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Physico-Clinical Medicine

A Quarterly Journal devoted to the study of the Electronic Reactions of Abrams and the Visceral Reflexes of Abrams, in the diagnosis, treatment and pathology of disease.

Vol. 1.

DECEMBER, 1916

No. 2

FOUNDED AND EDITED BY

ALBERT ABRAMS, A.M., M.D., LL.D., F.R.M.S.

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PUBLISHED BY
PHILOPOLIS PRESS

SUITE 711, ST. PAUL BLDG.,

SAN FRANCISCO, CAL.

Works by Albert Abrams,

A.M., LL.D., M.D., (University of Heidelberg.) F.R.M.S.

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Physico-Clinical Medicine

Vol. I

SAN FRANCISCO, DECEMBER, 1916

No. 2

All the subject-matter of this Journal refers to the original research work of Dr. Albert Abrams. Citations from other sources will be duly accredited. "*Spondylotherapy*" and "*New Concepts in Diagnosis and Treatment*" constitute the archetype of this Journal and *S*, in parenthesis, followed by a number, refers to the page in the former and *N. C.*, to the latter work where extended consideration of the subject cited will be found. *J*, refers to a previous number of this Journal. The motive of this Journal is to replace the cell doctrine by the Electron theory. Vital phenomena are dynamic and the actions of organisms should be regarded as processes and not as structures. Exclusivism is excluded inasmuch as all sciences are embraced in practical medicine and diagnosis must invoke physical, biological and chemical methods. All problems in medicine not in accord with the progress made in physical science are doomed to perish.

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Price of Single Copies\$1.00

PHILOPOLIS PRESS

711 St. Paul Building

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A REVIEW OF PHYSICO-CLINICAL MEDICINE.

The *Western Medical Times* (Oct. 1916), presents the following:
"This is the first number of a new medical journal to reach us. It is peculiar, in that it deals exclusively with the ideas of Dr. Abrams. While we may or may not, agree in toto with that which Abrams may present, still such should not be a valid reason for cur not giving his ideas some, if not considerable, attention. It is possible that Abrams is so far above us in his understanding of the subjects presented, that we cannot at this time, comprehend what he offers. All the more reason why, even though we cannot accept as the truth a word he may have to say, we should study his teachings. It is possible, although made the subject of more or less ridicule, Abrams may have discovered some things of more than slight importance, both in the diagnosis and treatment of diseases. History may repeat herself, and Abrams, may some day, reach the pinnacle of recognition."

"*Damnant quod non intelligunt.*" is evidently not the shibboleth of Dr. G. L. Servoss, to whom I am indebted for the foregoing. Any unjust criticism concerning my work has *always* emanated from those who know absolutely nothing about it and to whom condemnation is more facile than investigation. A simple illustration will suffice: Archibald Church, Chicago, Professor of Nervous Diseases (Northwestern University Medical School), referred, in a review, to Spondylotherapy, as "quasi-therapeutics."

Always desirous of learning the demerits as well as the merits of

my work, I sent a physician in Chicago to interview him. The following conversation ensued: "Dr. Church, I am desirous of learning something about spinal therapeutics. You are an authority and I have heard a great deal recently concerning spondylotherapy." Dr. Church: "There's the book (pointing to the same) but I have *never* read it and know nothing about the subject. If, however, you get the book and learn anything of interest concerning it, let me know." This story was repeated in one of my lectures in Chicago, at which Dr. Church, unknown to myself, was present. Did Dr. Church resent my story or did he apologize? He did neither, and yet this is the kind of stuff which passes as criticism. Contrast the foregoing with the following from a physician of international reputation, Dr. Wm. Ewart (London): "Your studies invite hope, which are almost beyond human expectation but they cannot fail to stimulate enquiry and the true clinical spirit of unrelenting helpfulness."

Also the following from "*Riches*" (a monthly journal, Oct. 1916): "The propoganda of Dr. Abrams' discoveries makes the existence of this journal a matter of unusual importance and I consider that the work it has done in bringing these discoveries to the attention of the public during the past few months is of more value than all it has done in the 15 years of its previous existence. The problems that it has tried to work out have been solved by Abrams and it no longer is compelled to depend upon intellectual gymnastics as a basis for its statements."

The Editor acknowledges with thanks reference to this Journal in the *Journal of A. A. O. S.* ..

A CRITICISM

The plaint of a physician concerns itself with the liliputian proportions of this Journal and he establishes the plea that the charge for subscription should be in proportion to its size. Let us assure this physician that some precious things are often put up in small packages and the pot isn't the beer. Size, like time has a definite value to some people. There was a man who objected to paying his dentist \$1.00 for extracting a tooth. He contended that his last dentist who did a similar service for half the price had yanked him all around the room thus consuming 30 minutes time and he wasn't going to pay double the price for an operation that had only lasted a second. This Journal is not padded with advertisements. It appeals to a limited number of physicians, hence its publication is a financial loss. It only contains original matter tersely presented. An entire volume could be written concerning the appendix reflex (J. 52) yet, a few lines suffice to proclaim the discovery. Language was invented to conceal thought. The scientist is recalled who, when asked a question, replied that he knew nothing about it, in fact he had written a book on the subject.

SPLANCHNO-DIAGNOSIS

NOTE—The preliminary facts concerning this method of diagnosis were recounted in the September number of this Journal. A few copies may still be procured by subscription.

EPILEPSY

The concept symbolizing epilepsy runs the gamut of epilepsies of gross cerebral affections (paresis, arteriosclerosis, syphilis, etc.), those of toxic and infectious genesis, imbalances of the endocrine glands, etc. Epilepsy is a specific clinical entity and every epileptic should be regarded as an individual problem. The proof of the toxic origin of epilepsy is overwhelming and although the convulsions may be viewed as epiphenomena, they are dependent on a direct toxic action on the cortex. Treatment of the disease justifies this conclusion and the effective anticonvulsants act by reducing the excitability of the motor area in the cerebral cortex. Drugs, like belladonna, are cerebral excitants and have been used in diagnosis for exciting an attack.* The etiological factor in genuine epilepsy from endogenous toxins is regarded as transitory yet this assumption which is untrue must likewise view enterosepsis as an evanescent condition. An epoch-making discovery to the epileptologist in my opinion, is that of Charles A. L. Reed*, of Cincinnati. The latter graciously accords priority of discovery to Bra. Reed's observations may be briefly summarized;

Constipation is frequent in epilepsy but the connecting link is a spore bearing organism—the *bacillus epilepticus*. The latter is present in the blood, cecum and appendix of epileptics. The alimentary canal is the chief atrium for the invasion of the system. The chief focus of the bacillus is the cecum and, owing to the spore bearing characteristic, perpetuates itself indefinitely in the blood and cecum. Communicability of the disease is possible. Treatment, surgical (cecostomy, appendicostomy) and bactericidal, to be effective, must be addressed to the organism (arresting its intake from the intestines and eradication from the blood.)

However limited the observations of Reed, may bear to the varied group of morbid states included by the term epilepsy, they offer nevertheless a working basis for further research and possible cure for some patients.

Desirous of investigating Reed's observations, 15 epileptics were placed at my disposal by Drs. W. B. Kern and Dr. Charles E. Sisson, at Norwalk (near Los Angeles). Dr. Harley E. Mac Donald (Los Angeles), kindly assisted me. In all of the patients excepting two, a specific splanchno-diagnostic reaction was elicited from the *cecum*, *liver* and *spleen*; the blood reaction was so feeble that no reliance could be placed on it. The area of

*Abrams—Diagnostic Therapeutics, p. 236, 1919, Rebman Co.
†Reed—Jour. A. M. A., May 20, 1916.

ventral dullness, is located between the *symphysis pubis* and the navel on the left side. It is separated from the median abdominal line by a finger breadth and is bounded above by a line drawn across the abdomen from the left ant. sup. sp. of ilium and occupies the left ilioinguinal region (Fig. 4). The polarity of



FIG. 4.—Ventral areas of dullness in epilepsy; A, area when energy is conveyed between the 3d and 4th dorsal spines. As the latter area corresponds to the area of colicsepsis (J. No. 1), it is well to confirm the diagnosis by the Entero-diagnostic reaction (conveyance of energy to 2nd lumbar spine) which yields a dull area (B) located in left hypochondriac region just below and merging into lower liver border (This area corresponds to the carcinomatous area, J. No. 1).

the energy is *positive*. Observe that the reaction was likewise elicited from the *liver* and *spleen** I have repeatedly demonstrated (S355), that in latent malaria, a typical paroxysm may be provoked by concussion of the first 3 lumbar spines and it is suggested that this maneuver (which also contracts the liver) may be utilized in eliciting a paroxysm in latent epilepsy.

The foregoing, likewise suggests itself in the treatment of the disease. In addition, drainage of the *cecum* and appendix (*vide* this Journal, p. 52) may be attempted as well as polaritherapy.

*These patients as the physicians confessed, were surreptitiously included with the object of checking up my tests.

Lebon and Aubourg, presented before the *Société de Radiologie Médicale de Paris*, comparative radiographs showing modifications of the large intestine, after stimulation of different vertebral spines by my methods of concussion (J. p. 52).

In Los Angeles, Drs. F. Leix, J. T. Fisher and H. E. Mac Donald, present, an attempt was made to determine fluoroscopically (intestines filled with barium sulphate or bismuth, I do not recall which) if I could modify the caliber of the cecum. The latter was first percussed after my method (S 592) and the area subsequently confirmed by the fluoroscope. It was determined that *concussion of the 12th dorsal spine* contracted the cecum in its transverse and longitudinal diameters with associated peristalsis which extended as far as the hepatic flexure.

The employment of a polaritherapy in epilepsy is in accordance with my method of modifying the (N. C. 199) cultural soil of the *bacillus epilepticus* which yields a positive energy. This may be attained by colonic irrigation with agents yielding a negative or neutral duling energy (N. C. 209). All the foregoing is only offered as a therapeutic suggestion, insomuch as I have never executed the treatment in question in epilepsy.

Scepticism is rampant but genuine criticism which presupposes depth of knowledge is a rarity. In speaking to a neurologist of New York, a physician of National reputation, concerning Reed's investigations, he dismissed the matter by observing that the *bacillus epilepticus* was only the *bacillus subtilis*, hence the deductions of Reed were valueless. The falsism of the neurologist did not take into account the Periodic Law nor the elective localization of bacteria.

As a matter of fact, a culture of the *bacillus subtilis* yields the same area of ventral dulness as the epileptic bacillus. We know that the *bacillus subtilis* is also found in the feces. The periodic law known and accepted by chemists is unknown to physicians. It assists in the explanation of what I have called phylogenetic diseases (S 500). The law demonstrates that the elements fall into families and that the members of the same family show striking resemblance to one another. Thus, in the chlorin family, there is besides chlorin, bromin, iodine and fluorin. In brief, the periodic law is as follows: The properties of the elements are periodic functions of their atomic weights. Morphologically, the *bacillus epilepticus* and the *bacillus subtilis* may be identical yet, place the latter in a suitable environment and the non-pathogenic becomes a pathogenic organism. The recent investigations of Rosenow* are of tremendous import. He shows that avirulent

*Thus, not only the cecum, but the liver and spleen must be regarded as test tube cultures of the *bacillus epilepticus*. Cultures of the latter applied between the 3d and 4th dorsal spines will elicit the same area of ventral dulness.

were made virulent strains by successive animal passages and highly virulent strains less virulent by cultivation. At certain low grades of virulence, endocarditis and arthritis ensued whereas when the virulence was high, other lesions (hemorrhages, lung edema, etc.) occurred. There is an elective localization of bacteria which may possess a tropism for tissues like the homing instinct of pigeons.

The most important point to be recalled in bacterial infections is this, that the specificity of an organism is not identified with its morphology. The host and the reaction of the body are the basic factors for, without a propitious substratum, "The seed falls by the wayside" (N. C. 195).

Considerable interest has been aroused by Reed's discovery. Reed further observes* that the toxemia of epilepsy is shown by subnormal temperature, toxic products in the urine and chronic acidosis. The latter produces a deinsulating edema of the conducting paths of the brain. Hinkelmann† avers that, although the *bacillus epilepticus* is frequently present in the intestinal tract, it is no argument against its probable pathology. Cotton and others‡ contend that at least one type of epilepsy is dependent upon the absorption of toxic products from the intestinal canal due to stasis which in turn is dependent on hyperactivity of the suprarenal gland. The latter being due in part to dysfunction of the pancreas, treatment with pancreatin, should be employed in preference to surgical procedures. Spangler, in the same journal, concludes after a study of 300 cases that, idiopathic epilepsy is caused by a toxin carried into the blood.

Blood cultures in epilepsy made by Wherry, Oliver, Caro and Thom‡ disprove the findings of Reed, concerning the presence in the blood of the *bacillus epilepticus*. As before remarked, my reactions from the blood were so feeble as to prove unreliable but the reactions were constant in the regions previously mentioned. Terhune§ isolated a bacillus identical with the *bacillus epilepticus* in 75 per cent. of epileptics examined and it was present during and following a seizure but not during the interconvulsive period. It was not found in non-epileptics and caused typic epileptoid convulsions in cats and from the latter the organism was recovered after death. In Reed's reply* to Wherry, Oliver, Caro and Thom, whose negative findings were intended to discredit his observations, comment is made on the

*Jour. A. M. A., p. 662, Aug. 26, 1916.

*N. Y. Med. Jour., Sept. 16, 1916.

†Ibid.

‡Ibid.

§Jour. A. M. A., Oct. 7, 1916.

¶Jour. A. M. A., Oct. 14, 1916.

*Jour. A. M. A., Oct., 14, 1916.

tendency of the orthodox scientists to becloud new work by "a policy of concerted and cumulative negation." This policy of treading the path of tradition has always been inimical to the path of progress. Elsewhere (N. C. 261), the writer has demonstrated that an unfavorable attitude of mind physically prevents correct apperception. The mind co-operates in seeing. Vision is a subjective as well as an objective process. "None so blind as those that will not see" is literally true. "*Naturam morborum curationes ostendunt*," at least justifies if nothing else, Reed's theory. Some of his epileptics have been cured, many have been improved, and others are on the road to recovery. He has brought into prominence the relationship existing between constipation (and its congener copremia) and epilepsy.

FURTHER PRECAUTIONS IN SPLANCHO-DIAGNOSIS.*

1. The subject must directly face the WEST; many reactions cannot be elicited when this rule is violated.
2. All pathological specimens must be removed from the vicinity of the cord and electrodes to eliminate their possible conduction.
3. A subject with reddish hair must not be selected. If colors approximating this shade are placed across the cranium of the subject, many reactions cannot be elicited.
4. Normal energy does not traverse a non-conductor but pathological energy does. Certain areas of the body discharge energy in the norm (N. C. 72) and the polarity of the latter may prevent the elicitation of the splanchnic reflex. When such regions are encountered, it is always advisable to cover the electrode in contact with the spine (between the 3rd and 4th dorsal spines) with thin rubber dam when executing the tests.
5. Always note the percussion note over the abdomen before executing a test, for owing to the sudden accumulation of gases the transition of resonance to dulness may cause a misinterpretation of the reaction.
6. Do not exhaust the subject; the accumulation of blood in the abdomen an attendant of enervation will cause ventral areas of dulness.
7. To accentuate the areas of ventral dulness, connect 5th dorsal spine by a conducting cord to the ground plate on which the subject stands during the time energy is conveyed to the depressor nerve. The 5th dorsal spine corresponds to the splanchnic nerve (S 430), and when its tone is removed by grounding (N. C. 218), its opposition to the dilatation of the splanchnic vessels is partially removed (S 40.)

*Some were cited in this Journal (No. 1, Vol. 1.)

LOCALIZED SYPHILOTHERAPY

Bouchard, at the Medical Congress of Cairo, in 1902, emphasized the fact that, in a general disease, which is localized, if a specific drug exercises a cure, better effects could be secured by injecting the medication into the affected part. Thus, in acute articular rheumatism, a man weighing 135 pounds, who takes 90 grains of sodium salicylate by mouth daily, notes all his joints clearing up. Every day a grain of the drug has entered into every pound and a half of his body and only a small proportion into the involved joints. By direct injections only small quantities of the drug are necessary.

He cites cases of gumma and condylomata treated without visible results by general medication yet, when mercury and potassium iodid were injected in the vicinity of the lesions, the results were immediate. This topical treatment has been exemplified by our present intraspinal treatment of cerebrospinal syphilis by Swift and Ellis. Horsley referred to the impossibility of curing a gumma of the cerebrospinal system by general medication. Recently* a more radical attempt is made to introduce the spirocheticidal substance directly into the cranial space or the brain ventricles in the optic atrophies of tabes and paresis.

Neurologists are agreed that the successful treatment of syphogenic diseases of the nervous system predicates an early diagnosis just like the classical quotation in tuberculosis, "*Tuberculosis primis in stadiis semper curabilis.*"† The Wassermann test does not inform us whether the symptoms in latent syphilis have any relation to the patient's symptoms, hence this test has increased our diagnostic difficulties. Two facts must be emphasized: the earliest and most absolute method of diagnosing syphilis is by aid of the electronic test and its virulency may be accurately measured. In the patient with paresis seen with Vecki, the syphilitic liver reaction was, 23/25 of an Ohm, whereas the potentiality from the spine was 3 Ohms. This reaction demonstrated an active lesion of the central nervous system which was later confirmed by the intraspinal findings; positive Wassermann, pleocytosis and globulin excess.

A lady, in whom the diagnosis of hereditary syphilis is diagnosed by the electronic test has an aortic regurgitation with the usual symptoms of the cardiopath. Her general reaction from the spine measures 18-25 ohm. With antisymphilitic medication, it is reduced in one month to 1-25 of an ohm (quiescent syphilis). It occurred to me at this time to measure the energy emanating from the anatomic site of the aortic origin and it was found to be 2 ohms and 9-25 of an ohm. After 30 inunctions of mercury *over the site of the lesion*, it was reduced to 2-25 of an ohm. Coincident with the reduction in the potentiality of the energy, the murmur became less loud, until at the time of its reduction to 2-25 of an ohm it had practically disappeared

*Schoenberg, Jour. A. M. A., June 24, 1916.

†Vide case of paresis seen in consultation with Dr. V. G. Vecki, cured by early intraspinal medication (N. C. 137).

and there has been no return of the subjective symptoms up to the present time of writing.

A gentleman with syphilis has a reaction from the spine of 1-25 of an ohm. One month later, he developed an Argyll-Robertson with myosis and headaches. Although the spinal reaction was normal, a luetic reaction from his head 5 cm. above the external occipital protuberance measured 24-25 of an ohm.

STHENOMETER

The most notable of all recent apparatus for measuring human radiations is the sthenometer of Joire*, which consists of a needle of straw inclosed in a glass case, which is attracted or repelled when the fingers are in apposition with one end of the needle. These exteriorized radiations have been employed by Joire in the diagnosis of hysteria, neurasthenia and other neuroses. In investigating this apparatus, I found that my results were as inconstant as with the biometer of Lucas, or the magnetometer of Fortin and Baraduc. The doctrine that human energy is exteriorized like the Hertzian waves is fascinating and can be demonstrated by the reflexes (N. C.) but not as yet by apparatus. My experiments with the sthenometer show that the needle movements are due to unconscious muscular action and may be obtained when the fingers are remote from the needle end or rest upon any part of the apparatus. It is the same subconscious muscular action (push and pull action) which explains table tipping, planchette writing and kindred phenomena. It is true, as Joire tells us, that sound, heat, light and electricity do not account for the needle movements, but he has evidently forgotten the automatic subconscious muscular tremors which develop from the constrained posture of the hand and fingers for the several minutes necessary to move the needle. I have also found that *moist heat* (steam) which is analogous to human heat, causes needle deflections. This action is not unlike the action of the galvanometer in the detection of the emotions. The latter increase the sweat which diminishes electrical resistance and causes increased needle deflections.*

The psychology of deception is rampant in all scientific observations and it is difficult to exclude "expectant attention" of perceiving what we expect to perceive. The work of Joire is, nevertheless, that of an honest scientist who is willing, I am sure, to preside at the birth of a theory and officiate at its demise on the morrow.

THE VAGARIES OF SYPHILIS

A late, but not the final chapter in syphilogeny, was the discovery of the *spirocheta pallida*. The passing of parasyphilis is a product of this discovery. Thus, it was customary to regard

*Traite de l' hypnotisme, 1908, p. 389.

†Abrams, Diagnostic Therapeutics, p. 474.

pareisis as a parasyphilitic affection due to the indirect action of toxins, whereas now we know it is due to the direct action of the specific organism. Why is it that only about 2 per cent. of syphilitics develop paresis? Four men infected from the same prostitute all became tabetic or paralytic later (Erb) and, in an epidemic of syphilis among glass blowers (7 victims), 5 were seen twelve years later and 4 were tabetics or paralytics (Brosius). Family tabes or general paralysis also accounts for definite strains of *spirochetæ* whose toxins possess an affinity for definite tissues. Every syphilographer knows that the virulency of syphilis varies with the locality in which it is acquired. This geog-

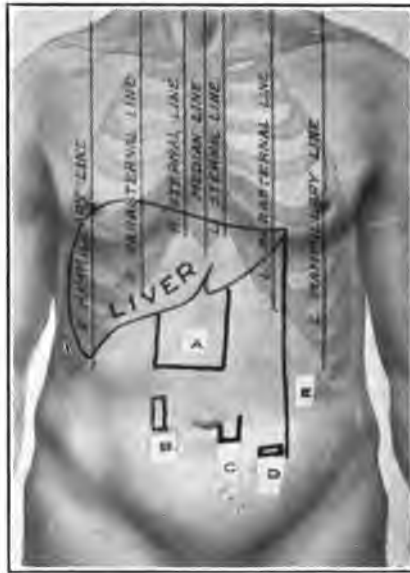


FIG. 5.—Ventral areas of dulness in syphilis when the spinal energy in this disease is conveyed to the area between the 3d and 4th dorsal spines. A, area in all cases of syphilis irrespective of the special structure invaded. In addition to the latter, the area B, is present in cardiovascular lesions; C, lesions of spinal cord and nerve roots; D, eye lesions; E, pulmonary lesions.

raphic determinant as a factor in virulency is also noted in gonorrhœa.

It is now known that there are distinct strains of the *spirocheta*; with one strain, eye lesions in rabbits may be produced, whereas another strain never produces these lesions. Investigators have shown that syphilis may affect the heart alone (*spirocheta* present) without histological lesions or spirochetes elsewhere. In a

considerable percentage of newborn infants, spirochetes at the autopsy have been found in the aorta.

Bacterial localization referred to elsewhere (J. 35) emphasizes the fact that there must be a great variety of species or sub-species among the spirochetes and that the elective localization of lesions is dominated by this fact. We have referred to the electronic syphilitic reaction in the Journal (Sept., 1916).

In addition to this general reaction, there are specific areas of dulness which seem to indicate the tissue for which the spirochetes show a predilection. If these additional areas are present, either the structure is already invaded or its invasion may be predicted in the event the luetic process is uninfluenced by treatment. My studies bearing on this subject are as yet limited but if errors have been made they will be corrected in a subsequent issue of this journal (Fig 5).

MAGNAVOX

This is a device which reproduces and amplifies all sound-waves electrically. It consists of a receptor and reproducer of sound-waves. The receptor is somewhat similar to a telephone microphone or transmitter, but built so as to transform the received sound-waves into strong electrical undulations. These electrical undulations are commonly called voice currents, and are identical with those present on a telephone line over which a telephone conversation is taking place. These variable currents, whose energy is greater than the energy of the original sound-waves, are received and transformed into sound in the magnavox proper.

The magnavox proper is a telephone receiver based on a principle which is new in the field of telephony. It consists of a strong electro-magnet which is provided with a very narrow air-gap. Into this air gap, which is saturated with magnetic lines of force, is inserted a small flat coil wound with many turns of fine wire. This coil is securely fastened to a diaphragm placed in a sound-box. When the voice current flows through this little coil a magnetic field will be created, and by the reaction between this magnetic field and the strong stationary magnetic field existing in the air gap the small coil will vibrate in accordance with the voice currents and actuate the diaphragm, which in turn produces the sound. The electrical energy is usually supplied by a storage battery (6 volts), although any source of direct current can be used.

The real object of this device is to magnify the voice and musical records of a phonograph. The apparatus at once appealed to the writer as a means for magnifying percussion sounds, and he employs it for class demonstration. When the receiver is applied to the chest, topographic percussion of the heart and liver

as well as other organs becomes extremely simple. Dulness from lung consolidation, notably in early phthisis, is at once recognized and I venture to predict that it will soon prove indispensable to the physician.

HECTIC FLUSH

This is evidently dependent on a toxemia and is specially noted in tuberculosis. In an iconographic publication which is anticipated, I shall show what I have called angiodiagnostic reactions*. In the meanwhile, I shall direct attention to the following new diagnostic phenomenon which is easily executed: Take a culture of tubercle bacilli and direct the opening of the tube (without removal of the cotton) to the region between the 3rd and 4th dorsal spines (depressor nerve) and note that within 10 seconds, flushing ensues in the region of the infralobular foramen just below the infraorbital ridge (Fig. 6). The area in question



FIG. 6.—Site of vasomotor phenomena incident to the employment of cultures of the tubercle bacillus and pneumococcus.

represents a streak. Apply the tube to the 1st dorsal spine and in about 10 to 20 seconds a streak of pallor ensues. The latter is less conspicuous than the former. The face of the subject should be directed toward the light and the observation is to be made during the time an assistant directs the tube to the definite spinal areas.†. It is a bilateral phenomenon if the tube is directed on the spinous processes, but is unilateral if applied to either side of the specified spinous process. Pallor and flushing is more diffused in individuals with the phthisical habitus if used

*These reactions invariably occur in definite areas and substantiate the rationale and definite localization of the areas in splanchno-diagnosis.

for the test. It is also evocable when energy is conducted from a tuberculous lung. Like phenomena are noted with a culture of the pneumococcus.

PHYSIOLOGY AND PATHOLOGY OF LOVE

Like every other phenomenon in nature, love is dependent upon matter in vibration (N. C. 231). The concrete psychology of love of the sexes, the theme of the poet and novelist, rarely invades the realm of the diagnostician. Love* connotes emotion characterized by nervous exaltation which finds its expression in muscular and visceral effects. The frontier symptoms are physiologic, but pathologic, when altered metabolism, disturbances of digestion, circulation and respiration supervene. The poet apostrophizes the heart as the abode of the emotions and "In many ways doth the full heart reveal the presence of love it



FIG. 7.—Ventral area of dulness in love.

would conceal" (N. C. 295). Sexual love may be objectively demonstrated by covering the heart region with a large electrode and conducting its energy to the area between the 3rd and 4th dorsal spines of a subject (*vide* splanchno-diagnosis.) *An area*†

†This reaction is only recognizable in the day light. Select a subject with a moderately florid skin.

*Love always predicates sexual desire, without it, friendship is its substitute.

of ventral dulness ensues located 4 cm. to the left of the median abdominal line (in the left sternal line) and a finger breadth in area (Fig. 7). The patient and subject thus connected, the physician puts a question bearing in some way upon the thought of the patient. The Freudian method may also be used to arouse the emotion which is revealed by a definite vibratory heart rate which elicits the area of ventral dulness.

The reliability of this test may be determined by requesting a male or female to concentrate on the person whom they love (sexual love). Each time this is done, the specific area of ventral dulness is evoked. The execution of this test among married individuals should not be encouraged for the supposititious lover in the husband or the wife may be lost. "Truth itself has not the privilege to be spoken at all times and in all sorts."

ELECTRIC BELTS

The preposterous claims made by exploiters for this and similar devices do not by any means nullify the value of electricity in endowing the subject with augmented energy, as I have shown elsewhere (N. C 263). It is not the use but the abuse of a commodity that relegates it to oblivion. In the average belt, the perspiration acting as an electrolyte never yields a current in excess of $\frac{1}{4}$ ampere and $\frac{3}{4}$ of a volt and within a minute owing to polarization there is no current at all. The electric insole can have absolutely no value inasmuch as the copper and zinc discs when pressed upon by the perspiring feet short-circuit the device and there is no yield of current. It is a truism that, every being is a transformer of energy converting the environmental energy into mechanical motion, heat and nervous energy.

Electric energy may be conveyed to the individual by a belt carrying two circular silver plates, one in contact with the spine and the other above the navel. To the plates a dry cell with an electromotive force of 1 volt is connected (negative to back and positive to abdominal plate). Soon after its application, one may note the increased output of energy by the individual wearing it (N. C. 16 and 263).

A FEW DAYS WITH DR. ALBERT ABRAMS

By

HARLEY E. MACDONALD, M. D.

Pathologist, Mutual Life Insurance Co., Los Angeles, Cal.

Several months ago, while in Los Angeles, Dr. Abrams examined some of my puzzling cases, and I present a fair and just summary of the results:

Case I.—Patient with systolic blood pressure of 100 mm. standing; lying, 100 mm. Vertigo and anginoid pains, when in the erect posture. Blood pressure experts throughout the country could not solve the problem. Dr. Abrams demonstrated a paresis of the splanchnic vasomotor mechanism* which was corrected by an abdominal support and the pressure now in all positions is 150 mm.† At a later date, it was found that the patient after ingestion of food suffered from anginoid symptoms preceded by a rise of blood pressure from 20-35 mm. Dr. Abrams demonstrated (S. 85) that the latter was caused by air swallowing (aerophagy) and could be corrected by the ingestion of solid food and by reeducating the act of deglutition.

Case II.—Patient with a palpable abdominal tumor. Stereoscopic radiograms and other clinical evidence suggested a malignant neoplasm. Dr. Abrams' electronic tests excluded malignancy but yielded the reaction of colibacillary infection. Pus removed at the operation demonstrated a pure culture of *Bacillus coli*. After the operation the patient was unable to retain nourishment by the mouth or rectum. Emesis immediately ensued when even peptonized milk was ingested. The patient was in a condition of collapse (95 deg. F. by rectum). I employed Dr. Abrams' method of opening the pylorus* immediately after food was ingested which prevented nausea and emesis. Recovery was absolute.

Case III.—Patient with a very much enlarged liver. Percussion of its upper border suggested a pleural effusion. In fact, exploratory punctures were repeatedly made without result. Dr. Abrams' reaction over the entire liver suggested syphilis. Large doses of *potassium iodid* were given and the hepatic dulness which had extended 3 in. above the nipple receded this distance below the latter within two months.

*Concussion of the 5th dorsal spine (S82).

†Sinusoidalization of the 5th to the 9th dorsal spines completely checked the gravitation of blood to the splanchnic vessels. This was more than could be anticipated inasmuch as the patient is 75 years old.

Case IV.—Healthy-appearing girl of 20 with pain in lower abdomen. The splanchno-diagnostic reaction was carcinoma. Patient admitted that she had been laparotomized twice and that the microscopic examination of the ovaries demonstrated carcinoma. Application of eosin† to the abdomen for several weeks. Patient has returned to her former occupation.

Case V.—Case of pachypleuritis as shown by radiograms. Cardiectasis of right heart. Extreme dyspnea on the slightest exertion. I persuaded Lund, Robinson, Binnie, Jackson and others to decorticate the lung but met with refusal. Dr. Abrams suggested his method of lung inflation* with the result that in four months expansion increased from 100 to almost 200 cu. in. (Spirometer) with practically complete relief from dyspnea. Fluoroscope also demonstrated reduced volume of right heart.

Case VI.—Girl with chorea. Relieved by conventional medication. Recurrence of symptoms. Dr. Abrams' splanchno-diagnostic reaction for chorea was also elicited from the right tonsil. Tonsillectomy had been done a year previously. A portion of the submerged right tonsil was removed and complete recovery ensued.

Case VII.—Mitral regurgitation; anasarca with attacks of dyspnea at night which resisted treatment until concussion of the 7th cervical spine was executed. If such attacks recur, they are always immediately relieved by this maneuver.

Case VIII.—Severe menorrhagia from uterine fibroids. Percussion of first three lumbar spines decreased menorrhagia ($\frac{1}{8}$ th).

Case IX.—Married woman with intractable arthritis in several joints. Tonsils enlarged and I advised Tonsillectomy. No reaction was elicited by Dr. Abrams from the tonsils but from the joints, the gonococcic reaction was evoked. Neisser's serobacterin quickly cured the patient and no recourse was had to tonsillectomy.

* (S529)

† (N. C. 215) The radioactivity of this preparation has been increased; the formula of this improved compound will be forwarded by application to Dr. Abrams.

*Electronic test.

*From Abram's Diseases of the Lungs and Pleura: "In determining lung inflation by different respiratory exercises, I found that in many, lung contraction and not expansion was effected. By holding the breath, there is an expansion of the air in accordance with the law of Gay-Lussac. Dr. MacDonald improved on this method by instructing his patient to keep his head under the bed coverings as long as possible.—Editor.

Case X.—Patient with gastroptosis. No evidence of tuberculosis, yet Dr. Abrams located a tuberculous lesion of left apex* which subsequent physical examination demonstrated to be correct.

Case XI.—Patient in whom Dr. Abrams by his electronic test demonstrated a streptococcic reaction on left side of pelvis. This, at the operation, was demonstrated. The presence of a ureteral calculus at the operation was not detected by Dr. Abrams.

Case XII.—Patient with lung tuberculosis. No improvement by the usual medication after six months. Dr. Abrams' application in tuberculosis† yielded a marked and steady improvement as controlled by radiograms.

Case XIII.—Epileptiform convulsions. Patient denied luetic infection. Dr. Abrams elicited the electronic reaction for syphilis and by his method located the site of the chancre which patient subsequently admitted was correct. Antisyphilitic medication employed and up to the time of writing, there has been no return of the symptoms.

Case XIV.—Patient said to have a healed tuberculosis. Dr. Abrams demonstrated by his electronic test, an active lesion of the left apex. This I affirmed was wrong as the X-ray and other previous evidence showed a lesion of the right apex. A subsequent X-ray and physical examination demonstrated the correctness of Dr. Abrams' test.

† (J. Sept. '16, p. 20).

SPONDYLOTHERAPY

THE MYTH AND FETISH OF THE DISLOCATED VERTEBRA

Since the inception of osteopathy in 1874 and of chiropractic in 1885, neither the fury of tongue nor the truculence of pen can gainsay the confidence which these systems of practice have inspired in the community.

Both systems concern themselves with anatomic abnormalities and their correction. Their nosology is a lesion and symptomatology, a subluxation. The theory of the osteopath and chiropractor cannot survive scientific analysis yet empirically, by special manipulations, they certainly cure conditions that have failed of cure in the hands of experienced physicians. This result, we assume, is due in part to the unconscious evocation of reflexes. My arraignment of their theory must not be interpreted as an indictment of their sincerity. Scientific theories are constantly shattered and swept into the discard. A simple antagonistic fact militates against the value of the most ingenious theory ever evolved. My friend, Dr. J. Madison Taylor, studying this as he does every other subject from an unprejudiced viewpoint and quoting from the highest authorities on anatomy shows that except when long standing or progressive morbid processes have been the cause (lateral curvature and tubercular disease), changes in the relationship of the vertebrae are practical impossibilities.

Owing to nutritive disturbances, the lateral and posterior spinal ligaments relax and this relaxation often gives the appearance of dislocation. If, by mechanic stimulation or otherwise, these tissues are restored, the vertebral asymmetries disappear.

In their attempts to "replace" these so-called "dislocated vertebrae," reflexes are evoked but not infrequently injury is inflicted and there results what I have called "osteopathic traumatisms." Hippocrates must have anticipated sectarian practice with relation to the spine. In his chapter on "*Articulations*," I find that, after enjoining the physician to know the spine, he inveighs against the practice of attributing cure to the reduction of dislocated vertebrae thus profiting by the ignorance of others. Curvature of the spine, he continues, occurs even in health from natural conformation, from habit, old age and from pains.

Dr. Earle Scanland Willard*, an authority on osteopathy, observes: "Neither macroscopic nor microscopic findings in the tissues passing through the spinal foramen warrant the assumption that the osteopathic lesion is the result of mechanical pressure in this region." Harold Swanberg, in a recent work†, does much to demolish the theory of dislocated vertebrae and to annihilate the rationale of cures effected by their reduction. He shows that the most abundant constituent of the intervertebral foramina and the areas immediately medial and lateral to them, is fat tissue and that the foramina are always larger than the nerves themselves. Even in pathologic changes involving the vertebrae and intervertebral discs, "pinching" of the spinal nerves is practically impossible. G. M. Norris, M. D., (*Med. World*, July 1916) quotes the following from a text book on chiropractic: "There are tricks in all trades, and so there is in ours, and the student must *not believe that when a chiropractor treats every disease with his thrust he has found the causative subluxation*. No; in the majority of cases he does not

*Journal of Osteopathy, March, 1912.

†The Intervertebral Foramina in Man, 1915.

find it; he may find tenderness at a certain point which he calls (but does not think) a *subluxation, and treats it with a thrust*. . . . We wish to state nothing but established maxima and facts."

More recently, I have made radiodiagnoses of patients whose vertebrae were said to have been "dislocated" by competent osteopaths and chiropractors and in not a single instance could this diagnosis be confirmed.

Mal-alignment of the spine is produced by a multiplicity of affections and, in this process a clonic or tonic spasm of the spinal musculature plays an important part. Therefore, the comparison between a clinical and anatomic study of the spine is inept. In the latter study, muscular tonicity is absent. The spinal adjusters today were the bonesetters of yesteryear.

This is again no more of a reproach than to refer to the modern surgeon as a survivor of the barber surgeon. Bone setting in America is associated in its incipency with the Sweet family and its evolution into osteopathy and chiropractic was effected through the indifference of the medical profession. Sir James Paget and equally illustrious physicians have recognized the effective work achieved by bonesetters. They commented on the frequency of bands and adhesions in joint lesions. When the spinal manipulator in his "adjustments" elicits the "pop," he causes the sudden separation of ankylosed articular surfaces. The mere mechano-therapeutic act of *brisement forcé* of the vertebrae has led to the creation of cults, that thrive through the negligence of the medical profession. Our ostrich-like attitude can never defeat the apothegm, that there is some good in everything. "The American Medical Association" could achieve a higher standard, if it would change its policy of antagonism to one of conciliation by not condemning anything new because it is new. A committee from that dignified body should be empowered to investigate and report on innovations. If funds for that purpose are requisite the writer, a Fellow of the Association, is willing to make a contribution with that object in view.

FIFTH ANNUAL CONVENTION OF THE AMERICAN ASSOCIATION FOR THE STUDY OF SPONDYLOTHERAPY

(Sept. 18, 19, 20, 1916, at Chicago.)

Without hyperbole, my attendance at this meeting was indeed a revelation. I witnessed a large concourse of intelligent and conscientious physicians whose chief endeavor was to grasp new data which could be employed in assisting the afflicted. The program was unusually prolific in original communications. The paper of the President, F. J. Bomberger, on "Autonomic Imbalance," clarified a prolix subject and his neologism was *apropos*. Dr. Harper's contribution on the "Uterine Reflexes" was a most interesting and original communication. The Drs. Ireland, as usual, contributed something new. Dr. Charles Ireland, who has done so much toward the elucidation of gynecological reflexes, contemplates writing a book on them. His reflex chart has already had a wide circulation and he is formulating a plan for the instruction of physicians at his office in Columbus, Ohio. It is a source of gratification to the writer to find some of his former students endeavoring to further the gospel of the reflexes in

diagnosis and treatment. Another attendant at the meeting was Dr. Chas. F. Anderson, of Lexington, Kentucky. This excellent teacher and physician is now engaged in giving a post-graduate course on, "THE SPINE AND ITS RELATION TO DISEASE." While the writer may not be wholly in accord with the subject-matter of all his lectures, yet he feels that any physician taking this course will find open to him a vista replete with new and valuable knowledge that will yield him incalculable returns. The ingenious and modest Planck was also present and, of course, with a new instrument. It is known that nerve cells discharge their motor impulses with a rhythmicity comparable to the rhythmical beat of the heart. Planck uses a sinusoidal apparatus in connection with a compressing armlet thus enabling the current to be delivered rhythmically with each beat of the patient's heart. By such a method, one truly attains physiologic physiotherapy.

It is impossible for me to do justice to all the papers read at the meeting, and for this reason, I crave the indulgence of many who may otherwise feel that I have slighted them. The paper of Dr. George F. Butler, the fearless and the champion of right and not might, outlined the scope of Spondylotherapy, and his address received the greatest applause at the convention. Of course, like at many other conventions, there was the little rift within the lute and it concerned the name of the "Association." Some contended that it suggested a cult, others, that it was too limited in its scope, and still others, that it was cacophonous and offended those "in authority"! The proponents for a continuation of the name were victorious. They questioned, like the immortal bard, the asininity of man's attempt to make nomenclature the basis for disapproval. It would be mere fatuity, they contended, to embody anything else. It would be impossible in one's life time to exhaust the study of the reflexes. The term "Spondylotherapy" was firmly entrenched in the literature and if it offended the captious critic, so did "electrotherapy" and "hydrotherapy" in the beginning. If, in certain States, Spondylotherapy was included in the *index expurgatorius*, it was owing either to a misconception of its purport or due to the machinations of a *clique* whose exploits will bear recital by the writer in a subsequent issue of this Journal. It is the duty of the Association to resent this unwarranted inclusion.

It is suggested that at the next and future conventions all papers should be limited exclusively to the subject of reflexes and electronic diagnosis and that *our Association should not be made the vehicle for any theorist who is gracious enough to honor us with his presence*. It is suggested that the President, Dr. Wm. L. Heeve, should appoint a committee to whom con-

templated papers should be submitted. That an invitation should be extended to all the members to begin at once the study of subjects bearing on the reflexes in anticipation of their presentation at the next convention. It is also suggested that the President proceed at once to appoint a committee on medical ethics whose duty it will be to guard inviolate the ethical reputation of our Association and to expunge from membership any one guilty of unbecoming conduct. Above all things, we must remain clean. We want quality and not quantity, and if our finances should suffer by the attainment of those ideals, the writer will always be ready, as he has in past, to make good the financial question.

A word should be accorded our efficient Secretary, Dr. S. Edgar Bond, to whom we owe so much for his persistent and conscientious efforts in behalf of our Association.

The regrettable absence, owing to sickness, of our distinguished and lovable confrere, Dr. Hugo Summa, St. Louis, was a source of great disappointment. His nephew, Dr. Louis Shreiber, was present and although a very young man, considering the work he has already done prompts me to predict for him a career of distinction.

TO MEMBERS OF THE AMERICAN ASSOCIATION FOR THE STUDY OF SPONDYLOTHERAPY

It is a noteworthy though lamentable fact that at the last convention no original matter bearing on the subject of Spondylotherapy was presented. The real purport of our association is to develop the study of the reflexes. The subject is inexhaustible, we have only attained the frontier lines and no one in his life time can even hope to grasp the subject in its entirety. The fatuous attempt of grafting new subjects for study in a domain quite unexplored is inconceivable. Our repertoire is sufficiently broad if it is only developed. To stimulate *original* work in this direction, the writer proposes to offer a prize in money for the best thesis submitted to him. The writer reserves the right to reject any or all theses which in his judgment lack originality and the further right to present any thesis at the next meeting of our association. All the members are earnestly solicited to devote their time to a study of the already known reflexes or to develop new ones if possible, or to extend their application. After this manner, the next convention will not be the vehicle of a *pot-pouri* of contributions distantly related to the essential object of our Association.

THE ADDRESS OF DR. GEORGE F. BUTLER

Reference to this address has been made elsewhere (J. 50). We desire to assure this eminent physician whose address sym-

bolized his catholicity, that Spondylotherapy constitutes only a small part of scientific medicine. That its methods embrace no exclusive system but include all accepted diagnostic and therapeutic aids. No school has been established. Only physicians of ethical standing in possession of the M. D. degree are eligible for membership in the Association. Unfortunately, like other innovations, Spondylotherapy has been exploited by some "irregulars" for commercial purposes. The same fate, however, has been accorded to hydrotherapy, electrotherapy, psychotherapy, to the artificial hyperemia method of Bier and to other adjuncts of medicine. The latter methods have all survived the stigma originally associated with them.

APPENDIX REFLEX

Lebon and Aubourg, presented before the Radiological Society of Paris, France, comparative radiographs showing modifications of the large intestine after stimulation of different vertebral spines by my methods (N. C. 65 and S. 32). It is also known that Jarvis (N. C. 58) was able to observe the reflexes directly in laparotomized patients. No one having reported concerning an appendix reflex, I requested Dr. H. E. Mac Donald (Los Angeles) to execute investigations respecting this question. His results were not definite enough to formulate conclusions. I then investigated the subject with Dr. Caro W. Lippman (a former assistant of Holzkecht) and a radiologist of repute as a gastroenterologist and others. In subjects having previously ingested bismuth or after enemas of barium sulphate, the appendix could be directly observed with the fluoroscope. It was noted that, *concussion of the 10th dorsal spine emptied the appendix of its contents and concussion of the 1st lumbar spine caused it to refill*. I have already successfully utilized this reflex in several cases of chronic appendicitis with good results. Thus the splanchno-diagnostic reaction (*vide* this Journal, No. 1, p. 8) of streptococcic infection and colisepsis evanesced after several séances of concussion of the 10th dorsal spine with corresponding amelioration of the symptoms.

VASOMOTOR REFLEX OF CONTRACTION

Vasoconstriction of the blood vessels is best attained by stimulation (concussion or sinusoidalization) of the 7th cervical spine and vasodilation by stimulation at the 10th dorsal spine. These effects may be observed with the ophthalmoscope and bronchoscope. In a case seen with Marie, in Paris, where there was a cranial defect, the contraction of the meningeal vessels could be directly observed during concussion of the 7th cervical spine. This reflex has been utilized in vasomotor neuroses, for the arrest of hemoptysis (sinusoidalization), migraine, etc. Dr.

Meyer Solis-Cohen (Philadelphia) obtained instantaneous relief in urticaria and in a rebellious case of migraine. Drs. Hugo Summa and Louis Schreiber, recently presented before the Ophthalmic Society of St. Louis, a patient with corneal ulcers of many years duration who had resisted treatment by many competent oculists. Acting on the theory that, by provoking the reflex in question, not only would contraction of the vessels ensue but likewise augmented tone, concussion of the 7th cervical spine (sèances daily) resulted in cure within one week. Dr. Schreiber assured me that there has been no recurrence of the ulcers.

MISCELLANY

VISITORS.—Among the many physicians who have recently visited Dr. Abrams, at his research laboratory in San Francisco, were the following: Wallace A. Briggs, Sacramento; Chas. P. Duffy, New York; A. W. Boslough, Oregon; H. Jonson, Paris, France; B. L. Baker, Washington; V. Stern, Paris, France. The arrival of Dr. W. M. Collins, New York, is anticipated.

INVOLUNTARY NERVOUS SYSTEM.—Dr. Geo. M. Aylsworth, President, Staff Collingwood General and Marine Hospital, Canada, in a recent contribution, emphasizes the directly curative effects of drugs upon the involuntary nervous system. He also refers to the methods of Abrams and his co-workers, who have rescued the subject of spinal therapy from the lowly esteem into which it had fallen owing to its exploitation by cultists. He concludes that, the temptation to restrict one's practice to these methods in the treatment of disease is strong and continuous.

J. Madison Taylor (*Medical World*, Nov. 1916) refers the wonder workings of the extramural cults, mechano-neural therapists, osteopaths and chiropractors to the simple factors as enunciated by Arnold (University of Pennsylvania) and Abrams.

VISCERAL DELINEATION.—*The British Medical Journal*, Sept. 30, 1916, refers to a method by Shearer, for delineating the organs by the application of electricity generated in the body itself. Unlike the X-rays, which reproduce dense structures, this method outlines the living soft organs. I have submitted the article in question to one of the best electrotechnicians in the United States who avers that it is impossible to construct the Shearer apparatus from its description in the *Journal*.

TELEDIAGNOSIS.—This method (N. C. 305) was first successfully done between Los Angeles and San Francisco (475 miles) by means of cultures only. On Nov. 2, 1916, the radioactivity of disease was conducted the same distance by telephone wire between the office of Dr. H. E. MacDonald (Los Angeles) and

my own office. The method having passed the experimental stage, patients were employed. The following diagnoses were made in succession: 1. Pus; 2. Tuberculosis; 3. Pus and Tuberculosis (mixed infection); 4. Carcinoma; 5. Colon infection. It was impossible to obtain any reactions until the energy was reinforced by passing it through an induction coil (2-inch spark coil) at my office.

In the first test, not only was the site of the pus detected, but its energy was measured and found to be $7/25$ of an Ohm. This was a slight decrease in the energy potential as compared with the examination previously made in Los Angeles. All the diagnoses were correct, as shown by a letter received from Dr. MacDonald on the following day, excepting one patient in whom the diagnosis by other methods has not been definitely established. The hooks on the new telephones are now insulated at contact points to avoid shock and do not conduct current. Therefore, at the transmitting and receiving station, connections must be made with either L1 or L2 on bell box of the telephone before the tests are made by aid of the reflexes.



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