EAV Discussions

Electro-Acupuncture Testing, Electro-Acupuncture According to Dr. Voll

Dr Voll

EAV is a valuable testing technology.

There is an ongoing discussion regarding the following questions;
What is EAV and how does it work?
Is EAV a viable, valid and valuable testing modality?
How can it be possible to test different remedies ?
How can you test different remedies on the computerized instruments?
How do the computers get the remedies inside the software?
What are the differences between EAV devices?
How does EAV Testing stand in the eyes of the Food and Drug Administration, (FDA)?

This article will attempt to answer these questions.

Every EAV instrument is an OHM meter, i.e. It measures one thing – electrical impedance.

Back in the late 1940's, Dr. Reinholt Voll, MD began an investigation of the effects of electricity on the human physiology. In his studies, Dr. Voll used a technique known as Impedance or OHM metering. In simple terms, some materials are very electrically conductive, for example metals like steel and copper – electricity flows very easily through metals and therefore there is no substantial resistance on the electricity flowing through the metal. Other materials are not conductive, for example wood or rubber, and since these materials are not conductive, their resistance to electrical current is very high. An OHM meter measures electrical resistance (impedance), and it is also capable of measuring conductance since the inverse of resistance (1/resistivity approximately), is conductance.

Dr. Voll found that if he tested the electrical conductance on any general area of the human body, there was a fairly high level of electrical resistance. This is a curious point since we know that the body has a large volume of electrically conductive fluids within it. But, the skin is very resistant, by its nature to electrical current. Dr. Voll also found that at certain specific locations on the anatomy, the electrical flow is much more conductive, and these points generally correspond to the Eastern Medical Acupuncture points. Therefore, you can use an impedance or OHM meter to test the acupuncture points. This is somewhat simplistic, but it does describe the basic process of EAV.

EAV Testing indirectly measures the "Energetic System" of the body. It does not measure the physiology, the biochemistry or the pathology components of the human body. However, the "Energetic System" is related to these components, from the standpoint of physics, not chemistry.

Acupuncture is a science that works with the "Energetic" system of the body.

The human body is biochemical (physical). It has an electrical component and also an energetic aspect as well. The acupuncture meridians are a communication and energetic flow network.

"Energetic", in this sense, is a somewhat elusive term. Yes, the meridians do have some form of energy, but it is not electricity. There is a controversy about the validity of Acupuncture because scientists cannot measure the energetic system of the body directly, i.e. they cannot prove that acupuncture meridians exists using conventional measurements. It is important that you keep this fact in mind. EAV does not directly measure the acupuncture/energetic system of the body directly. This is not scientifically possible at this time. But, there is a bio-physiological phenomenon that occurs when you run electricity through the acupuncture points. The electrical flow (conductance) gives us an indication of the energetic health status of the meridian that we are testing. For example, if you are testing the Liver Meridian with an EAV instrument, the meter will give an indication of the Liver Meridian's energetic status. Remember, energetic is not electrical, but we can use electricity to indirectly measure the energetic system.

The "Universal Baseline" makes EAV a viable testing modality.

The EAV/OHM meter gives us conductance readings and there is intrinsic value in this; however the actual reason that we can use EAV to evaluate the meridians is because, as Dr. Voll discovered, there is a Universal Baseline. Regardless of who is tested, no matter what their age, weight, sex, nationality or race, a reading of 50 with no change over time (no indicator drop), is an indication of an energetically healthy meridian. Readings that are significantly above 50 (65 plus) indicate inflammation, and this is due to the fact that when tissue becomes inflamed, the concentration of body fluids increases and therefore the conductance will increase accordingly. This inflammation occurs in the tissue and also in the proximity of the related acupuncture point as well. When a reading is significantly lower than 50 (below 30) then it is believed that this meridian is low energy or possibly degenerative. When a reading steadily drops in value from the high point down, this is known as an "Indicator Drop" (ID), and it can point to a weakness or disturbance in the meridian.

EAV is a valid health screening modality because the test readings are reproducible.

If you take a patient and then have three very well trained EAV practitioners test that same patient (points only and not different Remedies), one practitioner following the other, you will get essentially the same test results. There will be slight differences, but the overall test will be the same. The operative factor here is "well trained". There is a specific technique to EAV Testing and it can be learned. The key is learning how to get a correct reading on a particular point. The difficulty is in accurately testing the actual point and not something else in the proximity of the point!

The acupuncture points lie close to the bone in the fascia between the bone and the overlying tissue. To test a meridian point you have to get the Point Probe electrode (the instrument used to take a conductance reading), close to the bone. The problem is that the point has a specific location and the skin covers that location. It is very easy to disturb the skin when taking a reading and this causes the

readings to elevate dramatically. It is also difficult to find the point location. There is no road-guide map to show the exact point placement. The process of learning EAV involves some basic techniques as well as getting a sense of feel. The only way that a practitioner can determine the proper placement of the Point Probe and the proper testing pressure is by good training, dedicated practice and ultimately, "feel". Learning EAV is similar to learning to play a musical instrument. Anyone can tap a key and play a note on a piano, just as anyone can put a Point Probe on the skin of a patient and get a reading. But, it takes practice to learn how to play the notes of a song, and it takes a sense of feel to turn those notes into something that is musical. Without the feeling, the notes sound mechanical.

EAV requires both art and science.

Every EAV device is a technical instrument, but without the intuitive feeling of the practitioner it is useless for testing acupuncture points. Notably, this dissuades the interest of many practitioners. But this sensitivity and feeling is a fundamental component of medicine.

You can put a scalpel in the hand of any medical school student and tell him where to cut, how deep and the length of the incision. But the difference that qualifies a top surgeon is in part due to his sense of how to cut which can only come from the experience and his intuitive sense of surgical cutting.

Good acupuncturists feel where to place the needles.
Good chiropractors feel where and how to adjust.
A good psychotherapist must go beyond the words his patient is saying and intuit into what is being conveyed.

EAV is a valuable test because it gives us a powerful, energetic insight into the physiology, biochemistry and pathology of an individual.

Keep in mind that EAV is indirectly testing the Energetic System, not the physiology, biochemistry or pathology of the body. Making any inference about the health of the body through EAV must be kept in the domain of energetically related indications. EAV status is closely related to all of these other factors and it can be an indicator or qualitative screening tool, but it is not testing the actual physiology, nor the biochemistry or pathology.

So, what is the value of EAV, since it is only a relative indicator?

It would be a mistake to assume that EAV is not measuring a valuable parameter. When a practitioner uses standard blood test values, the purpose is in part to get a better understanding of the health of the cells of the body.

"Health" in reality can be broken down to the health of the tissue, the organs and the glands, and these are composed of cells. But when you are measuring the blood, you are not measuring the cells directly. It is extremely difficult to measure the cells but we can indirectly get a sense of what is going on within the cells by measuring the blood.

Similarly, the energetic system is a component of the body. It is related to everything going on in

the body, and therefore, measuring the energetic system gives us a valuable, non-invasive sense of everything that is going on within the body.

EAV is also valuable because it offers "Remedy Testing".

Over the course of two decades, Dr. Voll and his associates perfected EAV Testing. They based all of their findings on clinically proven cases in hospitals in Germany. By accident, they discovered Remedy Testing. In the routine course of EAV Testing a regular patient, they noticed that the patient's EAV readings were significantly altered by the remedies that were being kept in the patient's top coat! The nature of Remedy Testing is simple. If you find a meridian with an unfavorable reading (low, high or with an Indicator Drop), you can test different remedies on the patient. If a given remedy is favorable to the meridian, it will then alter the reading, bringing it closer to the ideal (50 and no ID).

How do you actually test the remedy?

The technique of Remedy Testing is simple. A remedy is brought into the energetic field of the patient and the practitioner performs an EAV reading. The remedy has its own electro-magnetic/Energetic field. This is a unique energy field emanating from the remedy, and this field completely describes the remedy. Every cell in the body has the capacity to distinguish the remedy by sensing into this electro-magnetic field. Therefore, on a subconscious level you know what is in the remedy, even if you cannot taste, smell or even see the remedy. This may be difficult to believe since we rely on and trust in our conscious senses. But we are not completely conscious of everything that occurs in our environment. And, just because we are not conscious of something, does not prove that it does not exist.

You can Remedy Test by having the patient hold the remedy, or you can set the remedy on a metal plate that is connected electrically to the patient. All EAV devices have some type of test plate. This plate brings the remedy's electro-magnetic field into the ultra-sensitive field of the patient.

Remedy Testing can give us clues about the cause of a patient's condition.

One class or type of remedy therapy that is widely used in EAV Testing is Homeopathy. Homeopathy is based on the principal that if something is harmful to a body in its raw form, then if you dilute the substance down to a minute concentration it can be beneficial in reversing the harmful effects of the original substance.

Often, the puzzle of what is really going on with a particular patient is locked deep within the cells. An example may be pesticide toxicity causing liver disorders. A standard blood test will generally reveal absolutely nothing about this condition. Taking chemical assays of the blood and urine may give a doctor some indications of pesticide toxicity, but it is very doubtful that the indications will point specifically to the liver.

With an EAV test, unfavorable readings may indicate a disturbance in the liver. The practitioner may proceed in looking deeper into the situation by choosing to use Remedy Testing. He may find that a homeopathic preparation of different pesticides may improve the readings and concludes that this patient, energetically, may have pesticide poisoning. At this point it should be noted and understood

that this scenario may indicate energetic pesticide toxicity in the liver, but even if the readings are improved greatly by the pesticide homeopathic, this is not a foolproof indicator. It is very possible that the patient may respond to the homeopathic preparation even if he does not have pesticide toxicity!

Never forget that EAV is energetic testing. Homeopathic remedies are an energetic treatment. This is not rock solid biochemistry or pathology testing. This procedure dominantly emphasizes physics. The point is to get the patient well. EAV Remedy Testing gives us a useful indicator of remedy effectiveness. It can also be used to help unravel the question of what has occurred in the past, what is occurring presently and what is likely to develop in the future.

Computerized EAV Systems improve testing efficiency and efficacy.

Early generation EAV meters used an analog needle meter, similar to the speedometer in an automobile. The next progression in EAV technology involved the interfacing of the meter with a computer and custom software. Computers are very useful at displaying information, saving and comparing data and organizing information in database fashion. EAV practitioners used organized "trays" made of cardboard, each containing 100 to 200 Remedies organized in rows and columns. The doctors would physically retrieve the trays and test the individual items, a very cumbersome, tedious process. One of the goals in computerized EAV was to better organize and access the thousands of different Remedies that are used in testing.

The first generation computer EAV instruments attempted to develop systems that would provide access to hundreds of different remedies sealed in 1 milliliter test ampoules, built into an elaborate, electronic switching mechanism. The computer would display the remedy on the monitor and then go out and switch the electronics to bring the field of the remedy from the trays into the circuit with the patient. The technology was similar to placing the remedy on the test plate but much more efficient. However, the cost to build this apparatus was exorbitant and the instruments were very unreliable. By accident, it was found that when the computer was disconnected from the electronic remedy tray system the testing still worked. In other words, with only a remedy displayed as a word on the screen, the testing system worked!

The next generation of computerized EAV used this phenomenon, dubbing it the "Holo-Linguistic Effect", "Holo", meaning dimensionality and Linguistic meaning language or words. Thus, you get a fancy way of saying that words on the screen of a computer are more than just words on the screen of a computer.

How this mechanism works is unknown. There have been attempts to explain the phenomenon by means of quantum physics. It may be more understandable and accurate to say that this phenomenon is related to the intuitive side of EAV. In every sense, EAV Testing depends on the developed skills, abilities, intuition, intent and focus of the practitioner. The value of these factors should not be discounted. In many ways, they may be the key element in the healing process. Why is it that one patient gets well and another doesn't? The belief factor, the intent and "bedside manner" of the practitioner can play a critical role in getting someone well.

The "Words on the Screen" technique works. It has proven itself in tens of thousands of case histories.

The results go far beyond the scope of coincidence. Is this a foolproof solution? No, of course not. Can the instrument be misused? Yes, and this has a lot to do with the intentions of the practitioner. Is "Word Testing" as accurate as testing the actual remedy? The question again clearly relates to the developed skills, abilities, intuition, intent and focus of the practitioner. If a practitioner's overall skills are questionable, then the results can be distorted. But, if the practitioner's ability and intent is clear and clean, then "Word" Testing can be very effective.

The advantage of Word Testing is simple. A computer can organize, display and sort through thousands of remedies in a very efficient manner. A practitioner can literally start with 20,000 different remedies and sort down to the few key remedies in a short period of time by using the facilities of an EAV Computerized System.

Current generation computerized EAV Systems do not have "Remedy Frequencies" in the software.

The concept of "Word" Testing is just too simple and too unbelievable. "There must be some sort of technical magic involved with these devices, some technique that programs the remedies into the computer." At least, that is what many people are led to believe. This scenario almost sounds plausible until you take a look at some very simple, scientifically accepted, universal truths.

1. Every remedy has a frequency, but to say this doesn't even begin to do justice in describing the immense complexity of the frequency pattern of a specific remedy.
2. At this time there is no known method that will measure the actual frequency of a remedy. This is far beyond the scope of current day technology.
3. If you cannot measure something, then you certainly cannot turn this unknown into a digital signal and program it into a computer.
4. Even if you could measure the frequencies and program them in, there is no way for the computer to broadcast them back to you out of the software.

What we are dealing with here is the true essence of nature and life.

A good example is a synthetic vitamin. Synthetic vitamins have the exact molecular structure as the natural counterpart. However, they do not have the same effect in the body. Synthetic vitamins do not absorb as easily, they do not have the same nutritional effects and over a period of time, synthetic vitamins can produce side effects not found with natural vitamins. The synthetics have the correct molecular structure, but they are missing something. They are dead and not alive. The "frequency" in part, accounts for this difference. Actually, the difference is far beyond just a frequency; it is beyond the domain of our present conscious or scientific understanding.

This raises the question: How do you measure and quantify life?

Another example is a high-potency homeopathic remedy. At potencies of 24X (24 dilutions of 1 part per 10) the chance of having one molecule of the original substance in a bottle of a remedy is one in a million. Let's say we have a 100X homeopathic (one part of the original substance diluted one part per ten, 100 times, basically one drop in a large lake). If we measure this very high potency remedy using

a gas chromatograph (an instrument that bends light to measure the specific molecular constituents of any material) we will get a result that tells us, without any question, that what we are dealing with is nothing more than average, ordinary water. Give this 100X remedy to some patients and they certainly will see a different reaction than what you would expect from water. The high potency homeopathic (greater than 24X/12C etc.) has no original substance in it but it carries a powerful frequency signature of the original substance. However, state of the art technology, such as the gas chromatograph, cannot measure this.

Research scientists have spent months trying to decipher the electro-magnetic frequencies of remedies and at best they have come to the conclusion that there are patterns and tendencies, but nothing more exacting than this.

Clearly, we cannot measure the true frequencies of remedies and we certainly cannot digitize and program something that we cannot measure.
The difference between computerized instruments is nominal. They essentially do the same thing. Every EAV instrument is an OHM meter, and there is absolutely no exception to this rule. The computer-interfaced models give us, in addition, a powerful set of software tools to work with.

Each manufacturer has its own way of approaching EAV Testing. But, there are no secret technologies.

Some of the manufacturers have incorporated signal/frequency generators as a means of offering a "secondary recognition system". This is their way of explaining the fact that they use "Word Testing" as well as an arbitrary square wave signal. This type of technology needs to be explained.

The devices we are talking about use a "square wave" signal generator. Every remedy listed in their database is arbitrarily assigned a square wave frequency – a very simple frequency value. There should be no question about the fact that these frequencies are assigned. They are in every respect arbitrarily assigned. This process can be simply illustrated.

Square waves do not occur in nature!

AC amplifiers make good square waves, but you will never find a square wave in nature. Remedies never make square waves, and the frequency of any remedy is never, in any way, measured as a square wave.

A square wave can look quite convincing to the uneducated eye on an oscilloscope. It makes it appear as if the computer is sending out the actual signal of a remedy, but it is not the frequency of the remedy and it has no correlation with any remedy!

If these manufacturers could actually measure the frequencies of remedies they would come up with complex patterns that look nothing like a square wave.

Another critical point worth considering is this: Assume that the square wave signal generated by a testing device is in fact the actual frequency of a remedy. Also assume that the technology is capable of "square wave recognition" (the device can measure the frequency of a remedy). If this assumption

were valid then when an unknown remedy is placed on the measuring tray, the computer program should be able to recognize that remedy and name it, provided that it matched a corresponding pattern programmed into the software. This however is not the case. A simple test of the validity of this assumption would be to place a remedy that has no label on a device and have the device, with no operator intervention, tell you what is inside the bottle. The devices are certainly not capable of performing this simple, analytical and objective verification.

In the final analysis between different types of manufacturers' devices, a shopper can get very confused and frustrated trying to decipher the differences.

Again, when you clear away all of the hype and look at the actual differences, all of the devices do the same thing in their own way. All of them are quite capable of doing EAV Testing. It is valuable to look at the technological differences but one must keep one thing in mind: "Scientific Reality". At this point, it is obviously better to evaluate different devices based on other criteria as, for example the following factors:

- Is the software easy to use? Is it user friendly, and does it offer the features, tools and capabilities you need to handle testing now and in the future when your capabilities expand? Is the software current technology? In the software development game the tools and rules change every year. Some software developed more than six years ago is not compatible with current-generation operating systems (Windows 95, 98 and NT). What will the picture look like in another three years?
- Upgradability. Can you upgrade your device at a reasonable cost year after year as the technology changes, or will you have to buy a new device in a few years to stay current with technology?
- Does the software have hardware limitations? Some software and hardware configurations are not compatible with current generation computers. For example Pentium Class computers are too fast for some DOS applications.
- Reliability. Does the device you are examining have a track record of being dependable? This is the kind of question you should ask other users who have experience with the device in question.
- Service. What is the typical failure rate of equipment, and what is the turnaround time for repairs? An EAV device is useful only if it is working properly in your office when you need it.
- Support. Is technical support available or even better, how available? This is another question that should be directed to current users of any device.
- Training and clinical support. Where can you get hands-on training, and is the training coming from a reliable, educated source.

It all boils down to the real issue of finding a device that you can count on, learn to use, and feel comfortable with, along with a source of support that will stand behind the product now and in the future.

The current status with the FDA is that there is no specific classification called "Electro-Acupuncture Testing" or "Electro-Dermal Screening" (EDS), or any other derivation of this type of testing.

In 1976, Congress passed the Device Amendments Act. This legislation gave the FDA full authority over any type of medical device. This includes everything from a tongue depressor to an MRI system.

The job of the FDA is to ensure the safety of both patients and practitioners, as well as to ensure that all "claims" being made about any device are proven and acceptable.

For example, the medical device component of the Avatar System is an FDA-Registered Medical Device. It is called the ProComp and it is manufactured by Thought Technology Limited of Montreal, Canada. It is classified as a Class 2 (sellable to professionals and not over the counter, safe to both user and practitioner), Physiological Feedback, Data Acquisition System. It falls in the same testing class as EKG, EMG, EEG, GSR, Skin Temp and Poly-Plethysmograph.

Software used with a medical device is in a "gray" area of classification with the FDA. At this time, if the software makes no evaluations or suggestions about diagnosis or treatment, then the software does not require FDA approval.

Every medical device must be "Registered" under the classification of an "Approved" procedure.

For example, x-ray is an approved procedure, but if Phillips Corporation wanted to introduce a new x-ray device to the market, it would have to pass FDA manufacturing specifications as well as operating safety criteria. The new device would also have to go through a "510K" approval process to be accepted as being "equivalent" to an existing registered device, i.e. Phillips Corporation must prove to the FDA that the new device is essentially the same thing as another registered x-ray device. The new device would be registered, not approved, as an x-ray device. After going through this process Phillips Corporation could make the claim that the new device is an x-ray device and nothing more than this.

In the case of EAV Testing, the FDA would have to look at every testing aspect as a different procedure!

For example, testing the liver meridian and determining that there is a chance of pesticide poisoning would be one procedure. Testing the liver point and determining that there is Malathion poisoning (a common specific insecticide) would be another procedure. Roundup poisoning in the Liver would be another procedure. Each of these tests is considered a specific procedure, even though all of these are basically pesticides or insecticides. This does not even begin to mention the thousands of different toxins, pathogens, remedies, etc. that can be tested on an EAV System. Every one of these is qualified as a different procedure. And, for any one of these to pass the FDA's approval process, it must be proven scientifically that the testing procedure is statistically accurate, regardless of the patient or the testing practitioner.

This may give you some idea of the scope of procedures required by the FDA and it should bring some reality to the absurd notion that EAV Testing will ever be approved. Every device that is used by a medical practitioner, including even a tongue depressor, must be registered (not approved), with the FDA. However, there is an exception to this rule, called the "Investigational Device Exemption" (IDE). The FDA will allow experimental devices to go through a temporary proving period.

The IDE program allows a manufacturer to sell a limited number of devices to practitioners to use as a proving ground for their proposed, new procedure. There are some rigid stipulations with the IDE

program. The manufacturer may sell the devices, but is not allowed to make any profit on the sale. If the device procedure is not approved after the established test time period, the FDA may require that the manufacturer collect and refund the price of all of the devices that were sold.

Every time these devices are used, all of the test data must be collected by the practitioner and sent to the manufacturer to be evaluated by an "Investigational Review Board" (IRB).

Every patient tested on the device must sign a waiver, signifying an understanding that the test is experimental.

It is illegal to charge a fee to a patient for an experimental test.

And, after all of this procedural annoyance, the IRB must present the findings of its evaluation to the FDA to be either approved or denied as a new procedure.

Remember, every procedure (every disease and every condition), is considered under this provision a new IDE and a new IRB.

While it is true that every device used by a medical practitioner must be registered with the FDA, the FDA does not control "how the device is used".

For example, every EAV device is an OHM meter or more specifically a "Skin Conductance Meter". The FDA has an approved procedure classification for this type of testing – Skin Conductance Metering.

If a practitioner wishes to use this approved type of procedure to evaluate acupuncture points, then that is up to the discretion of the practitioner and his licensing boards. The FDA is concerned with the claims made by a manufacturer and the safety of a device, but not how the practitioner uses the device.

The State Practitioner Boards control what is deemed as "Standard Medical Practice and Procedure" under the bylaws of the Board. Some State Boards have a specific listing of EAV Testing as an approved modality.

In all situations, it should be understood that EAV is an energetic evaluation. The claims that any practitioner makes about the use of EAV must be restricted to the field of "Energetic testing".

When a practitioner claims that he is diagnosing a disease or a condition with an EAV device, this is an inaccurate and misleading claim.

Energetic testing is not a medical diagnosis. EAV is a useful qualitative and supplemental screening procedure. It is not designed to replace standard practices and protocols.

Any findings made with EAV techniques should be validated with standardized certified procedures.

In summary, Electro-Acupuncture according to Dr. Voll is a very straightforward technology. EAV devices are simply skin conductance meters with or without a software/computer interface. But in

clinical application, the simplicity of this modality cannot explain or justify the value and effectiveness of EAV Testing. EAV stands as a remarkable and viable asset for the forward looking medical practitioner. Given the nature of EAV Testing, it is understandable why many practitioners often have difficulty believing in and feeling confident in EAV. Some have grasped at stories and answers that seemingly give substance to the inexplicable questions that cannot be answered with our current level of scientific understanding. There are no secret mysterious or magical technologies. In the final analysis, we are left with the fact that EAV works and the critical component is the human element. EAV is the integration of science and art, electronics and intuition, software and intent. And, as Hamlet said, "There is much that cannot be explained between heaven and earth".

- Robert Eanes
Veradyne Corporation