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THE MAN WHO KILLS TIME GENERALLY FINDS HIMSELF CHIEF MOURNER AT THE FUNERAL.

Fischer's Magazine

Devoted to the advancement of the Science of Electro-Physio-Therapy and to the interests of those earnest and enlightened medical men who are practicing it.

H. G. FISCHER & Co., Inc., 2333-43 Wabansia Ave., Chicago, Ill.

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SERVICE

To Others

A certain magnate was once asked to what he most attributed his success. He replied "TO OTHERS." Ponder that—it contains deep philosophy. This was long years ago that he noted "To serve is to successfully survive."

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Fischer's Magazine

It is your magazine—devoted to your interest and welfare. It is your convention hall—a common meeting ground where all can look for good and wise counsel, discuss subjects of mutual interest and exchange ever welcome ideas. If you have an idea—an instructive talk—send it in, maybe your neighbor can use it. Be of service to him.

The Treatment of Chronic Prostatitis by Electro-Therapy

W. B. CHAPMAN, M. D.
Carthage, Missouri

In the treatment of chronic inflammatory conditions of the prostate, certain factors must be taken into consideration, which, when properly considered, explain the futility of the time-honored methods employed by physicians in the treatment of such cases. It is a well-known fact, that sufferers from chronic prostatitis, usually drifted from one physician to another, then to the chiropractor or divine healer, finally becoming wholly discouraged and giving up to a life of semi-invalidism and patent medicines.

Chronic prostatitis is almost invariably the end-result of a gonorrheal infection. And in the majority of cases, is induced by the injudicious injecting of various remedies by the patient or by unwise instrumentation on the part of the attending physician.

The prostate gland almost encircles the deep urethra at the outlet of the bladder. It contains some thirty or more branched tubulo-alveolar glands, embedded in a mass of muscular tissues. These glands open through their ducts directly into the urethra.

On the introduction of infection into these glands, there is the usual acute inflammatory reaction, which is followed in the chronic stage by the formation of fibrous (scar) tissue. This may cause obliteration or obstruction of the gland ducts, thereby preventing the escape of bacteria and cellular debris, which lie bottled up and may cause trouble for many years. The physician has treated this condition by prostatic massage and deep urethral injections of weak solutions of silver salts with somewhat unsatisfactory results, and, urologists in general, while accepting this form of treatment as standard, frankly admit that few cases of chronic prostatitis leave their offices cured. The mechanical emptying of such glands, as have remained patent, by the prostatic massage is to be commended, but many prominent urologists have long maintained that the injection of antiseptics into the deep urethra merely irritates the urethral mucosa and tends to form more scar tissue, thereby doing more harm than good. These tubulo-alveolar glands are so formed that they effectually prevent the introduction of fluids from without inward, and it is highly improbable that even the minutest quantity of the antiseptic injected finds its way into the glands. I feel that we can discard the deep urethral injection as a procedure that is not only useless but harmful to the patient.

Now taking for granted that the accepted deep urethral injection is of no benefit, what other procedure can we resort to for the treatment of this condition? We know that massage alone will not cure the condition. We likewise know that medicines taken by mouth or hypodermically cannot reach the gland in sufficient concentration to be of much benefit, we must, therefore, search for some agent that will set up a healthy reaction within the gland, and that will not produce injury to adjacent organs and tissues. Fortunately, we now have such an agent in what is commonly termed diathermy. This merely means the application of currents of electricity of low tension and high amperage which produce heat within the deeper parts of the body.

It has been found that gonococci cease to multiply and cannot long exist when subjected to a temperature of 104 degrees Fahrenheit. Sampson claims that it is possible to produce a temperature within the tissues by the use of diathermia to as high as 138 degrees Fahr., without injury to the tissues. This being correct, one can easily see how effective this modality will be in the treatment of an old gonorrheal infection of the prostate. Furthermore, the application of heat within the gland causes a marked hyperemia, with increased vascularity and consequent increased activity of the secretory glands; the increased blood

supply aiding in the absorption of waste products and the secretory glands mechanically washing out accumulated concretions and cellular debris. There is also an attraction of leucocytes to the part with consequent destruction of bacteria. In other words, we simply induce within the old, stagnant, prostate, a healthy reaction which is identical with nature's method of combating infection. We have all of the factors found in a healthy inflammatory reaction except the pain, and diathermia is painless. Neither are we introducing some foreign substance, usually a poisonous mineral salt, into the system, which must be absorbed by the system with more or less damage to all vital organs.

As the prostate gland is easily accessible through the rectum, we have no difficulty in applying one electrode in contact with the gland. For this purpose the prostatic electrode designed and sold by H. G. Fischer & Company of Chicago, is the best. It is hollowed out on one side, can be easily introduced into the rectum, and, when in place, fits snugly over the prostate. The larger, indifferent, electrode should be placed on the abdomen so that its lower edge is about one inch above the symphysis pubis and at least that far from the hip bones. I have found that whenever possible the current will follow the bones in preference to the softer tissues. For this electrode, either wire mesh or block tin should be used. It should be about five inches in diameter and should be well soaped and in perfect contact with the skin. In introducing the prostatic electrode, I find a coating of glycerine quite effective.

While any standard High Frequency apparatus will prove effective for this work, I have been able to obtain the best results with the H. G. Fischer cabinet type of machine. I have used other machines, but with mediocre success. To be successful in this work, it is imperative that one uses a machine which has a capacity of at least three thousand milliamperes. While I never employ more than half that amount in treating, still I get better results with the larger machines than I obtain with the smaller types that must be pushed to capacity.

I have one of the smaller machines, but seldom employ it for diathermia treatments. There seems to be a difference in the rapidity of the oscillations, which probably explains the better results obtained by using the higher type machines.

While I have discussed the good effects produced by the internal heat, I have failed to mention another reaction which I consider of far more importance than the mere production of an internal hyperemia in the diseased area. With the rapid transmission of these electrical charges, there is set up within the tissues a certain amount of chemical action. We have all watched the experiment in the physical laboratory wherein electricity was allowed to flow through a U-tube containing water and saw the liquid transformed into its component gases, oxygen and hydrogen. We have likewise studied the reactions taking place in the wet cell batteries, and later on have seen how complex molecules may be broken up by electricity into simpler compounds or even into the elements. That such a reaction occurs during the transmission of the current through the tissues of the body is quite apparent. We mentioned above that the prostate lies at the outlet of the bladder. As is well known, with inflammatory conditions of the prostate there is more or less obstruction to the out-flow from the bladder with a consequent accumulation of salts and complex protein products along the walls and lower portions of the bladder. This is especially true in old men who have hypertrophied prostates with retention of urine. In the chronic prostate there are also crystals and an accumulation of protein substances, mainly cellular debris, which are affected by the passage of the current. That these substances are broken up into simpler compounds that are more readily absorbed by the blood stream can be demonstrated by the rapid decrease in shreds, etc., in the urine following a few of these treatments.

Another factor. We are also aware that most chemical reactions proceed only in a liquid medium, usually water. We have here the ideal location for chemical reaction, with the prostate and one electrode at the base of the bladder and

the other above; and in giving these treatments, I prefer to have the bladder partially filled as I depend on this chemical exchange of ions to aid as materially in the treatment as the mere production of heat within the gland. What changes of temperature take place within the bladder, I will not state here, but that there are changes, one can readily see. At the end of the treatment, I massage the gland to expel cellular debris and then have the patient void, thereby thoroughly cleansing the urethra, and expelling all foreign material discharged from the gland or stirred up in the bladder by the passage of the current. It would appear that to produce this effect, the galvanic current would prove the most effective, but clinically, I have failed to get better results where it was employed. Where there is retention of urine, I usually alternate treatments with the Morse Wave Generator, placing the electrodes exactly as I do for diathermia, except that I use the regulation Morse pad over the abdomen, giving ten milliamperes for ten minutes with the idea that I ionize the urine within the bladder and break up the complex salts that so quickly accumulate in a condition of this kind. I believe the treatment to be justifiable.

In giving the diathermia treatments, I advance the current slowly to about 1,200 milliamperes, allow it to run for twenty minutes and then turn it off gradually, I then massage the prostate, as mentioned above, and have the patient evacuate the bladder. The presence of material in the urine will act as a check on the progress of the patient. The shreds and cellular debris are usually excessive at first, but clear up as the treatments proceed. I give the treatments every other day in mild cases, and daily, where there is retention of urine in the bladder, washing out the bladder with a weak boric acid solution after the treatments if the patient's condition demands it. I have treated a number of cases of prostatitis by this method, and have yet to treat one that was not rapidly and materially benefitted. I consider this method a distinct advance over the older methods, and believe that it will soon supplant all other procedures.

Treatment of Gonococcal Infection by Diathermy.

—The reason for the selection of diathermy for the treatment of gonococcal infections by E. P. Cumberbach and C. A. Robinson (*British Medical Journal*, July 14, 1923) is because the gonococcus can be destroyed at a temperature which is not high enough to damage the living tissues and because the diathermy raises the temperature of the tissues *en masse*, whereas other methods of applying heat raise the temperature of the superficial parts only. In almost all of the cases of gonococcal arthritis treated the pain was abolished, the swelling was reduced, and the range of motion was increased within a comparatively short period of time. Cases of gonococcal orchitis and epididymitis without exception quickly were relieved of pain and swelling after diathermy, even if the symptoms were severe. Convincing proof of the therapeutic power of diathermy in gonococcal infection was furnished by the disappearance of pain and swelling from joints or scrotum after the application of the treatment to the site of the original infection. Cases of gonococcal arthritis were freed from pain after application of diathermy to the urethra and prostate, or urethra and cervix, without the inclusion of the joints in the treatment. There were also cases in which the application of diathermy to the joints did not procure much relief until the parts originally infected were included in the treatment. Diathermy was also applied to the urethra and cervix uteri in the female in cases in which these parts alone were infected. Such applications were followed by disappearance of the gonococci and cessation or diminution of the discharge. The effectiveness of the treatment was demonstrated by the failure to find gonococci in repeated attempts and the subsidence of arthritis after the application of diathermy, not to the joints but to the parts originally infected. Good results were also obtained in the treatment of prostatitis.

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A *gentleman* has never heard a story before.

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That Monthly Physiotherapeutic Meeting!

We know that you will be very glad to hear that we have arranged to have with us on Monday, April 14th

HARRY THOMETZ, M. D., of Chicago, who will perform a Tonsil Operation with Electrocoagulation, and also to give a report on similar cases——— 10 to 11 A. M.

RAYMOND F. ELMER, M. D., of Chicago, who has successfully operated on over 125 cases of Tonsils with Electrocoagulation, and who will demonstrate the correct technic——————————11 to 12 Noon.

K. T. LAWLESS, M. D., also of Chicago, promises to give a talk on PHYSIOTHERAPEUTIC METHODS AS PRACTISED IN EUROPE, and we hope to have him on the floor at 1:00 P. M.

C. H. FREDERICKSON, M. D., who is connected with the Veterans' Bureau, at Chicago, will be with us from 3 to 4 P. M., and, although he does not tell us specifically just what his subject will be, he is such an experienced Electrotherapeutist that his hour will pass all too quickly.

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REMEMBER the DATE AND COME!!!
to our Lecture and Demonstrating Rooms

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BY SURFACE CAR — Western Avenue to Wabansia Avenue, and one block east to Claremont.

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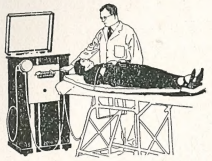
Treatment of Myocardial Insufficiency

WILLIAM MARTIN, M. D.
Atlantic City, N. J.
Formerly Pres. Amer. Electrother. Assoc.



It has been the custom for generations to use "heart tonics" when a patient applies to the physician for treatment of "weak heart," which method still holds with the majority. The physician will feel the pulse and sometimes auscult the heart as he feels necessary and as a rule this completes the physical examination. Being expert in this type of case, he feels it unnecessary to do more, so the usual prescription of digitalis or strophantus is given and the case told to return at a suitable time for another prescription.

Recent years have brought the study of the heart and circulation as a necessity in practically all types of cases, since we have such constant evidences of some derangement of a part or all in many chronic diseases. Perhaps Mackenzie has done most toward establishing the weak heart muscle as a factor in so many disturbances of a vital nature, particularly in angina pectoris. A myocardial inefficiency from whatever cause, whether overstrain or toxemias, is recognized to be a menace to longevity, and may be a distinct menace to life itself under stress.

Given a circulatory stasis from a hepatic engorgement or other venous blocking, we will have stress against the right side of the heart, which will show itself as a simple strain with moderate symptoms, but as this increases later we will find an actue dilation develop with its dangers. Take the circulatory stress such as accompanies an active hypertension from any cause, functional or organic, we will find the ventricular walls endangered, but as they seem to have greater compensatory powers, the hypertrophy will be the first effect, but as this stress continues, we will have the evidences of failing compensation and loss of muscle strength.

What can we do for such cases? Shall we use the time honored doses of the heart tonics which must be given in increasing doses with their dangerous accumulative effects, or shall we use the more modern methods which some of us have learned to depend upon? In a practice covering thirty-five years the writer used the former methods during two-thirds of that time, but the remaining third with its more modern therapy has demonstrated the greater value of electrotherapy in these as well as other cases, and it is the modern method that he now wishes to place before the reader.

Granting the cause to be known and as much as possible having been done to eliminate it, we may proceed to treat the actual condition. If back of the myocardial weakness there is a hepatic engorgement, we must remove that by the use of diathermy as has been frequently mentioned in these pages. This will be the first step, which may be followed by diathermy of the heart. This must be done in a safe and sane way, so a more detailed statement will be given. We use two metal electrodes of the usual type approximately 4x5 inches, and when properly wet, they should be applied exactly opposite each other, the one directly over the heart and the other directly back, *not* allowing the current to flow in an oblique direction, but straight through. This is exceedingly important. Taking for granted that you have the proper machine with a good spark gap, the current is turned on with the minimum of current charge. The amount is slowly increased until in about five minutes you have reached the maximum, which should not be more than 300 to 500 ma. in the average case, and in some even lower. This is continued for from fifteen to twenty minutes altogether, counting the slowing up for the completion of the treatment. The ending may be done in about the same manner, although some take less time for this. Playing safe is the best method, so as the treatment is going on, the physician will note any effects upon the circulation and general condition of the patient, so that the treatment can be cut off at a minute's notice, if necessary. As the treat-

ments are given from time to time, somewhat larger doses may be given under the same watchful care, and in time the response will be noticed in a general betterment of the patient.

Vibration of the interspaces of the 7th cervical and 1st dorsal will add to the value of the diathermy, and this may be given for from 1 minute to 1½ minutes, following the other, as its effects upon the heart centre has great value, and the writer always uses it in this manner. The treatment just outlined will usually suffice, if persisted in, and the writer trusts that it may help others as much as it has him in the therapy of these cases.

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Diathermy of Facial Paralysis.—Bordier recommends diathermy in facial paralysis, especially in cases with a slight reaction of degeneration.

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In response to an inquiry on the value of Diathermy in connection with fractures, we received the following short but clean-cut article, for which we are very grateful:

In diathermy on fractures, we permit knitting to take place in the normal way, without disturbance for a week or two, until the dressings can be handled without displacing the fragments. There is no rule about this; each case must be judged individually. Then we remove the dressings daily and apply diathermy. Lots of work; but results are worth it. Do not mount electrodes in casts; that is dangerous; ischemia may result from the swelling that the diathermy produces; and there is no way of checking burns. If a plaster cast cannot be made removable, we omit the diathermy.

Cordially,

Miles J. Breuer, M. D.
Lincoln, Neb.

Diathermy in High Blood Pressure and Other Conditions.
F. Howard Humphris, F. R. C. P., Brit. M. J.

Patients with high arterial tension may be treated by diathermy and kept in a state of safety thereby. If the hyperpiesia be recognized early, diathermic treatment will prevent an otherwise inevitable consequence. Even though arterio-sclerosis has become established the process may be stayed and the very serious sequelae avoided.

The effects are two-fold—one is general or constitutional, affecting metabolism, and the other is a local effect upon the vasomotor system. Clinically there ensues a general improvement in the health and the mental outlook, while chemically there results an increase of solids in the urine and in the perspiration. All these effects are perhaps due to the relaxation of the arteries and the better circulation resulting therefrom.

The use of medical diathermy in pneumonia has been proved of value and attention is called to this work in the United States Marine Hospital, which the author says has the best medical service of any country he has visited.

He also believes that medical diathermy is destined to play an important role in the treatment of pulmonary tuberculosis.

In the discussion of this paper Dr. Turrell said that the mode of action of diathermy and how it might apply to the case in hand should always be considered in arriving at a decision as to treatment; for example, in a case of spasmodic dysmenorrhea would relaxation of the spasm relieve the patient and would diathermy accomplish this? In an unresolved pneumonia would an increased blood supply help and would diathermy bring this about? He added that diathermy had been found of great benefit in non-surgical hemorrhoids, in dysmenorrhea and in coccygodynia of the simple congested type. It is useful, he said, for high blood pressure, but a hot bath is of equal value and is more simple

treatment whenever possible. It is useful in rheumatoid arthritis, but must be long continued. All discussants agreed upon its usefulness in relief of gonococcis infections.

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Stricture of the Urethra

BURTON B. GROVER, M. D.

Vacuum tube currents may be of service in removing spasmodic stricture, but I doubt very much their being of service in the organic form. Strictures resulting from gonorrhea may be removed by electrolysis. I have cured over 100 cases by this method.

Technic—First ascertain the size, the location of the stricture, then place a well-soaked pad on the abdomen and connect to the positive pole of a direct continuous current. Connect the negative pole to an olive-shaped urethral electrode, one size larger than the lumen of the stricture; pass the electrode down to the stricture and turn on the current gradually up to from 3 to 5 milliamperes; keep the electrode in contact with the stricture by gentle pressure until it passes, then withdraw the electrode through the stricture and turn off the current gradually to zero before removing the electrode from the urethra. Repeat the treatment every seven days, each time using a larger electrode until the normal calibre of the urethra is restored. There are a few old strictures that will not yield to this treatment. Strictures that have been operated upon are very rebellious and often incurable. For these cases the Neiswanger technic, 1% solution of thiosinamine cataphorically, is often successful.

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In King Tut's tomb was found a tablet giving a recipe for the Elixer of Youth.

Hooray!! The recipe is *honey and wax, mixed with fourteen vegetables*. The vegetables, however, are not named in the inscription on the tablet.

Gall Bladder Infection

At the recent annual meeting of the Iowa Radiolological and Physiotherapy Society at Des Moines, Dr. A. B. Adams of Omaha, Nebraska, read a paper on "The Value of Sine Wave Current in Obstruction of the Hepatic Duct".

He reported a case which has passed through the usual operative procedure for drainage without satisfactory result —yet the Morse Wave Generator, by its selective surging action accomplished all that was desired.

Dr. B. B. Grover, of Colorado Springs, Colorado, in the February number of the "Bulletin of The New England Society of Physical Therapeutics" reports several cases successfully treated by the Sine Wave.

The infected Gall Bladder evidently loses its muscular tone necessary to expel into the duodenum its putrifactive contents, and just a little non-irritating mechanical help applied to this regien with the Gall Bladder Nerve Area in the circuit, is apparantly the one thing needed.

Treatment of Gonorrheal Affection by Diathermy.

C. A. Robinson, M. B., D. M. R. E., Brit. M. J.

The gonococcus is less resistant to rises of temperature when in culture than are most pathogenic organisms, though the temperature most suited to its growth in living tissues is not known. Whether the destruction of the germs by diathermy is due to direct or indirect effects of the current the author does not know, but he is sure of the results in gonorrheal infections of the joints, namely, that such cases are amenable to treatment by diathermy. The optimum temperature to secure these effects by diathermy is about 115 degrees F. Results in cervicitis prostatitis, epididymitis, etc., have been very gratifying.

A PAGE OF FUN

There were two negro buck privates discussing the relative values of their buglers during the recent war. You know, negroes are naturally musical, and they can certainly do great things with a bugle.

The first private stated, "Why, nigger, that bugler of mine am so good that when he plays 'Pay Day' it sounds jes 'xactly like the Boston Symphony Orchestra playing 'The Rosary.' "

The second negro replied, "Why, nigger, you aint got no bugler a-tall. When Snowball Jones, dat bugler of mine, wraps his lips roun' dat bugle and plays 'Mess Call,' I looks down at mah beans and says, 'Strawberries, behave; you're kickin' de whipped cream out of de plate.' "

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"I don't like your heart action," said the medical examiner. "You've had some trouble with angina pectoris."

"You're partly right doctor," said the applicant, sheepishly, "only that ain't her name."—College Humor.

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Little Ada—"Mother, shall I run out and post this letter?"

"No, child, certainly not. It's pouring in torrents, and not fit to turn a dog out of doors. Let your father go."

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Biddie: "Suppose you have been in the navy so long you are accustomed to sea legs?"

Middie: "Lady, I wasn't even looking."

Yachtsman: "If this squall continues, I shall heave to."

Passenger (wanly): "What a horrid way to put it."

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On a farm in South Georgia is posted this sign:

"Trespaser's will be persekuted to the full extent of 2 mean mongral dorgs which ain't never been ovarly soshibil with strangers and 1 dubbel barelt shot-gun which ain't loaded with no sofy pillers. Dam if I ain't tired of this hel raisin on my proputy."

□ □ □

There was a young person named Ned,
Who dined before going to bed
On lobster and ham,
And salad and jam,
And when he awoke he was dead.

GIVE THE MOSQUITO CREDIT—WHEN HE SEES AN OPENING HE DIGS IN.