of a positive spinal Wassermann, he was given .9 gms. neo-arsphenamin, followed by spinal drainage.

This seemed to improve his general condition temporarily, but he soon relapsed into unconsciousness, became incontinent and developed Cheyne-Stokes breathing. The end seemed imminent. By chance, Dr. Burr Ferguson, who was on his way to the A.M.A. convention, was asked to see the patient. He agreed with the suggested diagnosis of **meningo-encephalitis**, with the possible development of cerebral abscess, but unhesitatingly advocated heroic doses of hydrochloric acid intravenously.

Acting upon his suggestion, the man was given **20 C.C. of a 1:500 solution.** There was no evidence of untoward reaction. By misunderstanding, a second dose of the same strength was given two hours later, also with no ill effect. **Injections of 1:500 solutions** were continued every 2 days, but with little appreciable effect, except a marked increase in polynuclear leukocytosis. Several days later, the patient showed slight improvement, but was developing bedsores and a pustular eruption on his back and buttocks from the continual soiling. **A local**

application of 1:1000 HCl solution was immediately successful in bringing about rapid healing of these sores. For a time, the man was able to converse intelligently; was able to take food, and, on one occasion, climbed over the sides of the restraining crib to the floor, and appeared in the ward **walking normally**.

His spinal pressure still remained high -- so high that it could not be recorded by the manometer -- but his temperature came down to 99.0 F; pulse 72, and the spinal cell-count fell to 31. The man was later removed to the University Hospital and **died following an operation** in which a large brain tumor was removed.

Pneumonia Case. A second case in the wards was that of a young man, admitted in **serious condition with signs of pneumonia** involving the left lung. He was treated by the usual methods, and recovered from the more acute condition, but the involvement of the left lung and pleura refused to clear up. X-ray examinations showed evidence of some fluid, or thickened pleura on the left side; and the physical signs over this area supported this diagnosis. His temperature began to develop the characteristic septic swing from normal or subnormal to 101.0 or 102.0 F., with sweating and chills. An aspiration was attempted, but no fluid obtained.

He was **given 1:1500 injections intravenously**, 10 c.c., every second day. **Immediately improvement was noted in his general condition**, but in a day or two he complained of considerable left-sided pleuritic pain and discomfort in breathing. The X-ray showed some increase in the shadow over the left base, and the breath sounds became more indistinct. A second aspiration was successful and 40 c.c. of cloudy fluid obtained, which on examination showed pneumococci and short-chain streptococci. The patient stated that he experienced immediate relief from his pain. The following was much more comfortable, and the temperature began to come steadily down to normal. He was given the acid-mineral solution (formula of Guy), 12 drops every 3 hours, with continuation of the intravenous therapy. His condition immediately became extremely satisfactory, and he began eating ravenously. His **leukocyte count fell to approximately normal**, as might be expected where the necessity for phagocytic activity no longer existed. We mention this case to illustrate the point emphasized in the first part of this introduction, that collections of pus may be expected in closed cavities when phagocytic activity is increased. In this case, however, the mere withdrawal of a portion of the infected fluid was sufficient to throw the balance in favor of the patient. A thoracotomy, with weeks and months of drainage and discomfort, to say nothing of expense to the hospital, seems to have been obviated by this simple therapeutic procedure.

Remarkable Discoveries. In conclusion, we wish to say that we feel that **the medical profession is probably entering upon an era of remarkable discoveries**, based upon the logical theories of Dr. Guy and Dr. Ferguson, who are at the present time suffering from the stings of skepticism on the part of many of their colleagues. We realize most fully that many steps must be taken before the procedures advocated by these pioneers can be accepted by the conservatives. Careful checking of results by laboratory investigation will eventually establish or disprove the assertions made by these men. However, it seems incumbent upon progressive practitioners to make every effort to assist in the clinical research which may later prove of unbounded assistance in the healing of the sick patient.

We have been led along the paths of synthetic medication for too many years, to the detriment of too many sufferers, as evidenced by the growing incidence of serious blood disturbances, such as agranulocytosis, methemoglobinemia and others. We have often relieved pain without attacking the underlying cause; we have operated when resistance was at too low an ebb; we have prescribed remedies empirically, without clear-cut knowledge of their action or collateral effect. Let us make a determined effort to follow our lines of treatment with scientific exactness, and, if we feel justified in assisting the work of Ferguson, Guy and others, we may either offer conclusive proof in condemnation of its principles or congratulate ourselves on being able to support the efforts of its advocates by accurate clinical proofs and painstaking case records.

-- HENRY PLEASANTS, Jr., *Associate Editor*, THE MEDICAL WORLD

ACID MINERAL CHLORIDES IN TREATMENT

By Walter B. Guy, M.D.

In a previous article, emphasis was laid upon the **necessity of free chlorine in the gastric fluid and its fundamental role in carrying on normal digestion, assimilation and excretion**. Also, certain consequences were indicated of the metabolism of the body cells, if its secretion by various causes was interfered with.

Chlorine Deficiency. It was also shown that **chlorine deficiency would cause incomplete digestion and bring about a slow starvation of the mineral elements, and thus produce abnormal symptoms, indicating profound changes, not only in the skin, bones and glands, but also in the nervous system, such changes causing malfunctioning of the spinal nerves. Also that this dysfunctioning of the motor and sensory spinal nerves by lack of control over cell life may give rise to neoplastic growths.**

In this paper, an attempt will be made to bear out this hypothesis; to show that mineral deficiency is quite common; also to show results of treating various diseases with a solution of mineral chlorides, the formula of which was given in the before-mentioned article.

Before doing so, the writer desires to bring out some interesting facts found in the vegetable world, in order to clarify, if possible, the hypothesis advanced. Mineral deficiency has long been recognized in the agricultural world, and results of same, to a marked degree, have been studied, and appropriate remedies or fertilizers have been applied, and results from their use verified. It is not the writer's intention to take up all these minerals, but to select the few necessary to bring out the salient points involved.

Potassium Deficiency. Let us take, for instance, the **deficiency of potassium in soils**. Corn or maize grown in such a soil is apt to be sickly and die. When examined by biochemical methods, **deposits of iron salts were found in joints of corn**; also coagulation of proteins. When potassium salts were applied to soil, this condition disappeared. Tobacco plants grown under the same deficiency will become sickly; also areas of necrosis of cells appear on the surface of the leaf, etc. Does not this at once call to mind **pernicious anemia, with its debility, lack of gastric HCl deposits of iron salts in liver and kidneys**? The necrosed cells of tobacco leaves surely point to a great similarity of our commonplace epitheliomata of the skin.

Calcium/ Phosphorus Deficiency. In soils **deficient in calcium and phosphorus**, another variety of disease appears: **wilts and fungi of root system** and an **accumulation of aluminum** in the tissues of the corn. Quite a few articles on absorption of aluminum have appeared in various medical magazines, indicating that this element, foreign to the body cells, causes much disturbance, such as nerve and digestive disturbances. Calcium deficiency is quite common even in Florida, where the artesian water is impregnated with calcium salts. It is recognized by the tendency to nocturnal asthma, worse from cold and dampness, slow healing of broken bones, lack of strength and myocardial weakness; also a low blood pressure, twitching of muscles, and cramps.

That the nervous system is implicated in tumor formation we believe is indisputable. The lack of sensation or pain in the area involved in the early stage of the disease shows dysfunction of the sensory nerves. That spinal nerves may have more than one function to perform is a truism corresponding to the varied functions of other organs. Nutrition, cell growth and repair, cell control, and inhibition of cellular growth must also be included in their functions, as well as motor impulses and sensory impacts.

We need greater knowledge of gastric chemistry: how the warm peptic hydrochloric solution functions, how it breaks down food products, changes slowly but surely the minerals into chlorides to be again transformed in the duodenum, these chemical changes liberating heat and vital forces for the use of the brain and nervous system, etc.

Deficiency of Hydrochloric Acid. **Deficiency of this hydrochloric peptic solution** must, of necessity, bring about in the animal economy a **slow starvation of the mineral elements**, an imbalance, also a fixation or

deposits in various tissues. For instance, as already mentioned, **deposits of iron in anemia, deposits of urea and sodium in gout and arthritis, an overplus of sodium in edema, a probable deficiency of potassium in tumor and epitheliomata; also a deficiency of calcium in parathyroidism and some forms of asthma; a lack of chloric acid must be manifest in alkalosis of cancer, tuberculosis and septic infections.**

Progressive diseases of eyes, ears, kidneys and uterus may come under potassium deficiency; also tumor formations. The value of potassium iodide in syphilitic nodes and gummata is well known and universally applied. The various **calculi of kidneys and gall-bladder, deposits of uric acid in tissues also indicate a lessened solubility of salts, showing deficiency of hydrogen and chlorine.** Chlorine, like oxygen, carries on its own combustion in the digestive organs, while oxygen functions in the blood and lungs. **Deficiency of chloric acid solution also indicates a lowered immunity to infective organisms, lowered vitality, impaired appetite and excretions, endocrine dysfunction and premature old age.**

Hydrochloric acid is also the protective agency against microbic life in food and water intake of the stomach.

The first case to be reported is one showing marked indications of duodenal growth and who, after three weeks treatment, with good results, of the mineral chloride solution, developed severe nocturnal asthma. Calcium chloride was added to the solution and immediate relief was obtained.

Case of Annie M., age 45 years, colored, normal weight 170 lbs., losing weight for one year, now 140 lbs. For the past two months, **frequent gastric distress.** July 5, 1932, found in great distress in region of stomach for past three days. Soreness over duodenum. Unable to vomit, no relief from soda bicarb., etc. Gave the acid mineral chloride solution 3 minims (drops), diluted, every half hour. July 6th reported **complete relief in 6 hours.** Examination showed (hardness) and tenderness in duodenum. Gave the solution every hour while awake. Diagnosis: Probably precancerous condition at pylorus.

July 13th, much improved; soreness relieved. Gave the solution three times a day. July 27, no sign of soreness of duodenum or induration (hardness), but had developed nighttime asthma. The solution plus 10% calcium chloride: relief of asthma reported next day. Still under treatment, **steadily improving.**

Case of Andrew D., age 26, school teacher. **Asthma** at night, greatly aggravated by dampness, rainy weather and bathing in water. Calcium chloride, three times a day diluted, was given. **Immediate relief of all symptoms;** can now bathe in ocean, get wet in rain without previous symptoms. Still taking remedy once daily.

Case of C. T., clubfeet, low blood pressure, weight 188 lbs. **Fractured tibia and fibula** midway between ankle and knee. Seven months in hospital with regular treatment of milk food in excess, also calcium lactate and cod liver oil. Left hospital with **ligamentous union of bones freely movable.** The acid mineral solution plus calcium chloride, 3 grains, diluted, three times a day. In spite of a sharp attack of influenza, **complete ossification had taken place in 6 weeks** and he returned to his occupation.

The next few cases are diagnosed growths in digestive organs. They were treated by the solution, some intravenously, all by mouth. Most of these cases were probably in a precancerous condition or early stages of cancerous disease.

Case of James C., age 53 years. Dec. 12, 1930. Diagnosis: **papilloma of the bladder:** no loss of weight. Second attack of **hematuria;** last, one year before, bright blood and clots for two weeks with soreness in bladder.

Treatment: intravenous injections of the solution once weekly. The solution, 4 times a day for 4 months. Bleeding slowly disappeared; **no recurrence to date.**

Case of Peter D., age 50, Greek, married, two children, normal weight 135 lbs., now 102 lbs., **jaundiced 4 months, growth in gallbladder** easily outlined by palpation. Several surgeons and specialists **gave fatal prognosis**. X-ray picture indefinite. Oct. 10, 1931, the solution intravenously once weekly and by mouth four times a day. Bile laxatives at night. First two weeks, lost 4 lbs. Third week passed bile, and icterus gradually cleared. Treated by mouth only after 3 months. **One year later, no indication of tumor, in good health, no history of gallstone**, colic; weight 128 lbs.

Case of T. W. M., age 60. Feb. 16, 1932. For 2 years had suffered from **severe gas pains** for several hours after eating - no loss of weight, now 158 lbs. Blood pressure 110. Examination showed soreness and induration of sigmoid flexure.

Gave 9 minims (drops) after meals. Feb. 23, 1932, reported **immediate relief of gas pains**. Continued the solution, treated spasmodically until May when he had a severe attack of influenza. June 11, 1932, soreness and induration still present, but much reduced. The solution was continued; still under treatment. As he is out of work, he is greatly despondent, but much improved at last visit.

Case of Lyla G., 87 years old, colored, many children. June, 1929, found writhing with stoppage, gas pains, vomiting. Examination showed **immense adenoma of descending colon**. Gave the solution intravenously; no other treatment. Next day reported relief in 5 hours. Four more injections were given intravenously, then by mouth. October, 1929, showed **tumor almost disappeared**; treated for 3 months longer. September, 1930, reported tumor in right tibia, size of an orange. Diagnosis: **sarcoma**. Treatment: the acid mineral chlorides by mouth. July, 1932, although complicated by two attacks of edema, is in good health; very small swelling of leg still present.

Case of J. L. J., colored. age 40 years. Oct. 8, 1931. Tumor removed from abdomen one year previous; **fibroma**. Complained of severe pains over abdomen. small tumor present in site of previous operation. Gave the solution internally. **Complete relief in 3 months and disappearance of induration (hard spot) or tumor**. June 10, 1932, no sign of growth.

Case of C. S. colored, age 50. 4 children living, weight 100 lbs. Three miscarriages. For 10 months, had pain during eating; great distress after. No relief from medicine. Asthenia and insomnia.

Examination: liver enlarged; **hard mass in outlet of stomach** and edge of liver. Gave the solution intravenously and by mouth. Complete relief of pain after eating in five days. Growth in pylorus cleared up, but induration (hard spot) still remained in liver. Treated one year, complete relief, **no sign of tumor remaining**, well at this date, July 1, 1932.

Case of L. P., age 63, colored. Aug. 2, 1930. Dairyman. Operation for removal of stone one year before, suprapubic incision, no history of venereal disease, frequent urination during day, none at night. Loss of weight, 11 lbs. Examination: **prostate shrunken; tumor size of small orange in scar**. Treatment: Intravenous injection of the solution weekly-, same by mouth q. i. d. (four times a day). In three weeks time, tumor had softened and **in six weeks had entirely disappeared**. Opened urethra by sounds (a searching instrument), which aggravated trouble. Solution continued at intervals. July, 7. 1932, still under treatment, much improved; had lost in beginning 15 lbs., gained 7 lbs.

Case of A. K., age 67 years. **Sarcoma of right mastoid for 18 years**. Three years ago had radium seeds applied, for pain and swelling had become severe. Partial absorption and relief from pain, then a decided recurrence of all a symptoms 6 months later. Gave solution without HCL. Much improved for a while; then relapse. HCI was added to solution three months ago, with great improvement, **tumor decreasing** and pain in nerves of jaw nearly disappeared, with gain in weight, strength and facial appearance.

Case of J. D., Nashville, Tenn., age 62 years. Jan. 11, 1931. **Recurrent growth in larynx.** Operated on 5 times at Johns Hopkins; last time Oct. 15, 1930. Very hoarse, larynx swollen, inflamed, involving epiglottis, putrid tongue. Solution given by mouth; still under treatment. Thinks he will get entirely well, as he is **greatly improved and able to speak in public.**

Case of C. S. S., age 57 years. Sept. 19, 1930. No history of syphilis. One year ago had an attack of vertigo, **unable to walk, face and tongue paralyzed on left side**, deafness in left ear, blood pressure normal. Left knee reflex slightly exaggerated, left pupil larger.

Diagnosis: **Brain tumor** causing pressure on brain. **The solution gave quick relief.** June, 1932, recurrence, same. Symptoms, also a hernia at 6th cervical vertebra of spinal fluid, which varied in size at intervals and could be squeezed back into spinal canal. Solution again given six times daily. In two weeks relief of symptoms and drawing in of hernial sac. **He is now walking, can stand with eyes closed, reflexes normal**, face and tongue normal. This case shows action of acid mineral solution on the fluids of brain.

These cases, chosen for their variety of symptoms, show but little of the possibilities of this method of treatment.

Diabetes has been treated with this remedy, with very gratifying results. Doubtless some of the curative results of insulin are due to the **1% HCl** that the preparation contains; likewise the famed adrenal cortex solution. During the (first) World War, Dakin's solution of **chlorine, lime and soda** became famous for its curative action because of its power to **liberate minute quantities of chlorine into suppurating tissues.** The acid mineral solution likewise liberates chlorine into the general circulation of the body.

It may be criticized that the dose of solution is very small, but if we call to mind how the farmer uses but one ton or less of an 8% potassium fertilizer to the acre—that if too much is used, then injury, instead of growth is produced—so likewise, as we are dealing with the delicate pH equilibrium of the tissues, small doses (repeated often, if necessary) are better than massive medication.

Pulmonary tuberculosis has responded wonderfully to this solution, and, if another paper is in order, cases can be quoted later. So far, it appears that uterine fibroids and myomata are not benefited by this method of treatment.

CONCLUSION

The world is in sore need of a reliable, effective remedy for cancer and tuberculosis, also a preventive treatment. The writer does not claim that he has a perfected remedy, but he does claim, by repeated proofs, that this **solution contains in itself an ability to promptly cause many precancerous lesions to disappear**, that cancerous conditions of the internal organs, where other methods are so futile, are and have been dissipated, and that **in cases too far advanced for recovery, relief of pain and distress is so marked** that such patients believe they will entirely recover.

Inexpensive Restorative Remedy. If the **chlorine deficiency hypothesis** be true, as it seems to be, we have in this solution a reliable, **inexpensive medication which, taken daily for several months, will prevent the imbalance of minerals**; likewise **restore into the circulation, for assimilation or excretion, pathological mineral deposits** in the tissues involved.

Other physicians will doubtless test out these claims, as some are doing now, and publish results, and the writer hopes that in the near future hope will take the place of despair, and no longer need cancerous victims face inevitable and untimely death.

- (1) The intravenous dose used by writer is 3 to 5 minims (drops) in 5 c.c. of distilled water at 5 to 7 day intervals. Dose by mouth: 3 to 20 minims well diluted, 3 to 6 times daily.
- (2) The solution has been proved by the writer to be an **effective and curative remedy in many cases of cancerous growths**; also it points the way to the etiology of cancer and how cancer may be avoided.
- (3) The remedy can in no wise cause injury; also advanced cases of cancerous disease oft times find great relief from pain and toxemia.
- (4) It has **curative properties in diabetes, tuberculosis and other degenerative diseases**.
- (5) **It will restore the normal acidity of the stomach, and thus bring about those conditions whereby the digestive organs will absorb those minerals necessary for sustained health.**
- (6) The solution should be administered before and after surgical or other methods of treatment in cancerous affections.
- (7) The formula is the result of over 3 years' clinical study in many diverse diseased conditions, testing and eliminating unnecessary salts, and as now constructed should produce even better results than those herein reported.
- (8) Certain minerals in a weak hydrochloric acid solution by reason of its free ions, are quite active, and but small doses are required.
- (9) Taken regularly for sufficient time, the solution will correct alkalosis and put into circulation precipitated salts.
- (10) The solution by releasing free chlorine ions, **raises immunity against infection and also an increased phagocytosis**.

A FURTHER REPORT OF CASES

By Walter. B. Guy, M.D.

I have some interesting cases to report. During the summer of 1933, the writer visited New Hampshire, Maine, New York City and Washington, D.C., and its environs. Wherever he went, he found **cases of chronic disease** of many kinds. Some hopeless and in despair; others still fighting for their lives. To these varied cases, the writer **gave his acid mineral solution with remarkable results**. Some of the cases are worthy of record, and are here briefly recited. The first case, however, was under treatment ere the writer left for the North, but is worthy of inclusion, because of its severity.

May, 1933. L.W., negress, age 72 years. For two years, had **Paget's cancer of left breast**. Ulcerated area 6 inches around retracted nipple. Painful, stinking. No glandular invasion. Bedridden, toxemia and asthenia. Acid mineral solution, by vein twice weekly, 12 drops in water four times daily. Locally a saturated solution of copperas to ulcerated area on breast. Quick relief was attained. Oct. 6, 1933, patient well and active, breast still swollen, area of ulceration **completely healed**. During the summer months the solution was taken only by mouth. Still under treatment.

May 15, 1933. White widow, age 74 years, New York City in slum area. **Last stages of heart disease and pulmonary tuberculosis**; a large cavity in her right lung. Acid mineral solution and a Blaud-strychnine compound tablet twice daily was ordered. Report at this date: Is able to go out and is **greatly improved in health**.

H. G., white girl, age 4 years, New Hampshire. Parents and three older children well. For 2 years, had slowly increasing **convulsions** until they numbered 5 to 24 daily. Under observation as Boston Children's Hospital several weeks; report negative. Phenobarbital in large doses ineffective. Examination showed child running about with body bent to right, dry cough and persistent constipation. Headaches preceded convulsions, evidently not epileptic. Acid mineral solution was given 6 times daily, with **immediate relief**. Convulsions returned slightly once weekly for three weeks, then stopped. When last seen had gained in weight, rosy cheeks and

seemed in best of health. Here was plain evidence of increased brain pressure. The diagnosis or cause I will leave for present.

August 15, 1933. H. C. White man, age 90 years, New Hampshire. **Large tumor in abdomen** from fecal impaction in small intestines; Blood pressure, 230. Interstitial nephritis, slight albumin. Bedridden from herpes zoster for four months. Treatment: acid mineral solution, 12 drops in cup of hot water, preceded by dessertspoonful of mineral oil every hour. **Complete relief of impaction in 48 hours.** Acid mineral solution now three times daily. Blood pressure slowly dropping and improving in health.

July, 1933. H. C., white woman, age 43 years, Washington, D.C. Diabetic. Three years before had received intravenous injection of glucose for varicose veins in legs at a Baltimore hospital, which set up a glycosuria; taking 40 units of insulin daily for three years. Complained of **muscular tetanic spasms**, awake and asleep, indicating parathyroid insufficiency. Acid mineral solution was given six times daily, with **immediate relief of tetany**; also it lowered the excretion of glucose in urine.

M. E. White woman, age 53 years, Washington, D.C. For 18 years had a **horny growth on heel of foot**, which would crack, ulcerate, then horn would peel off to form still another one. The whole foot inflamed and sore. Acid mineral solution was given. In 4 weeks, the growth fell off and **foot is now healed and free from disease.**

H. S., male, age 43 years, Washington. D. C. Weekly migraine; also raised pus from **chronic bronchitis**. Acid mineral solution given; **complete relief in two weeks.** Two months later, still well.

E. S., white woman, age 70 years. Complained of **gastric distress** after eating for past 2 years. Burning and pain immediately after meals. Acid mineral solution was prescribed. **Immediate relief** was obtained.

G. H. S. White male; age 72 years, Washington. D. C. Had operation on prostate one year before. Examination showed cavity in apex of right lung. Myocarditis marked, with frequent extrasystoles; **carcinomatous growths in bladder wall.** Two large cancerous growths in the right groin, 6 x 6 1/2 inches. These growths had occluded right ureter. Anemia marked, weak. Average urinary evacuations 16 times each night. Six intravenous injections of acid mineral solution were given. Daily by mouth. Improvement soon took place. Urinary frequency reduced to five times at night. The ammoniacal urine soon became acid; heart beats become normal, the lung lesion disappeared, also expectorations. Growth gradually reduced to two inches in size. The right kidney ureter opened up, discharging large amounts of pus through bladder. October 1933, case still under treatment. Outcome, owing to advanced age and anemia, still uncertain, but he is **much improved.**

Potassium Deficiency. Other cases might be quoted, but enough has been described to show there must be an underlying factor in all these varied aspects of disease, and that this factor, the writer believes, is a **deficiency of potassium in progressive and degenerative disease**, including tuberculosis as well as cancer, **bringing about a deficiency of chlorine in gastric secretions and an excess imbalance of sodium, calcium, and magnesium in the tissues.** Therefore, when the acid mineral solution, containing iron, chlorine, and potassium, is administered, the varied symptoms due to deficiency must inevitably be relieved. We sorely need a simple chemical color test for this potassium deficiency, and this test the writer hopes to be able to find. If so, a future article will be written. Till then, let all carry on this treatment, so helpful in the multitudinous cases that are to be found in every town and countryside.

The child with convulsions was diagnosed by the writer as a tuberculosis involving bowel and brain, causing stoppage of the lymph channels; therefore high cerebral pressure.

In a previous article, reference was made to the claims of Professor Esmond R. Long of Chicago University (Chemistry in Medicine), who found that **free glycerin was given off from the fatty acids in tubercular patients, and that this glycerol is the chief food for growth of tubercle bacilli.** It seems logical, then, to believe the acid mineral solution producing, as it does, profound changes in the chemical reactions of the tissues,

inhibits the breaking down of the fatty acids and the production of the free glycerin in such cases, thus bringing about starvation and death of these invading germs. **All cases of tuberculosis when given the acid mineral solution show quick and uniformly curative reactions.** The writer hopes that other members of THE MEDICAL WORLD "family" will report their cases to this journal, knowing that only good results can follow. However, it must be clearly understood that when this acid mineral solution is given to cases of cancerous disease, both calcium and magnesium must be rigidly excluded from the treatment; otherwise no good results can possibly follow.

For the reason for this law, study should be made into the mineral chemistry of the soil of the earth, where excess of soluble calcium inevitably produces sterility and permanent injury. Magnesium is the chief impurity of sodium chloride and produces injury to the nervous system when in excess, and as in the writer's opinion, neoplastic growths are but signs of failure of posterior spinal inhibitory control of reproduction of cell life, we can readily see, by the light of this hypothesis, why magnesium is contraindicated in cancer treatment.

Keratosis Case. The case of **keratosis of the foot**, a horny growth existing over 18 years, is very suggestive, for here we have uncontrolled proliferating, epithelial cells, so closely allied to malignancy. Hence, when a **potassium salt is given in an acid solution**, and **within 6 weeks the growth falls off**, to be replaced by normal skin, shows conclusively that lack of potassium in tissues can be present over many years and that this mineral has a very distinct relationship with cell production, its deficiency causing doubtless excessive uncontrolled cellular growth, not restricted to any portion of the human economy.

The writer has received many letters of inquiry and of commendation, and he believes if such letters were addressed to THE MEDICAL WORLD, all could share in answers, and likewise receive encouragement from the favorable reports quoted.

HYDROCHLORIC ACID INJECTIONS IN ACUTE INFECTION

By William I. Howell, M.D., Lexington, TN.

It is strange that things will hold on when they get nowhere. I noted an article in a medical journal where an Indiana man was writing on cellulitis in the pelvis of women following lying-in period, either at time or not, telling of the management. His idea was to clean them up, give blood transfusions, rest.

It really meant let them die if they could not fight it out alone. Some 3 years ago, I found **a remedy that is 95% sure. Begin as early as they show signs of fever.** Give them 10 c.c. of a 1-1500 or 1-1000 solution of **hydrochloric acid**, in a vein, every day. **Usually in 5 to 8 days, they are clear of fever, really getting well.**

De Lee says one out of every 400 women die in childbirth or from causes related to the same; 10 out of these 400 are invalided for life. It is almost all uncalled for. I have just attended two cases of confinement that had serious lacerations. I began to give them injections of acid at once, repeated every day to the seventh or eighth day. They never had any fever. They are getting well; are not invalided for life.

The question arises: just how does it do this? **We fight infection with the white cells.** After every injection of the acid, **there is a rise of 2,000 to 6,000 cells in 6 to 8 hours.** To prove this contention, I went to Dr. R. A. Douglas, and asked him to take a white cell count; then give me an injection of the acid. He did this. The first count was 7,300. Then, the injection. I went back in 1 hour and 40 minutes. He made another white cell count. It showed 9,800 -- a rise of 2,500 in that short time.

NEPHRITIS

The acid gives the **same happy results in nephritis.** Give an injection every day – **in 5 or 6 days, the albumin diminishes until there is none.**

Acute Nephritis Case. I saw a case of **acute nephritis** September, 1933, following scarlet fever. A boy, 9 years of age, swollen till he looked as though he would burst. I tried everything I could get at; salt-free diet, potassium citrate in large doses, milk diet. The hospital authorities said his urine showed four plus albumin. After 6 weeks, he showed no improvement. I decided to try the acid. I gave him 3 c.c. of a 1:500 solution in the gluteal muscle every day, alternating hips each day. In 7 days, the albumin began to decrease. After 21 injections, he was **entirely well**. I have reports from him almost weekly; no albumin.

I saw him May 6th, 1934. He was out on the road with other children, was just as busy in their games as they were, showed no signs of his former trouble, looked well, ruddy like the others.

Acute Prostatitis. Since that time I saw another case of **acute prostatitis**, urine loaded with albumin. After 6 injections, his urine was **entirely cleared up**. I have given him about 25 injections. He sleeps well at night; no more bladder trouble.

Tuberculosis. I have a man under my care who had **tuberculosis of the lungs**. The bladder became involved. I gave him an injection every day for 30 days. He missed his fever, all bladder symptoms are gone, eats plenty, sleeps well, has had no fever in 10 months. His weight has gone up from 140 to 180 lbs. I am still giving him an injection once a week. He is doing light work, coughs very little. He has taken more than 100 injections with never the slightest harm.

TONSILLITIS

In acute tonsillitis, it is specific. Never over 2 injections, one each day. Most of the time, one injection is sufficient and next day, they are ready for work.

DILUTE HYDROCHLORIC ACID INTRAVENOUSLY AND INTRAMUSCULARLY

By Desidierius De Beszedits, M.D.

Former President of the Federal Sanitary Brigade in the District of Tlaxiaco, State of Oaxaca, Mexico

PNEUMONIA

Take, for instance, in my exceedingly severe pneumonia cases, where it has never failed me. Pneumonia -- all types of pneumococci -- in hot climates is more treacherous, more deadly, than in the temperate zone. A characteristic of these **pneumonia cells is that they are enclosed or, should I say, "gum-coated"** [i.e. now known as a **biofilm**]. Thus incased, this outer coating or casing or capsule contains polysaccharides. **This evidently impermeable coating makes the protected germs inaccessible, virulent, deadly**; more so if each type has its own particular coating. Once made accessible (to the action of the white blood cells), exposed, undressed, so to say, these germs are not particularly dangerous.

Then, I ask, when injected, **what does HCl solution do to these pneumonia cells, to this perhaps impenetrable coating?** Is it that it itself attacks and simply "skins" them? After which, once made accessible, their undoing and elimination are simple through the natural process of leukocytosis plus phagocytosis. Am I on the right trail in my deductions?

Or would this HCl solution injected, do some biochemical wonder as to respiration and the physiology of circulation, since the exudates (blood, pus, serum, germs) that accumulate in the minute air chambers of the lung cause it to lose its "sponginess" and become liver-like; the devitalized air cells definitely collapse; no adequate amount of oxygen can get into the blood; neither can carbon dioxide and toxins constantly produced by the attacking germs escape from the blood; the lungs, under the undue labor, become exhausted; so does the toxin-poisoned heart.

Yet noting the unfailing beneficial effect, I always obtain with HCl solution injected, even in such extreme conditions, isn't it reasonable if I ask: did it cause dilatation of the plugged air spaces (so that the white cells can

get to the toxins?) so that enough oxygen can get through, so to sustain the patient until (the white blood cells having done their work) carbon dioxide gets into the blood and helps (via the brain) to excite the lungs to expand and contract, thus re-establishing normal breathing and saving the patient?

Or can or does HCl solution injected act as a detoxifier or a "toning up" agent when the toxin-poisoned cells are no longer able to take and deliver life's essential oxygen?

The most trying circumstances -- numerous civil uprisings, thus not only far away, but cut off from any possible help simultaneously with the burning down of my house and drug store -- under which I have been laboring in my daily clinical work, compelled me at first not only to use, but really to abuse, HCl injections. At first I entertained very serious doubts about this substance, and did not approve its promiscuous use in almost every case that came to my clinic, my only excuse (to myself) being of the sheerest necessity: numerous sick people seeking treatment and absolutely no other medicine available. So if necessity is mother of all inventions, so much more was it mother in my case of innovation or discovery or, better yet, "revelation" of this humble, but marvelous, acid.

Little by little, the more I used it - upon others as well as on myself - my doubts turned into hopes and gradually my hopes into happy surprises. Looking back now, after having used several thousand injections - I am not only not sorry for having done my "dangerous" experiments, but I am decidedly glad for all, for **HCl injected had proved to be a godsend therapeutic agent** on all occasions when used with due caution and prudence.

My investigations - with the capable guidance of a competent American biochemist I employ -- I consider far from being complete. However, to me it is certain that HCl, besides its action upon cellular life and cell behavior, does have some additional inherent "virtue," for it accomplishes much more than claimed by its most ardent advocate.

So far, we have only heard of what it will do in infectious diseases. My observations, my failures and results, my work with this substance, lead me to reason thus: man is the center of medicine; he is either the victim of illness or is the cause of his own disease; so human diseases may be put into two general divisions: from within, degenerative diseases; from without, the infectious diseases. Numerous subdivisions are possible, but not necessary.

In the infectious diseases the leukocytosis and phagocytosis theory -- as championed by Dr. Ferguson and his followers -- certainly is correct and most satisfactory. But what about the degenerative diseases, due to tear and wear, where the "cogs" in the wonderful human machinery become more or less worn and out of alignment; life-giving and sustaining substances--- minerals ---depleted or exhausted? What will HCl solution injected accomplish in order to obtain "repair"?

What are the coadjuvants that are needed to make it a complete success? In pernicious types of malaria and in a malignant type of highly infectious dengue, as seen only in tropical climates, HCl solution injected intravenously produces a notable effect -- quick and sure -- upon the hematopoietic elements of the spleen, marrow, and lymph glands.

MALARIA

The gradual re-establishment of the acid-base equilibrium of the body, the renewed carbon dioxide combining power of the blood, the relation of the chlorides of the blood plasma under its action attest its highly active and beneficial (repairing, coagulating, etc.) influence.

This is my tenth year of clinical experience in Mexico, spent in different parts, mostly on the coast in the hot country. I usually see from 2 to 20 malarial cases every day, besides all the diseases that one finds "in the books," and sometimes I think that there still are some "unwritten" ones that occasionally come to me.

Among all, my own case was, perhaps, the most characteristic and most malignant. Though saturated with quinine, I was daily shaken with chills lasting 45 minutes followed by high temperature up to 105 degrees of 2 to 3 hours duration; then profuse sweating.

Having exhausted all my own malarial knowledge, I consulted two of our best malaria expert M.D.s whose 3 weeks' treatment did me no good. Of my usual weight of 170 lbs., **I have lost 65 lbs., became the yellowest-skinned skeleton, with added tropical dysentery and stomach ulcers**, and -- seriously contemplating suicide.

Then, just at this time, my house and small drug store burned down. Thereafter, the only medicine I had left was a scorched bottle of "acid phosphate of Dr. Horsford," and at that time it enjoyed quite a large sale in Mexico. It is composed of different **mineral phosphates and dilute HCl**.

Hardly able to drag myself around, and with many sick people asking for treatment, I decided on something "big and bold." I diluted that bottle to the limit, so that it would go a long way, and I myself took it by the mouth and in intramuscular injections and administered it to every one of my patients for any and all ailments.

Seems and looks foolish, doesn't it, this my "Indian medicine man" attitude and action? Yes, I think so myself, but everything is fair in love and in war. So is everything excusable for a sick person trying to get well! To be short -- **in one week, we all were well and happy**. This, again, gave me the idea to **use certain mineral salts as coadjuvant with minute doses of HCl**.

Since then, I have treated a great many similar **malignant types of malaria** -- bilious, hemoglobinuric or black-waterfevers. One of them that I treated with quinine and salvarsan terminated fatally, with persistent hiccough, hepatitis and abundant vomiting of blood. **All others treated with my HCl mineral prescription survived**, like myself. In the most severe cases of tropical malaria, with "access pernicieux" (when death may supervene with unexpected suddenness) and with cerebral involvement and consequent coma, the very efficient and quick effect of HCl injected is noticeable in copious sweating, this **"crisis" of sweating usually terminating the comatous state and heralding the beginning of nursing back to health**.

Now, why is this sweating? What effect can HCl produce on the "glandulas sudorificas"? Or on the corresponding nervous system in malarial amblyopia that under the action of the HCl solution, injected intravenously, will clear up readily? How does it work in this case upon the benumbed or oppressed nerves (causing release from oppression)? What deductions and explanations can doctors, thoroughly familiar with the blood picture, morbid anatomy, pathology and pathological anatomy, etc., of this "multiform" disease, make as to the action of the HCl injected?

Those who know malaria and quinine therapy in all its forms and manifestations know that quinine is not a specific for malaria. It is only that certain types of malaria and malaria in its certain "phases" are amenable to quinine. But, all and every malarial case will clear up when the sulphate of quinine is used, dissolved with water with the **aid of HCl**. And in the opinion and practice of our best malaria experts, it is infallible when the chlorides, as recommended by Dr. Walter B. Guy in the pages of THE MEDICAL WORLD, are added.

Not to apply the HCl solution with quinine in all malaria cases right from the start I would consider a culpable error. If HCl solution so used does not prevent the next succeeding "chill" (it always diminishes it), or if relapse is prone to occur, it is only because the right dose was not given.

Can it be that HCl solution injected, due to its inherent quality or virtue, exerts a toxic influence upon malarial parasites, killing them by poisoning or "burning: them up or choking them to death by engulfing them, by isolation or saturation? Or is it that the white blood cells will do any or all this when stirred up by the HCl solution injected?

What an immensely broad field is offered here for the most interesting research work as to the possible or likely effect of HCl solution injected, upon these and all other parasite germs. Is such effect the same on the filterable as on the different bacterial germs? On those that are reproduced by dividing or splitting or on those that grow spores? When they alone can or do cause the disease or when acting in concert with some other contaminating organism that somehow gets into the colony? On new germs or on new forms of the old ones? During the reproductive or other evolutive period, in free state or when encapsuled? Such research and accompanying experiments should be carried on and kept up until the final solution is reached, for the hot countries, as well as the temperate zones, have a great many seasonal and regional, but in all "international," pathological puzzles.

ELEPHANTIASIS

In another interesting trial, I have put the **HCl solution** in two cases of **elephantiasis** arabum, and in a good many cases of elephantiasis graecorum. The first, said to be caused by the filaria sanguinis hominis, and the second by the specific bacterium, the bacillus leprae of Hansen. HCl solution injected intravenously in these hopeless cases produces **surprising effects**.

It is an accepted fact in pathology that the **causation of the condition as in the first case is due to lymph stasis**, or to an occlusion in the lymph stream. Naturally, the involvement of the lymphatic glands ensues; or lymphangitis may be due to specific infection in the congested area.

NOTE: This is a very long article and has not been finished editing -- very interesting parts will follow.

TREATMENT OF CANCER

Experience to date indicates that the treatment of cancer can now be divided into two divisions. First: removal of underlying factors producing lymph and nerve stasis, viz., a potassium deficiency, an alkalosis and lymph stasis, caused by an iron precipitation. Second: surgical removal, when possible, of tumor, or local antiseptic treatment to external open lesions to destroy invading micro-organisms; also other measures are helpful, such as bacterins, sulphur internally, as well as supporting treatment, as proper diet, tonics, gland therapy, and radiation.

This local antiseptic the writer believes he has perfected. It can be applied to large cancerous lesions, is very effective in destroying micro-organisms, removing foul odors and discharges; it causes cancerous nodules to break down, stimulates growth of healthy granulations, and, best of all, its application is painless and inexpensive.

The antiseptic oil I use is the following: (Old apothecary measures)

Sat. sol. of iodine (crystals) in chloroform.....400

Sat. sol. of naphthalin in mineral oil.....12000

M. Sig.: Apply to cancer sores for 30 days.

By the above treatment, rapid improvement occurs; the cancerous nodules in lymph channels melt away. Recent growths are rapidly dissipated, ammoniacal urine becomes acid, blood in index improves, complexion clears and a sense of well-being comes in place of toxic malaise. Also cancer pains are quickly alleviated.

The question may be raised: **why potassium deficiency**? This the author believes to be quite common and may be **due to a hypochlorhydria brought on by worry, grief, etc., producing the deficiency of hydrochloric acid giving rise to lactic acid replacement and maldigestion and impaired absorption of mineral salts**.

As **lactic acid is given off by malignant growths**, it may be assumed, therefore, that **replacement of hydrochloric acid by lactic acid is proof of existing alkalosis**.

Potassium deficiency may also be the underlying factor in susceptibility to tuberculosis, causing excretion of glycerol from the fatty acids of cells, as outlined by Professor Esmond R. Long, of Chicago University.

A few of the cases treated will now be briefly described in order to show how the remedy causes alleviation in different aspects of neoplastic disease:

L. W., negress, aged 73 years, St. Augustine. 4-10-33. **Paget's disease** of left breast, necrosed area six inches in diameter, breast hard, swollen, retracted nipple. Bloody discharge at intervals, toxic, bedridden, no glandular involvement, severe pains posterior to heart. Intravenous and internal treatment by acid potassium solution; also local treatment. 11-14-33, In good health, has gained 25 pounds in weight. **Breast normal** except for small induration remaining in center of breast. Still under treatment. Breast improving after each injection. Note: This case was neglected during absence of the writer for 4 months during the summer.

Wm. T., 42 years, white, veteran. 2-22-33. Had gastric distress twelve years previous. February, 1930, much worse. February 1931, had chicken pox; gastric distress became worse; went to Pensacola Hospital; treated for gastric ulcer, no relief. May 1, 1932, X-rayed at Flagler Hospital, St. Augustine. Sent to Lake City Veterans Hospital. June, 1932 went home. Diagnosis: Cancer of stomach. Hopeless, grew worse, frequent hemorrhages from stomach and bowels, almost died January, 1933.

February 23, 1933; Examination. Near death, **large mass in stomach and duodenum**, great pain, frequent hemorrhages from stomach in vomitus and from bowels. Pulse, 120; night sweats, fever, marked cachexia (malnutrition and wasting) and much emaciated. Case looked hopeless.

Treatment: acid mineral solution intravenously every 3 days. **Same by mouth in oatmeal water, 5 times daily.** Atropine sulphate given when in pain. April, 1933: Big improvement; mass in epigastrium no longer palpable. Hemoglobins had risen from 40 to 70 color chart. Bacterin Van Cott was given. This patient got up and around during writer's absence during the summer. In September, roof blown off shack; got wet, has gastritis, no sign of tumor present. Should recover. 11-18-33: Owing to extreme poverty and lack of proper food, all improvement is due to medical treatment.

Case of L. W., age 48, St. Augustine; weight, 117'. loss 13 lbs., 10-26-33. **Uterine fibroids** for 6 years. Treated 18 months before by X-rays. One year ago, severe pains in back and pelvis; sitting or lying down almost impossible. Examination showed uterine fibroids, size of head, reaching nearly to umbilicus. Yellow skin, operation scar for removal of right kidney 17 years before. Motion painful in base of spine and unable to bend forward. Weekly injections of acid potassium solution were given intravenously; also same by mouth q.d. After second injection, pain and stiffness decidedly relieved. Can now lie down in bed and sit without pain; complexion clearing and growth much reduced in size and uterine discharge stopped. Diagnosis: Beginning of malignancy in growth. 11-13-33: Case still improving. Intravenous injection once weekly; **tumors decreasing** in size after each injection.

L. G., age 87 years, negress; June, 1929; many children. Found with gas pains from on immense **adenoma in the colon**, size of 8 months pregnancy; vomiting and complete stoppage. Injection of acid solution was given intravenously; no opiates. Gas pains and colic relieved in 5 hours. Five further injections were given, then solution by mouth. By September, 1929, **all signs of tumor had disappeared.** One year later, a sarcomatous swelling appeared on the right tibia disappeared after treatment by the same solution by mouth for several months. This woman died from diabetic gangrene in 1932 -- from diabetes with gangrene of the hand.

P. D., Greek male, age 50. **Growth in gallbladder and duodenum**, badly jaundiced for 4 months. X-ray film indefinite; loss of 20 lbs. Several surgeons in this city and Jacksonville gave fatal prognosis, and mineral solution was given intravenously once a week; same by mouth. Gradual improvement took place. At this date, he is **in the best of health** and has gained 28 lbs. in weight.

J.L.J., woman. colored, age 40. 10-8-31: Recurrent **growth in scar above pubes**, operation for removal of **fibroid** one year before. Gave acid solution internally for 3 months. **Complete relief of pain and disappearance of tumor.** 6-10-32: Still well.

Mrs. F. P. J., white- age 70 years, 1-2-31: Probable **growth in duodenum**, with digestive disturbance; also hard red swelling on right tibia. Gave acid mineral solution for 10 months. Complete relief and at this date is in good health.

Mrs. M. M., age, 67 years; white. 12-4-30: Indurated **swelling over duodenum**. Toxemia, ptosis (drooping) of stomach and intestines. Gave **acid solution by mouth**. Slow recovery. Now **in good health**.

C.S., colored woman; age 50. 10-19-30: For 10 months had **severe pain while eating**. Examination showed growth in stomach and liver. Insomnia, toxemia, no relief from medical treatment. Acid solution was given intravenously and by mouth. Immediate relief from gastric distress. Complete relief from all symptom and growths at end of one year. **Still well.** 4-10-32

P. F.; age 30; colored woman, Jacksonville, 3-19-31: Gas and pains in abdomen for three years. Low blood pressure; asthenia (weakness). Examination showed **indurated swelling in left colon**. Acid solution by mouth. Complete relief in 2 months and **disappearance of growth**.

J. D. C., age, 58; colored man Jacksonville. 12-18-30: **Indigestion for 25 years**. Ate freely of eggs and sugar. Examination showed indurated swelling of left colon. Acid solution by mouth. **Complete relief in 3 months**.

M. E. P., age 63 years; White. 2-24-33: Cancer of cervix uteri, ten years before. Radium treatment four years ago. Examination shows vagina nearly occluded. Cancerous membrane on meatus and vaginal wall, like raw steak; cauliflower excrescence of vulva. Large nodule in rectal vaginal wall. Acid solution by mouth. Ferrous sulphate locally. 10-10-33: Unable to pass finger into vagina. Acid solution intravenously once weekly. Antiseptic oil locally. 11-21-33 Much improved. Vagina opening up, less painful, better health; Gaining in color, weight strength. Still under treatment.

L. P. colored man; age 63 years, 8-2-30. Complained of cystitis; loss of weight. 15 lbs. Examination showed **indurated growth** in scar over pubis from previous operation for stone in bladder. Acid solution intravenously once weekly and by mouth. Within twenty-one days tumor had disappeared. 11-1-33: **No recurrence of growth**. Bladder still irritable. Prostatic gland normal; gained 7 pounds in weight.

C.S.S.; age 57 years; colored, St Augustine. 6-19-32: **Vertigo, paralysis**, one year before treated by acid mineral solution, complete relief in four weeks. Attack of vertigo, facial paralysis, deaf in left ear. Small hernia in back of neck of spinal canal about sixth cervical; can be compressed. Diagnosis: Cerebral tumor. Acid mineral solution by mouth. 9-19-32- **All symptoms absent**. Able to resume work.

CONCLUSION

More cases could be quoted, but these have been chosen to show how the acid potassium solution covers a large field of internal cancerous diseases.

As experience permitted, the acid potassium solution was improved; so at this date the solution is rapidly effective, especially so when given intravenously. The local remedy mentioned is intensely antiseptic and germicidal and, being inexpensive. and painless, is well adapted to large ulcerated areas, seen in advanced cancerous disease, also in rectal and vaginal growths.

(Editor's note: Old symbology not on my keyboard and possible omissions or errors.)

The revised solution I am now using is the following:

Liq. potas. arsenitis.....100
Sol. potassium chloride (10%).....800
Sol. potassium sulphate (10%)..... 1600
Sol. hydrochloric acid diluteq.s.ad 3000
M..... Sig.; 5 to 25 drops in water after each meal. Intravenously: 5 to 10 minims in 10 cc. of water.

No bad effects have been noticed by the intravenous injections.

Literature Cited: Cancer contributions. Adair; Bulletin 208, Purdue University, Indiana; Manual of Clinical Chemistry. Austin; Chemistry in Medicine.

RELATION OF IRON TO NEOPLASTIC DISEASE (1935)

By Walter B. Guy, M.D.

It is axiomatic that **a healthy organism in either the vegetable or animal world is primarily dependent upon a normal balanced mineral content.** Therefore, **an excess or a deficiency must inevitably bring about, sooner or later conditions known as disease.** That the abnormal mineral content will likewise cause the affected organism to be less able to withstand encroachment of microbic life is likewise a truism.

The writer wishes to present some interesting data linking up both the vegetable and animal worlds showing, by proven statistics, how certain mineral deficiencies disease conditions and how this knowledge applied to neoplastic and affiliated diseases in the human kingdom throws flood of light upon this darkened area of human knowledge; also to show how, when this truth discovered in the vegetable world is applied to cases of cancerous disease, its symptoms can be greatly mitigated and curative results become strikingly manifest.

Twelve years ago, more or less, east of the Mississippi River, corn plants began to die. Their stalks were stunted, molds grew on ears and roots, and farmers were in despair. The sweet corn canning industry was also involved, for black specks would appear in the canned corn, to the disgust of good housewives and the dismay of the canners when this product was returned to the canning factories. Expert chemists examined these black specks and pronounced them precipitated iron particles.

But, how did iron get into the corn and why did these corn plants, roots and ears develop unsightly molds such as the rhiizopus, gibberella, fusarium, etc.?

It was George Hoffer who, with the help of others, finally put the puzzle together. Taking ears of corn, by using the well-known thiocyanate test, he found iron, first, in the grains of corn, before canning; next, in the joints of corn, where it had blocked the channels for sap; also that a weak solution of iron slowly injected into a growing corn plant caused these diseased conditions to appear.

By using the methylene blue stain, he noted that **the circulation of sap had been almost completely blocked by these iron deposits.** At last, after much research, it was found that **when potassium salts were applied to the soil these disease phenomena were controlled;** also the **various molds likewise were no longer found** on roots and cars. Again potassium salts increased production two to three hundred per cent in potassium-deficient soils. Can we show that potassium deficiency may be present in animal bodies and, like in corn, this deficiency may cause profound changes in their metabolic life?

Professor A. E. Austin' says that: "**Potash** salts are believed to be **absolutely necessary for the sustenance of life.**" Again, Professor R. A. Hatcher, says: "It is only within recent times that we have come to understand the importance of extremely small amounts of certain salts of the blood and the influence exerted by even slight changes in its composition. Small amounts of potassium are essential for the heart-beat, etc." Of late years we

hear of iron precipitation into the kidney and other organs, as in pernicious anemia, and if this **precipitation of metallic iron can be shown to be the cause of the indurated (hard) tumors, malignant and benign neoplastic (cancerous) growths**, a great step forward can be taken toward ultimate victory over neoplastic malignant disease.

But what test can demonstrate potassium deficiency in human tissues? There is a more or less accurate test for this deficiency in soils; but, after all is said and done, the only real proof is a pragmatic one, viz., what effect does the administration of certain potassium salts have in cases of cancerous disease? Can we show, as in corn production, that this metal does the same to human bodies as it does to growth of this cereal? **Does the administration of potassium salts soften indurated (hardened) cancer tissue, pick up again precipitated iron and cause a decisive increase of hemoglobin in anemic blood, cause tumors to reduce in size and bring health and life back to cancer victims?** If so, what great possibilities are in sight! For, by simply adding a potassium salt to daily intake of sodium chloride all the varied aspects, and they are many, of this deficiency may be prevented and controlled. As, however, this thesis is devoted to cancer warfare, mention of other disease conditions will be left for some future papers.

What evidence have we that, like as in cases of iron precipitation in corn, shutting off the circulation of sap through the nodes of the plants, in man a blocking of the lymph nodes can be likewise present and cause the phenomena we term neoplasms? First of all I will quote from a letter from Professor W. W. Keen to W. Sampson Handley, M. D., surgeon to Middlesex Hospital, London: "I have just read your very interesting address on **'Lymph Stasis the precursor of Cancer!** It appeals to me as the most reasonable and almost certain paper on the origin of cancer that I have ever seen. All others are guesswork. Here is a series of facts, observations which cannot be disputed. . . . Whether we can do anything to prevent or remedy the stasis of lymph or not is the next question. If we can, we can possibly prevent cancer."

Again in the same article Dr. Handley states: "In remarkable accord with **the view that lymph stasis is the greatest general physiological factor which lays the foundation of cancer**, is the flood of evidence coming from many quarters that **papilloma or adenoma is the precursor of carcinoma of every variety.**" "If, as I maintain, **the papilloma or papillary adenoma is the characteristic product of local lymphatic obstruction**, we are getting near to the conclusion that **all carcinomas are the result of local lymphatic obstruction.**"

That an excess of one group of minerals and deficiency of another may seriously disturb the delicate pH chemical balance is easily understood; also that this chemical imbalance is present in cancerous disease has been almost universally accepted by the scientific medical authorities.

The late Dr. Willy Meyer, of New York City, wrote. "Exact pH measurements have revealed the fact, as shown by the literature, that **malignancy is always associated with a high degree of alkalosis, and it has also been shown that the alkalosis precedes the malignancy. There can be alkalosis without malignancy but it would seem that there can be no malignancy without alkalosis. The more virulent the malignancy, the stronger must be the alkalosis which sustains it.**"

Calcium, magnesium and sodium are seemingly in excess in alkalosis of the body; in the earth, calcium, phosphorus and magnesium are recommended for acid soils. Yet **potassium is rarely in excess in such soils**, but usually deficient, and **when corn is destroyed or injured by precipitation of iron into the nodes, roots, ears and leaves of the plant, we always find a deficiency of potassium salts.** Likewise in this potassium deficiency disease of corn, we find reported that **many varieties of molds attack ears and roots.** Does this fact not remind us of the **varied micro-organisms that are found in all advanced cases of malignant growths** and reported by so many research workers?

During the past years, **a potassium salt solution has been given to quite a few cases of cancer with striking curative results.** Since **giving potassium salts in a solution of hydrochloric acid of about 2%, results are so striking** that the before-mentioned claim of result of precipitated iron must be as true in man as in corn, for in as

short a space of time as 4 weeks in a woman of 42 years the writer has seen indurated masses disappear, circulation of the arm restored, infiltrated lung by metastatic growths clear up, blood index rise; strength, color and appetite return; pain relieved and a large hole in right breast under simple germicidal application fill in rapidly with healthy tissue; also involvement of spine with pain in spine and intercostal nerves entirely relieved.

Keratosi Case. A striking case of keratosis treated in Takoma Park, Md. was that of a woman who had a horny mass on the heel of one foot for over eighteen years. This growth would crack, ulcerate and break away; then another growth would take its place. Six weeks from commencing to take potassium salt solution the foot was well and skin was normal. This case is especially interesting, showing, as it does, how a potassium deficiency may be present many years, and opens up new thought for treatment of not only keratosis, but psoriasis and similar affections, for in keratosis we have a condition closely allied to epithelioma.

Breast Cancer Case. In the city of Jacksonville, there is a woman about 70 years of age who several years before had her right breast removed and axilla cleaned out for cancerous growth. Last spring the writer examined her and found several large, hard, recurrent growths on the border of the axilla and in the ribs. The potassium and hydrochloric acid solution was prescribed. At this date, all these recurrent **growths have disappeared** and her general health is greatly improved.

Repeated cases have proved that the acid potassium solution changes back to normal the gastric secretion and impaired digestion. The past 4 years of economic distress and financial worry are already bringing a harvest of degenerative disease, including cancer in all its manifold phenomena. And because of this great demand for relief, the writer puts out this information instead of piling up conclusive proofs for several years in order that others, if they so desire, may use this form of treatment, so inexpensive and yet so successful in the writer's hands.

Lymph Channels Blocked by Iron. Apropos of the claim that **iron is precipitated into lymph channels, blocking of the affected areas from the lymph circulation and nerve control of cell life, and these blocked lymph areas become a fruitful field for micro-organisms of varied nature and kind to infect these occluded tissues**, what further proof can be given to prove this statement? A most suggestive fact repeated over and over again is that **in advanced cases of cancerous disease the hemoglobin color index is invariably low -- 40 to 50%** on the color chart. After such cases have been **treated a week or two**, even when no iron is administered the **color index is found to have risen to 70 or 80%**.

This indicates, the author believes, that the **red cells of blood have taken up the precipitated iron** which they had lost by the potassium deficiency. This phenomenon **throws new light on the various anemias of blood so hard and unsatisfactory to treat**, and also on the solution of the problem, for if iron is precipitated into the tissues it seemingly must have been lost by the hemoglobin of the red corpuscles, and, if they regain it, this engorged tissue should be dissipated. This is exactly the phenomenon that occurs **when HCl and potassium are taken** or, better, injected into the blood stream. The **cancerous indurated growths often then disappear** and the hemoglobin color index rises nearer to the normal.

Various means have been employed to combat alkalosis, mostly futile, others quite injurious. In soils, calcium is applied to combat acidosis, and, when given to cancer cases by the author, has proved most disastrous. Magnesium salts likewise. **The hydrochloric acid solution with potassium salts, by vein and mouth, however, is most effective. The ammoniacal urine present in advanced cancer soon becomes acid, accompanying the dissolution of swollen lymph nodes and improvement of blood, etc.**

The addition of hydrochloric acid to the body increases the available chlorine, with its marked antiseptic and phagocytic properties; also it helps to restore the normal pH of the tissues.

Starvation also tends to correct alkalosis, but it cannot do much to relieve accompanying toxemia. Loss of blood likewise also helps greatly, in the writer's experience, in removing excess of iron, and many report themselves improved in health after losing blood from hemorrhoids, kidneys, liver, etc.

TOXEMIA AND ALKALOSIS

By Walter B. Guy, M.D.

(An article from between 1930 and 1935)

Acidosis and Toxemia. In the understanding and treatment of the progressive degenerative diseases, much depends upon a practical knowledge of the cause of acidosis and toxemia, and of the condition known as alkalosis. The writer hopes to show that **acidosis and toxemia are, in reality, synonymous**, and that **underlying the varied symptoms of these diseased conditions there is, in reality, a basic alkalescence of the cellular tissues.**

To get an approximate picture of cellular chemistry we must first of all realize we are not dealing with fluids and solids but rather with a **colloidal form of tissue**, a popular illustration being a diluted mixture of gelatin and water or gel. Dr. Edward J. Stieglitz writes: "The living cells of the kidney or elsewhere consist of just such colloids, containing many thousand different substances in complex combinations separated by surfaces and limits." (*) "Dr. Martin Fischer and Prof. Jacques Loeb demonstrated that with slight chemical changes, in the medium bathing living cells, the cells could be made to swell with water, or shrink and give up water at the will of the experimenter. Dr. Fischer studied not only the living cells, but simpler colloid mixtures, such as gelatin, and was able to show that increases in acidity and of certain salts, caused the gel to give up water and therefore to shrink in size. In the body swollen with edema exactly such phenomena occur. It is the 'thirst' of the chemically altered tissues that absorbs and binds the water, and the reason for the small urinary output is, in large part, that there is no or very little, water available for excretion by the kidneys." (*)

"In this connection one particular phase is of special interest. Fischer and others contended that the **swelling results from increased acidity of the tissues** so that their treatment consisted in the liberal administration of alkalies. This treatment is often effective; but inasmuch as the reaction of the kidney cells has been shown by the indicator method to be the opposite to the reaction of the urine eliminated, excessive alkali treatment is liable to cause injury to the kidney cells, and thus occasionally lead to suppression of diuresis, aggravating the dropsy. More recent work has demonstrated that certain **acid-producing substances, like calcium chloride, give rise to a prompt and liberal flow of acid urine and a diminution in the edema.** If the above explanation is correct, improvement by this treatment is probably due to favorable action on the kidney itself, the acidity of whose cells is diminished."

That the **acid-alkali balance or pH in the colloidal tissues** is the **base of all the phenomena or disease symptoms which are termed acidosis, alkalescence or toxemia** is readily understood. But what the medical world is in sore need of knowing is how to read these clues or symptoms aright and to better realize the causation of these clinical signs and their pathological significance.

What is acidosis? An accumulation of acids or a diminution of the pH reaction. But what acids? We can glibly say: carbonic acid in the blood or lactic acid in the tissues, uric acid in the joints and blood vessels; lactic, diacetic, butyric in the stomach or intestines, and so forth. We may even visualize hepatic acids in the liver, but unless we know why these acids appear in excess and their relation to alkalosis we shall never be able to understand their true significance or marshal our remedies effectively against them.

The only normal acid in the animal body is, of course, hydrochloric acid -- found in the gastric juice. **All other acids are waste products.** The carbonic acid of the breath is created by the oxidation of the lactic acid of the tissues; therefore, an excess of lactic acid is a failure to oxidize this acid sufficiently. **In diseases, such as**

cancer, tuberculosis and fevers, this failure of complete oxidation is present, particularly so in cancer, where the cancer cells, too, throw off this substance.

The amino acids are but stages of food digestion, and, when present in excess, show impaired hepatic and pancreatic functions. The most pernicious form of acidosis is that produced when a stoppage occurs in the duodenum or pylorus. In this condition the HCl of the gastric fluid disappears, and other acids, such as the acetic, butyric, lactic, take its place. Also Dr. L. G. Rowntree, of Philadelphia, says in this condition, the chlorine of the blood is usually diminished, the urea increased and the capacity of the blood to combine with carbon dioxide increased.*

The above quotation of Dr. Rowntree is worthy of more than a cursory reading. Many people, both young and old, have, if not a sore or ulcer at the pyloric orifice, an inflamed or congested area indicated by digestive distress. Dr. Moore says that **achlorhydria (lack of stomach acid)** occurs in some cases of apparently healthy persons and **in many cases of gastrointestinal disease**. He also **stresses its frequency in diabetes mellitus, and still greater frequency in thyrotoxicosis, as well as in certain non-megalocytic hypochromic anemias**.

Although achlorhydria occurs in both forms in anemia, **a deficiency in hydrochloric acid in the gastric juice is a common symptom in depressive neuroses**. It is **frequently associated with mental fatigue**, persistent worry and strain, especially in persons with a congenitally unstable psyche. **The symptoms are very vague: lack of appetite, fullness after eating, gaseous eructations and diarrhea is more common than constipation**. Pain is absent. Again we find quoted: "Moreover, **hydrochloric acid forms with the duodenal membrane a hormone named secretin, which stimulates the pancreas (to form insulin), also formation of bile and activity of gall-bladder. It is estimated that 2 grams of HCl is required for a meal.**"

Failure to Secrete HCl. If we have followed the above carefully we shall realize how **failure to secrete sufficient HCl in gastric juice gives rise to a long train of events: improper digestion, fermentation, therefore poor absorption of food and mineral elements, a likelihood of sore ulcers or cancer forming at the pyloric outlet; next an inactive liver and pancreas, failure to secrete the secretin hormone -- which reduces sugar in blood, failure to oxidize lactic acid in tissues, more or less retention of CO₂ in blood, inability to destroy bacteria sufficiently in food.**

We can visualize still further **a toxic liver, hypertension in arteries; retention of CO₂** has been implicated in convulsions of **epilepsy and other brain affections**, also failure of endocrine glands to function normally, as well as **diabetes and kidney affections**. Still, we can go further and trace out more of the disturbances we may expect to gradually appear in various patients.

The mineral elements have been mentioned. Improper digestion means malassimilation -- an unbalanced mineral content of the body. What are some of these symptoms? First, **a surplus of sodium**; tissues too watery; tendency to edema and asthma; flabby muscles and little strength; **a lack of chlorine produces a condition favoring boils, abscesses, pus formation. Deficiency of calcium means excess of sodium and deficiency of potassium**; this last the writer believes to be the most important of all. Let me quote Dr. Robert A. Hatcher, of Cornell: "It is only within recent times that we have come to understand the importance of extremely small amounts of certain salts of the blood, and the influence exerted by even slight changes in its composition.

Small amounts of potassium salts are essential for the heart-beat; large amounts are poisonous. It has been found recently that under certain conditions the behavior of the heart toward potassium is an index of its behavior toward therapeutic doses of the digitalis group, and those hearts which do not respond to potassium are incapable of benefiting by the use of digitalis."

No one who has not read the reports of potassium salts in fertilizing the soil can really appreciate its value; a common comparison of 30 bushels per acre of potatoes without it and 150 bushels or more by its presence in the soil is well known; yet it is used in such small amounts that such a difference is hardly believable. **What of the**

body if it is deficient? We find **coldness of extremities, weakness of heart an unhealthy, pasty skin,** tendency to skin diseases, as well as **malignant growths**. And this is not all, for out of the potassium molecule in the gastric acid cell the hydrochloric acid is derived -- not from the sodium chloride of the fluids, but from the solid tissues; therefore **potassium is undoubtedly implicated in hypochlorhydria**, with all its subsequent effects.

Shall the writer go further? Yes, there is more to say; viz., **the lack of hydrochloric acid is the main causation of alkalosis**. Much space might be taken up to show this is so; but let us go on to another sequel to its deficiency.

Tuberculosis is in everyone and everywhere. But why do the few succumb and the many escape its ravages? Alkalosis is the answer. **When the cellular tissues are too alkaline, the fatty acids tend to disintegrate and give off glycerol**; a study in fatty acids will readily show this to anyone. In this glycerol molecule (glycerin) the tubercle bacilli thrive. Let me quote an authority on this point, Dr. Esmond R. Long, University of Chicago*. "Curiously enough he says the tubercle bacillus stands almost alone in its dependence on one or two particular combinations of carbon. The most usable source of carbon by far is the relatively simple substance glycerol---luxuriant growth does not occur (in laboratory) in absence of glycerol." Again, Long says: "It may be that a difference in the availability of free glycerol in the tissues accounts for some of the differences noted in people in susceptibility to tuberculosis."

So far we have given an hypothesis; but to the writer the only real proof is a pragmatic one: Does the hypothesis work? Do clinical reports bear out these claims? I will quote but three cases, although many are indexed, then leave the formula I use today in the hands of my colleagues for their vindication. **The formula contains: ferrum**, necessary for oxidation of cell life; **sulphur** for same reason to complete cycle; **chlorine and hydrogen** to keep ions free; **potassium** to supply the hypothetical mineral deficiency and to enable gastric cells to form their own peculiar acid.

The formula now in use by the writer is as follows; (Editor's Note: these are old apothecary symbols, probably miscopied. Don't use.)

Sol. potass. arsen. (Fowler's) drams j
Tr. ferri chloridi drams v
Sol. potass. chloridi (10%) Sol. potass. sulphatis (10%) as liquid ounces j
Sol.acidi HCl (2%) ad liquid ounces iv

Case of Pat. R.; girl aged 8 years. **Two years constant cough, night and day; fever, weak**, dullness over lung area. History bad. X-ray showed lungs riddled with plastic areas; weight 50 lbs. Diagnosis: **pulmonary tuberculosis**. Realizing that ordinary treatment of bed and feeding was hopeless, she was allowed to run about and kept on her diet, but lunches were added, and kept from school. Treatment: the given formula, **5 drops 5 times daily**. In 2 months, almost complete cure has taken place, **lung healed**, gain 10 lbs., and child has romped herself to health, for she cannot keep quiet.

Case of J. R. D., 64 years old, dairyman for 16 years. Had **cold legs, pained at night, insomnia, nervous**, liver and stomach involved, despondent, tongue red and cracked. Diagnosis: Potassium and chlorine deficiency. Formula; 9 drops 4 times daily. In 1 month, **completely well**. All former treatments had failed and he had tried many physicians.

G. B., male, age 65. **Diabetes** for several years. Health poor, weakness and thirst. A small **cancer** the size of a quarter on neck. Treated by formula, also with Harrower's pan-secratin tablets. **In 3 weeks, was sugar free**. The growth was removed by zinc chloride paste and a small daily dose of the mineral chloride formula keeps him in good health. In fact, the writer finds that all cases of functional diabetes become sugar free if the above gland tablet is used while needed, in addition to above prescription.

CONCLUSION

Much more could be said concerning the complex cellular chemistry, but many of my medical colleagues can hold up their own hands or those of their elderly patients, and see their **swollen or distorted joints** and say, "Alkalosis." Then, if they will, they can **take this formula and week by week, see these infiltrated joints subside with increase of bodily comfort and physical strength**, and realize that **alkalosis causes precipitation of waste products**, and that the administration of alkalies but **changes the acid waste products into salts, to be deposited as sodium urate, in those joints farthest removed from the heart, or to form calculi in bile or kidneys. Destroy these acids by the stronger natural normal acid (HCl) and they will be eliminated**; broken down by alkalies, they become deposits.

The formula is designed to increase the amount of HCl in the gastric juice, to supply deficient minerals, and finally to restore the chemical reactions of the body to their normal metabolism. A word of warning seems necessary, viz.: **keep to a small dose**. Recently, a fisherman with furunculosis of arms took instead of 9 drops, a teaspoonful as a dose. After the second dose, he had to walk about for half an hour to overcome the numbness and failure of circulation in his legs. Needless to say, his **boils soon disappeared**.

The **potassium salts suspended in an acid medium** have free ions and are rapidly assimilated. The formula is self-sterile and can be given intravenously, 3 to 5 minims in 10 c.c. of distilled water as needed; by mouth, well-diluted, 5 to 20 drops three to five times daily. The writer gives it in hot water in cases of **cholecystitis**, with inevitably **happy results**. If desired, calcium chloride can be used in place of the potassium salts when indicated in edema, asthenia (weakness), etc.

References: **Chemistry In Medicine, *British Medical Journal*

THE CONQUEST OF CANCER

By Walter B. Guy, M.D., Publication of 1935

It is incumbent upon all physicians and surgeons who have made any improvement or discovery that may help in the constant warfare against disease and premature death to report such discovery or improvement to the medical world at large, so that perchance it may fit in, become a necessary cog, or a stepping stone whereby the army of this world may function more readily, or move upward toward the unseen and perhaps unattainable ideal of a humanity free from disease, plague and early death.

Also it is morally obligatory upon those who gain help and knowledge from such contribution to acknowledge their obligations by reporting back to the same journal their successes or even failures, in order that such claims may be fully verified or disproved by the light of experience and corroboration. The following article is to bring up to date the writer's progress in the war against cancerous disease, to present his claims, deductions and the results of his treatment.

Causes of Cancer Growth. First of all, what are the **underlying causes which allow the formation of neoplastic growths?** These he believes to be:

- 1st. A **deficiency of potassium** in animal tissues.
- 2d. Potassium deficiency causes **loss of function in posterior spinal nerves**.
- 3d. **Hypochlorhydria is the chief cause of potassium deficiency**.
- 4th. **Hypochlorhydria, likewise, causes alkalosis of tissues**.
- 5th. **When a group of cells becomes isolated from nerve control, such cells will become a parasitic entity**.

Potassium is one of the essential minerals of animal tissues; also in vegetable life; it is found in all cells, tissues and fluids with the exception of milk. Potassium salts are absolutely **necessary for the sustenance of life**. In small doses, they stimulate the heart and raise the blood pressure; in poisonous doses they depress and

paralyze the various functions of the body. It is claimed by Wood that the stimulating effect of beef tea, beef extracts and coffee is due to the small amounts of potassium contained therein. To its value in vegetable life, reference has been made in previous articles. No crop can be grown without its presence in the soil, and the contrast when potassium deficiency is corrected is at times almost unbelievable. That a deficiency of potassium in the human tissues can set up great pathological disturbances is easily imagined; but just what these tissue changes are has never been established.

Clinical reports are few, yet for years has not Blaud's mass, with its potassium carbonate content, been one of the standard remedies for impoverished blood and asthenia (weakness)?

The writer contends that **potassium deficiency in nerve tissue will bring about a slow degeneration and loss of function, attacking particularly the posterior spinal nerves, and that this malfunctioning is the cause of neoplastic (cancerous) growths. Deficiency of hydrochloric acid** in the gastric juice is becoming, under the stress and strain of modern civilization, very common. That this deficiency will cause imperfect digestion and assimilation of food is easily understood; also the **mineral content of food will be imperfectly absorbed.**

Vicious Cycle. Thus a **vicious cycle** is thereby set up, and as potassium in the acid gastric cells becomes depleted, less and less HCl will be excreted into the digestive fluids, thus giving rise to asthenia, diabetes, toxemia, and, above all, profound tissue changes. That **hypochlorhydria** will bring about the condition known as **alkalosis in the cells of the body** is easily grasped, although much further laboratory work is required to show the process by which this condition appears. As, however, **HCl is the only normal acid in the human economy**, it must be inevitable that such is the case.

When carcinoma, for instance, is fully established, this alkalosis is increased by the lactic acid excreted by the cancer cells; so, therefore, **excess of lactic acid in stomach and tissues of body** is but another term for **alkalosis**. This condition is supposed by many to favor the formation of or to precede the appearance of cancer.

In this city there is grown, for ornamental purposes, a thick, waxy-leafed plant. When one of its leaves is broken off and lies upon the ground, it puts out roots and shoots, and if in a favorable location will grow into a similar plant from which it came. In other words, cutoff from its nerve control, it takes on an independent existence. So in cells of the body, any cell supplied by nutritive elements, but cut off from nerve control, of necessity becomes an independent growth, the nature of which depends upon the kind of cell or cells involved. This theory, therefore, can explain all the innumerable varieties of neoplastic tumors, both benign and malignant growths.

It is the writer's belief that the **posterior spinal nerves** have a **sensory function controlling and inhibiting cell growth**, and that the anterior spinal nerves, as is well known, in addition to their motor control, stimulate cell production. This is well shown in progressive muscular atrophy, and in infantile paralysis, where the anterior spinal nerve centers are involved, causing destruction of tissue cells in affected muscular areas. So likewise, if the posterior spinal nerves or centers are involved, a loss of control over areas affected will ensue, thus allowing the various forms of neoplastic growths. In other words, the cells are cut off, both from sensory and inhibitory control. This also explains the lack of pain or discomfort in early cancerous growths.

As all theories and hypotheses are dependent for their substantiation, finally, on clinical proof, the writer presents two cases that are uncomplicated by other diseased conditions to illustrate above claims, in addition to those already quoted in December, 1932, issue of THE MEDICAL WORLD, giving not only the remedy used internally and intravenously, but the treatment applied to the local lesions.

Cancerous growths, when localized on skin or in the orifices of the body, must be destroyed. At the same time, if the conditions which caused their appearance are not corrected, sooner or later their appearance at the same site will become manifest.

Formula. The formula I use by mouth and by intravenous injection in these cases is as follows: (Editor's note: Old apothecary measures, may be inaccurately recorded here)

Sol. potass. arsenate (Fowler's) drams iss

Tr. ferri chloridi drams iv

Saturated ad. potass. sulphatis fluid ounces ij

Sol. HCl (2%) q. s. ad. fluid ounces iv

Dose by mouth: 5 to 20 drops.

Intravenously: 3 to 7 minims in 10 c.c. of sterilized distilled water.

Why should the above formula be effective? What, in other words, has to be accomplished? First, **phagocytosis**. This term not only implies destruction of invading germ life, for these are always present as scavengers of the body in diseased conditions, but also destruction and absorption of diseased tissues.

Arsenicum (arsenic is poisonous) has been known for many years to have this therapeutic virtue, to increase hemoglobin and red cells of the blood; also it helps to correct toxemia, always present in cancerous affections.

Cancer and Iron. Ferrum (iron) seems to have a special affinity for cancerous cells. When applied locally, it is very destructive to local lesions. Ferrum, likewise, is essential to restore hemoglobin, also for cell oxidation, and with the sulphur atom present in the solution is necessary for normal metabolism of the cells. In cases of hemorrhage from cancerous growths, the writer has found it necessary to add a **sulphur lozenge** daily to the treatment. This readily brings **relief from bleeding lesions** as found in stomach, bladder, rectum, etc.

Cancer and Potassium. As to potassium it may be argued, what proof is there that a deficiency of this metal is involved in neoplastic (cancerous) growths? It can be readily surmised that this element, so necessary for life, can become deficient; but whether this suppressed deficiency is responsible for the above condition can be demonstrated only by the biochemist in spinal nerve tissue of cancer victims. Since this metal has been added to the acid mineral solution, results have been so uniformly satisfactory and curative, even in the most advanced and hopeless cases of cancer, that the writer feels justified in making this claim.

The contention of the writer, that potassium chloride in the gastric acid cells is the chief source of HCl in the gastric juice, and primarily not from the sodium chloride in the plasma, is, he believes, logical and understandable. Therefore, a **deficiency of potassium** would be a **potent factor in hypochlorhydria** (lack of stomach acid) present in so many of the progressive degenerative diseases. If such a deficiency of potassium is connected, and if this hypothetical deficiency is really the chief cause of the degenerative diseases, including neoplastic (cancerous) growths, marked improvement must appear in these patients, and so substantiate this hypothesis. And these curative manifestations are exactly what the writer, day after day, has witnessed, and wishes to put on record. **Every case of cancer** put on the acid mineral solution **has responded favorably** to its action. No matter whether it be applied to local lesions, given by mouth or administered intravenously, **the result in cancer is always favorable, and at times unbelievable.**

Cancer and HCl. As to hydrochloric acid, Dr. Burr Ferguson and Dr. C. De Witt Colby both have shown repeatedly the value of this acid. In spite of alarmist cries from the ranks of the ultraconservatives, they have repeatedly, with miraculous effects, injected this dilute acid into the bloodstream. They have also demonstrated, by careful watching, a marked increased activity and number of phagocyte corpuscles.

The **increased supply of chlorine to the tissues rapidly controls sepsis**; the ion slowly **changes alkalosis of tissues to the normal pH 7.3**. This acid mineral solution is the outcome of 4 years' clinical study. It has the virtues of all those minerals, contains all the possibilities of HCl therapy demonstrated by those eminent physicians; also, being an acid solution, its ions are readily absorbed and consequently are very active.

The following case demonstrates how without use of X-ray and expensive radium, **small local lesions may be readily and inexpensively treated and destroyed with this acid mineral solution**, with far better results than those treated by raying, and it is available in all communities.

This case also demonstrates how multiple skin cancers are very often but probable metastases from a pyloric growth.

Case of M. S. St. Augustine, Fla. Male 55 years. History of gastric distress and frequent vomiting since 1921. Toxemia, high blood pressure; also appearance of sore on right temple, 1926. This lesion was treated with radium twice in 1928. Three more growths appeared on face and one behind left ear in 1930. These lesions were treated by X-ray therapy at Pensacola Veterans' Hospital; also his toxemia and hypertension, November, 1931.

July, 1932. Case came into writer's care. Examination showed **lesions of face and head** were increasing in area and depth, the one on right temple angry, crusted and red from **radium burn**. Vomiting at least once weekly. Area over pylorus swollen, tender and indurated. The acid mineral solution was ordered 4 times daily; dose, 9 drops; with relief of gastric symptoms. Later, the smallest lesions on face were scrubbed with Fowler's solution until diseased cells were removed; then site was painted with tincture of iron. Later, the cancers on chin and back of left ear were covered with a thin layer of absorbent cotton, which was fastened at edge to skin by collodion. Then **HCl, full strength, was dropped on cotton and allowed to remain on lesion for 90 minutes**. Ungt. zinc oxide was applied daily. Results were perfect. The radium burn and cancer was again scrubbed with Fowler's solution, all crusts removed, and painted with tincture of iron.

April 3, 1933. Face well, radium burn still red; digestion nearly perfect, vomiting rare, soreness over pylorus absent. This case should still continue remedy for several months longer.

The next case is one of **gastric and duodenal carcinoma**.

W. T., white, age 42. veteran, 5 children. Had suffered from gastric troubles at times since 1911. Disabled by gastric trouble since February, 1930. February, 1931, attack of chickenpox; stomach trouble grew worse. Went to Pensacola Naval Hospital. September, 1931, for treatment. Discharged with no relief Dec. 1 1931 as hopeless case of gastric ulcer. May 1, 1932. X-rayed at Flagler Hospital, St. Augustine. May 8, 1932 entered Lake City Veterans' Hospital. Discharged June. 1932, as a hopeless case of gastric cancer. Become worse, frequent bleeding from stomach and bowels. Almost died January, 1933. February 22, 1933, writer took over case.

He was in great pain and profound **cachexia** (general ill health with emaciation due to chronic disease, such as cancer). Hemoglobin, 40; Pulse 120; **fever and night sweats**, diarrhea. Hands bloodless, sordes (foul, brown crusts), looked moribund (in a dying condition), unable to walk. Palpation disclosed a large mass in upper abdomen very swollen and tender to touch; taking opiates. Treatment was 3 to 7 minims of **acid mineral solution intravenously every 3 days and 5 drops in oatmeal water, 6 times daily**. On account of extreme poverty, no particular diet could be ordered. Slow improvement took place; bleeding gradually stopped; also less pain. May 2, 1933, patient up and walks out. Pulse, 100; still pain at times; color returning to face and hands. Hemoglobin, 70. Good appetite, but distress at times; still has fever and sweats occasionally, perhaps due to absorption of disease tissue; slight cough. Mass in abdomen no longer palpable; still tender. Prognosis: looks as though he will recover. Intravenous treatment discontinued. At no time did these injections cause any disturbance. Drops continued by mouth, 6 times daily. Due to extreme poverty and lack of suitable food, entire credit is given to medical treatment.

The first case quoted shows how **small cancerous lesions of skin can be quickly and easily destroyed with a minimum of pain and scarring**, without the sad after-results of radium and X-ray treatment. The acid mineral solution is quite inexpensive and readily available in all parts of the world; so that everyone, no matter how poor, can obtain this treatment.

The above cases were described in detail and can readily be verified. If the second one recovers, another film will be taken for comparison. That the acid mineral treatment promises much is evident. Further improvement in standardization and correct dosage of remedy needs more experience with a plentiful clinical material. So far, clinical results bear out the hypothesis given, and if, in the writer's opinion, the nerve control of cell metabolism can be re-established, absorption will take place in internal growths.

NATURE IS THE BEST DOCTOR

*By William I. Howell, M.D. Lexington, Tenn.
With the Collaboration of Burr Ferguson, M.D., Birmingham, Ala.*

EDITOR: *This article on hydrochloric acid therapy was published in the early 1930s. It seems very pertinent today, especially for cancer and pneumonia, where the old-timers apparently had good results with dilute hydrochloric acid.*

Thirty-two years of general practice in a small town without the resources of laboratory help made me often wish I might live and work in a larger community where I might have more assistance with many of my cases. Drugs, as I had been taught to use them in the treatment of infections that came under my observation, did not have the effect on my patients promised by my studies of materia medica. Hence, when my patients reported all too often that they were not doing well under the plan of treatment in use, changed the prescription and hoped for the best.

During those years, there was the occasional visit from a detail man from some chemical house, from whom I would hear of many new specifics for this, that or the other infection. After a few trials of the new serum, drug or vaccine, there still seemed to be something lacking; so I reached the conclusion that there must be something wrong about either the drug or my diagnosis. Since I felt fairly certain of the correctness of the latter, I concluded that there was still something missing about the drug.

In the hope of finding some better way for fighting germs, I went to all medical meetings in my district. At these meetings the greater number of the papers by men from colleges and larger towns were on difficult surgical procedures, diagnosis, therapeutic use of the X-ray or other electrical devices. Sometimes there was a most interesting report of the use of the cystoscope and ureteral catheter for lavage of an infected kidney or passing a catheter into the gall-duct for drainage of the pus from an infected gallbladder.

In the delight of listening to such reports I felt full of confidence of what I could do with such cases on my return home if I happened to get one. Then, when the meeting was over, in the long drive back home I realized that such elaborate treatment was not for me, with the limited equipment in my district.

In 1931, on my return from such a meeting, at about the same time I saw two reports in print. One was in a Memphis newspaper reporting that in America the year before there had been some 16,000 deaths of women in childbirth. This was startling to me, and a shock. For, no doubt, many of these women had died from infection, and while I had just spent the better part of a week at a most interesting meeting, not a word had I heard about what to do for childbirth fever. Then I saw the other report, just spoken of, in Clinical Medicine and Surgery, on the treatment of pyogenic infections, by Dr. Burr Ferguson. The clinical results he said he had seen seemed unusual in that he appeared not to rely at all on any local application of germicides. Dr. Ferguson's claim that nature was responsible for the good results through the **induced activity of the white blood cells following the injection of hydrochloric acid solutions intravenously**, fell in with my own belief that nature was the best doctor.

At once the thought came to me that it was highly probable that nature did use these white blood cells in resistance, and if a way had been found to create a greater leukocytosis (increase in number of white cells) and

to make these cells more active, it would add a lot to my medical knowledge. I had no way of checking Ferguson's report of the leukocytosis following the injection of mercury, arsenic, quinine, milk or serums; but it seemed reasonable, if true.

Since I had been trying new drugs and combinations of drugs for almost 30 years and was still changing, I decided to try the acid injection, because it was so new. I had never heard of anyone injecting an acid intravenously before, and I had heard of all the deaths that followed the injection of salvarsan when errors had been made in its neutralization; but since Dr. Ferguson said he had given thousands of injections in all sorts of infections, there did come up in my mind the objection that maybe this acid injection was just another cure-all, and every one of these that I had ever heard of was a failure.

As I thought of the plan of treatment, more and more did it seem to me to be worth a trial. For if Dr. Ferguson had not seen what he claimed to have seen and if all of these drugs he reported having used as stimulants for the white cells, including the hydrochloric acid, did not produce a leukocytosis, somebody would surely have taken the trouble to disprove his claims. Even then I was nervous over the acid injection, and I decided I would not use it on any moderately sick case, but would wait until I got one that I felt sure would die anyway, when I would be taking no chance in giving the acid as recommended.

Here was another thought that came to me. Arsenic, mercury and quinine had been used for a long time by the mouth, but it was only when these drugs were used by intramuscular or intravenous injection that such remarkable results were reported, and therefore the intravenous route must be the best, because you never hear much now of the oral administration of these old drugs. It seemed possible that with hydrochloric acid, which had been used by the mouth for several hundred years, and of which I had used a great deal as an aid to digestion, I might see some clinical results I had not seen before, just as other men had seen in the change of administration of the metals.

Childbirth Sepsis Case. On August 18, 1931, I found the case for the use of the hydrochloric acid. Five days before this date, I had delivered this girl of 15, after a prolonged and most difficult labor, using all possible aseptic precautions in a log cabin in the woods. The large baby lived only 2 hours. In spite of the small size of the mother (she weighed only 90 pounds), lacerations were apparently small in size. Three days after the delivery, a message was sent me that she had had a chill and a very high fever. It was a long distance to that river bottom where she lived; so in the hope that it was malaria, I sent quinine and calomel.

On the fifth day another message came, telling me of the grave condition of the patient and that my immediate presence was necessary. On going into the sickroom, I at once saw there had been no mistake in this urgent message. The little girl was delirious; temperature, 106, pulse, 140; respiration 40; discharge from the vagina scanty and fetid in odor. Every other case had ever seen in the condition in which I found her, is dead.

With much trepidation, I gave her 10 c.c. 1-1500 hydrochloric acid. The following minutes were anxious ones for me, as I hardly knew what to expect as this was the first time I had ever heard of the acid being used in **puerperal sepsis**. The reports I had seen of Dr. Ferguson's cases of pyogenic infections of Dr. Ferguson were of gunshot or lacerated wounds.

As I sat by that bed, holding the radial pulse in that lowly log cabin, a flood of memories of teachings concerning the fatal consequences of injections of acid into the veins came over me. While in this frame of mind I noticed sweat on the neck and forehead of the patient, and along with it a slowing of the pulse. In a few minutes, she was bathed in profuse perspiration. With it, there was a cessation in the chatter of her delirium.

Thirty minutes after the injection of the acid, I asked her how she felt. She replied that she felt much better and would like to go to sleep. Within the hour, the temperature was 103 degrees, pulse, 100; respiration, 22.

During the following 4 days, I repeated the injection of the acid each day, and on the fifth day, temperature was 99, pulse 72; respiration, 18. Two days thereafter I was called again, as I was told the fever had returned. Found her with a temperature of 101, with a free discharge from the vagina. I gave her another injection as before. Save for weakness, all evidences of infection had disappeared the next day, and she went on to an **uneventful recovery with a complete disappearance of the mass in the left iliac region.**

This case seemed unusual to me because **no local treatment or douches were used** and all of the foregoing clinical changes took place under my own eyes, during the first visit, with absolutely no other treatment than the injection of the acid.

Eclampsia Case. On October 10, 1931, I was called in consultation to a case of **eclampsia**. The patient was a primipara and in a forceps delivery, there was a small laceration. On the third day she had a hard chill and fever, and again I was called by the attending physician. I advised the injection of hydrochloric acid intravenously. The physician in charge refused to have the patient subjected to such a procedure. After a more or less heated discussion I was forced to agree to the injection of one c.c. of a mixed infection vaccine.

On the following day the patient was much worse; temperature 105, pulse, 130; respiration, 30; delirious and very restless; **large mass easily felt in pelvis**. My colleague then said: "It looks to me as if death is inevitable whatever we do, so you might try an injection of that damned acid." I gave the injection and witnessed the same clinical changes that I had seen in the other case just reported. Three days more and I was called again and found the patient with temperature of 104*, but she was not delirious and the **mass in the pelvis was much smaller**. Two other injections were given on the following days, after which she went on to an **uneventful recovery**. This woman has continued in good health and will be again confined in a few weeks. So nothing but good seems to have followed the injection of the acid.

Gonorrhea Case. Shortly after this, I was called to see a case of **double epididymitis**. The patient was in the declining stages of **acute gonorrhea**. I advised the application of ice, soft diet, calomel and rest in bed. The next day, the patient reported a restless night and intense pain in the testicles.

After the good results with my childbirth cases, I had exchanged several letters with Dr. Ferguson. In the reprints he sent me and in his replies to my letters, I was **astonished at the confidence he seemed to have in the hydrochloric acid, not only for pyrogenic (fever producing) infections, but for any and all germs.**

So since my results with other cases had been all that I could ask, I determined to try the same plan for the treatment of the gonorrheal complication. At that it did seem foolish, according to all of my schooling to give an injection in the arm for a swollen testicle.

There was a marked lessening of the pain after the first injection. These were continued every day as in the other cases. After the third injection, temperature was normal and testicles much smaller. With the eighth injection, there was a **complete disappearance of the swelling** and he was discharged after the tenth injection. Since that time I have had a few other cases of epididymitis, the behavior of which was altogether like this case.

Salpingitis. However, I have had several cases of salpingitis in which I did not get the expected good results. They would seem to get much better for a time, but the swollen tube did not disappear; but after giving these cases a few injections of lactigen they seemed to recover altogether.

Breast and Finger Infections. In January, 1932, I was called to see a mother nursing a 10-month-old child. Found her with a temperature of 96, generalized pains in her body and legs, pulse rapid and weak, breathing shallow. There was a discharge from a ruptured infection on the last phalanx of the middle finger. A deep, ulcer-like **infection on the upper half of right breast** about the size of a quarter. Gave her an injection of hydrochloric acid, as in the other cases. The next day there was a much more profuse discharge from both lesions and after the second injection, she went on to an **uneventful recovery**.

Tuleremia Case. In August, 1932, I was called by Dr. H. I. Wylie of Scott's Mill, to see a woman evidently septic, having had **chills, fever and prostration for several days**. There was an ulcer-like lesion on the last phalanx of a finger, edges ragged, blister-like lesions over forearm. Gland above elbow and axilla swollen and tender. Diagnosis of **tularemia** (rabbit or deerfly fever from a tick) was made and the use of hydrochloric acid advised. I failed in my efforts to give an intravenous injection because of the very small size of her veins; so I gave her intramuscular injections of 3 c.c. of 1-500 hydrochloric acid every day for 10 days using alternate hips. At this time, all evidence of the **infection had disappeared**. There has been no return of the infection.

Since that time, Dr. Wylie has told me he had another case of tularemia which he treated in the same way, except that he used the intravenous injection and that the result was like that in the case I saw with him.

Carbunkle Case. A banker in a nearby town came to me with the only **carbuncle** (surface and deeper tissue inflammation, with pus exudate) I ever saw **on the upper lip**. There were draining sinuses over the lip and the left side of his nose. Pain was being controlled by morphine. Six daily intravenous injections were used in this case with **the same good results** I had witnessed in the other cases in which I had used the hydrochloric acid injections.

Lung Hemorrhage Cases. During the summer of 1932, I had the opportunity to see a woman of 35, the mother of 5 children, three weeks after a severe **hemorrhage from the lungs**. Since Ferguson had reported that the injection of hydrochloric acid made the polynuclear cells attack the tubercle in a way that is not done in nature, I decided to try the same injection I had used in the preceding cases.

I advised absolute rest in bed and mineral oil for her bowels and began the injection of hydrochloric acid, 1:1500, 3 times a week. As the days passed, her appetite began to improve, and I ordered a diet of fruits, vegetables and what meat she felt she could digest. The improvement was most satisfactory and **within one month, she was free from fever**. In 3 1/2 months, she went from 95 to 110 pounds in weight. She had a comfortable winter and has been able to move about the house since early in the year after 50 injections of the acid. Early in March, 1931, I began another series of the acid injections, which I shall continue during the spring and summer.

In the autumn, I was called to see a man of 30, a farmer whose mother had died some time before with tuberculosis of the lungs. He too, had just had a **hemorrhage from the lungs**, and his history and condition were typical of **pulmonary tuberculosis**. He decided to go to Memphis for treatment, but after 6 weeks, he returned, saying that he had had the rest-in-bed treatment and he might have that at home just as well. Soon after his return, when he was running an evening temperature of about 101. He began to have painful urination. Specimen of urine was cloudy and well-colored with red blood.

After the first injection of the acid, 1-1500, there was a most pronounced chill, but the following fever was no greater than his daily temperature. For a few following injections of the acid, I decreased the strength to 1-2000. There were no further reactions, so I again returned to the injections of the 1-1500 solution. After a month, there was no more discomfort on urination and the specimens were pretty well clear. With the freedom from fever and an improving appetite, he began to increase slowly in weight; so I increased the strength of the acid solution to 1-1000, which I am giving three times a week. He **continues to eat and sleep well** and I shall continue the injections of the acid for a few weeks.

Coryza Case. In the fall of 1932, after a **coryza, (inflammation of mucous membranes)** my grandson, a robust lad of 6, complained of a pain over the lower lobe of the right lung. Rapid onset of fever. Within 2 days, the lower lobe was consolidated. Light diet, attention to elimination, and an occasional mustard plaster over the infected lobe were the only treatment used. In spite of the fact that I had seen no untoward consequences following the use of the acid, I feared to give it to one so young. Crisis came on the sixth day, after which he was free from fever for 2 days when it returned with this relapse, quickly going to 102, pulse 120. Fearful of an abscess, I determined to give the hydrochloric acid, giving 3 c.c. of 1-500 deep in the pectoral muscle. There

was an improvement in his condition for the following 24 hours, when his temperature was 101, pulse and respiration much lower. I gave another injection, as on the day before, under the pectoral muscle of the other side. Fever was normal the next day, and after a convalescence of two weeks, the patient returned to school, where his attendance has been regular since the illness.

Urticaria Case. Confirming the observations of Dr. C. D. W. Colby, of Asheville, of the effect of the hydrochloric acid injections on **asthma and other manifestations of the allergies**, about a year ago a young married woman came to me complaining of **intense itching over her body**, sometimes in one area, sometimes in another. The elevations on her skin on this visit seemed to be an **urticaria**. She said she had taken and done everything advised by her doctor and friends, but the itching persisted. Six injections of the acid 1-1500 were given every other day. Improvement was noticeable after the first injection and she was **wholly well after the last injection**.

Colitis Case. In the summer of 1932, I saw a baby with a severe case of **colitis**. **Frequent vomiting, abdomen much swollen**, delirious, with temperature of 104*. I tried all manner of recognized plans for treatment, but the foul-smelling frequent stools continued. I had been taught that such conditions were the result of acidosis and it seemed to be going too far to give more acid. But since all other measures had failed in giving relief, I determined to give the acid in the gluteal muscle, just as I had done with my grandson. Injections were given daily. Improvement in the general condition of the child was noticeable, abdomen rapidly flattened out, fever became lower, and on the third day there was a marked change in the quality of the stools. Six injections of the acid were given, after which the child made a rapid convalescence and has **continued in good health**.

Puerperal Sepsis Case. At 4 o'clock one morning, January, 1928, I had a telephone call from Dr. L. G. Martt, Proctorville, Ohio, from a hospital in Huntington, W. Va. Dr. Martt said he had a patient in the hospital with **puerperal sepsis**, 15 days after delivery. Temperature 105; pulse 140; respiration, 40. She had had two transfusions, which had failed in ameliorating the condition of the patient. Dr. Martt said he had urged the attending physicians to give the hydrochloric acid, but since the injection of the acid had been listed as a dangerous procedure, they declined to do it. On my urgent advice, he determined to give the acid injection himself.

Between 8 and 9 o'clock on the same morning, Dr. Martt called again to tell me of the remarkable effect of the acid injection. That the temperature had dropped to 103; pulse, 96, respiration, 30, and the delirium had disappeared. While the patient still had a temperature of 102, after the fourth injection of the acid she had apparently improved so much Dr. Martt returned to his home in Proctorville, Ohio. Shortly afterward attempts were made to aspirate an apparent abscess. There was a rapid rise in the temperature and pulse and the patient died within the following day.

Acute Tonsillitis. In November last, I had an **acute tonsillitis** of my own; temperature 102; tonsils much swollen; whitish patches over each one. Not being able to give myself the hydrochloric acid, I took calomel, aconite, gargles and painted the throat with nitrate of silver. Since I had no improvement, I called Dr. J.F. Godd, asking him to give me an intravenous injection of hydrochloric acid. He demurred, saying that it was against all reason to give an acid in the veins. On my insistence, however, the injection was given. **Improvement was rapid** during the following hours. I had a good night and the next day my temperature was normal. I returned to my office in the afternoon.

In every case where I have a laceration in a confinement case, I give, before I leave the house, a shot of 10 c.c. of 1 to 1500 HCl in the vein, with 100% results, without fever following. Before I began this practice, I was having fever once in a while of a septic nature. **In cuts or lacerations of any kind, I give the acid as stated above; it prevents infection.**

The forgoing clinical reports are experiences I have had in the administration of some 1,200 injections of the hydrochloric acid. I have seen few reactions after the injection of the acid and those that I have seen quickly

passed and I have seen no untoward following effects. I have been changing drugs for almost 30 years, but since I began the use of the intravenous and intramuscular injections of the hydrochloric acid, something over 2 years ago, there has been no change, and so far as I can see at present, I shall continue to **give the acid injections when I see indications of infectious diseases**. I have no way of checking the chemical and cellular changes that are said to go on in the body after the injection of the acid, as I am strictly a clinical medical man of the kind that do the larger part of general practice of the country.

Clinically, I know hydrochloric acid injections will be followed by good results in the greater number of infections. If the cellular and clinical claims are untrue or true, it seems to me they might easily be disproved or proved in a well-equipped laboratory.

In conclusion, I can only say that I am grateful to Dr. Burr Ferguson. Clinical experiences such as I have never known before are frequent in the application of this idea that **nature is the best doctor, through the injection of this basic acid of the body**.

Two Infection Cases. While this paper was being copied, on the 24th of April, 1933, I had the opportunity of seeing 2 cases whose behavior under the influence of the acid-stimulated cells seems worthwhile. One was a **lobar pneumonia** and the other a **pyogenic blood-stream infection**.

On April 23d a boy of 15 had a prolonged chill, with an intense pain in the right side. I saw him the next morning with a temperature of 104, pulse, 120; respiration, 36; cough and expectoration of rusty mucus and pus. Lower lobe consolidated.

Hydrochloric acid, 1-1500 was given intravenously. Twenty-four hours later temperature was 101, pulse, 90; respiration, 24; profuse expectoration and the patient comfortable. Another injection of the acid was given. I failed to see the boy on the following day because of a call in another district. On the fourth day, I was very pleased to find the temperature normal, yellowish sputum, **freedom from pain** and a most encouraging appetite.

Infected Wound Case. A week ago an employee in a sawmill had a **lacerated wound** in the right leg from a fall of lumber. I cleaned and dressed the wound, using mercurochrome. In three days the temperature was 104; pulse, 130; intense pain in infected wound. Several small incisions were made from which there was an exudate of a small amount of **bloody pus**. Following the intravenous injection of 10 c.c. of 1-1500 HCl, there was a profuse sweat within the hour, after which there was another pronounced chill but no increase in the temperature. The next day temperature was 102; pulse, 100; and the patient was much more comfortable. The discharge from the wound was much more profuse than one sees when the case of such lesions is left altogether to nature. One required no microscope to know that there had been a great stimulation in numbers and activity of the white blood cells.

Another injection of the acid was given and on the following day, the **patient was much better** with a normal temperature. Another injection of the acid was given in order that the very active repair of the wound might be continuous.