



E-MEDICA

CLINICAL TRIAL REPORT & SCIENTIFIC EXPLANATION OF EMEDICA

ROHERA INC.

**ROHERA HEALTHCARE &
TECHNOLOGY PRIVATE LIMITED**

www.emedica.in



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eMedica is a Non-Invasive Electronic Medical & Wellness Device that treats various diseases in the human body by correcting the cell parameters using a dedicated and specified frequency, voltage & current for each disease.

WHAT E-MEDICA DOES:

eMedica modulates the electromagnetic frequency of a human body to its optimal potential. The device transmits a combination of specific and dedicated frequencies, voltages and current into the human body through its blood stream charging the blood cells.

This 3- dimensional technology reaches out to the targeted organ and re-charges the cells of the targeted area to bring it back to its optimal efficiency level. As the cells of the organs gets back its potential efficiency, they start performing as per their function at its peak.

Every disease & virus works on its own optimal frequency, so here the device, eMedica, works on a particular/ specific frequency dedicated to the disease.

eMedica improves the charge of your blood cell. The first thing that impacts our body is our cell potential. The minute the person is sick because of any disease, the potential of his cell drops, so eMedica improves the membrane potential of each cell thus improving the immune system.

- Improves the immune system and blood circulation
- Maintains pH level in the body
- Reduces & controls cholesterol
- Supports to reduces heart blockages
- Controls diabetes
- Supports to reduce lung diseases and fibrosis of lungs
- Treats & controls spread of cancer (Metastasis)
- Supports to fight different viral infections
- Supports to control cough
- Supports to control cold and flu
- Supports to control Uric Acid Levels (Gout)
- Supports to detox Liver and Kidney
- Support to control Thyroid
- Supports to control Parkinson's

- Supports to control Alzheimer's
- Supports to control PCOD
- Supports to treats Paralysis
- Heals tissue damage or injury faster
- Prevents cardiac arrest
- Prevents Cancer
- Prevents Kidney Failure
- and many more
- It has 50+ versions to treat 3000+ diseases through dedicated and specific range of voltage, frequency and the current for each ailment.

PATENT LINK : <https://www.sumobrain.com/patents/wipo/Medical-therapeutic-device/WO2021048642A1.html>

We are about to make Revolutionary Changes in the Medical Industry and Heal the World Naturally with Non-Invasive Technology which is Invented, Created & Founded by Mr. Hemant Rohera.



Govt. Clinical Test Reports



सार्वजनिक आरोग्य विभाग
महाराष्ट्र शासन



Maharashtra Government
Health Department

Medical Superintendent, Regional Referral Services Hospital,
(Daffrin Hospital Campus), Shrikrushana Peth, Amravati-444601



राष्ट्रीय आरोग्य अभियान
1996-2022

Ph.No. 0721-2970161,
0721-2970167.

Outward no./RRSH,Amt./MOU / 3849 /2022
Date. 99/6/2022 Email : msrrshamt@gmail.com

Govt. Clinical Test Reports

To.

Rohera Healthcare & Technologies Pvt Ltd

E-Medica

Pune.

In Regional Referral Services Hospital, Amravati the installation & inauguration of E-Medica device was done in the month of February 2022, since that time patients were enrolled of different diseases as per instructions given by experts of E-Medica.

Total of 132 Covid confirmed cases were enrolled & studied for their improvement in health during this study period. About 60 minutes sessions were given on respective described mode of E-Medica device & parameters like SPO. Pulse, Temperature, Blood pressure were noted for three different settings.

A total 110 already diagnosed hypertensive patients & 153 diagnosed type II Diabetes mellitus patients were enrolled in study to see the effect of device to minimize blood pressure & blood sugar respectively.

Individual values of baseline (i.e. before use of device) & also values after the use of device on day one, day two & day three were noted in Microsoft excel. Mean and standard deviation were calculated & t test were applied using open epi software. After applying 't' test of significance, 'p' value less than 0.05 at 95% confidence interval was considered statistically significant.

From the study conducted in this hospital it was concluded that, use of E-Medica device in Covid-19 positive patients is a potent adjuvant to reduce the body temperature, pulse rate & improve the oxygen saturation levels in very short continuance of its utility. Also E-Medica device can be adjuvant to decrease the blood pressure & blood sugar level in diagnosed hypertensive & diabetic patients.

Above results are due to following reasons as stated in information brochure given by the manufacturer of E-Medica-

After applying eMedica device on the specific program (as pre-programmed & fed in the device), with specified frequency, voltage & current, it will enhance the cell charge of the organ. This process Improves the function of the organ, reduces blood-fat, reduces the chances of cardiac arrest, improves the blood

circulation. When a mild current is exposed to virus or bacteria it would destroy the virus & bacteria in the body. In diabetic patients eMedica device transmits specific voltages and frequencies with the specific electric charge into the human body. As this 3-dimensional technology passed through the blood stream, it enhances the charge of the B-cell in the pancreas, which in-turn improves the function of the organ helping it to produce more insulin. As a specific combination of voltages-frequency-current is passed through the blood stream, it burns the fat/plaque from the blood vessel. This allows the insulin generated from the (B-cell) pancreas to penetrate into the blood cells. As the natural insulin (produced by B-cell) reaches the blood stream, it immediately balances the blood sugar level. Hence controlling Diabetes. (Keterence www.emedica.in Rohera Healthcare & Technology Private Limited ROHERA INC.) This present pilot study was conducted on a limited sample size, which proved the efficacy on Covid positive & hypertensive patients. Currently the study is being in process in large number of groups to see its results on diabetic & hypertensive Patients. The long term needs to be effective of e- medica needs to be conducted on diabetic patients to understand better blood sugar control over a long term use. As soon we achieve our desired sample size, we will publish its results. Detailed results of this study with mean with standard deviation & P value are enclosed with this.

1. Dr. M. R. Mendhe – OSD, RRSB, Amravati.
2. Dr. G. Khobragade – MO, RRSB, Amravati.
3. Dr. Ravi Bushan – Nodal Officer RRSB-Covid, Amravati
4. Dr. V. S. Pawar – MO, RRSB, Amravati.
5. Dr. V. S. Dhande- MO, TBH, Amravati.
6. Dr. Shyam Gawande- MO, RRSB, Amravati


Medical Superintendent
RRSB, Amravati
Medical Superintendent
Regional Referral Services Hospital
AMRAVATI.

COVID-19

Table No.1: Effect of Emedica device on temperature in covid 19 positive patients (n=132)

DAY	TEMPARATURE (Mean with SD)		P Value (t test)
	BEFORE	AFTER	
DAY 1	99.99 ± 0.98	97.20 ± 0.88	<0.0000001
DAY 2	99.56 ± 0.64	97.25 ± 0.94	<0.0000001
DAY 3	99.56 ± 0.51	97.61 ± 0.76	<0.0000001

Table No.2: Effect of Emedica device on oxygen saturation in covid 19 positive patients

DAY	SPO2(Mean with SD)		P Value (t test)
	BEFORE	AFTER	
DAY 1	93.12 ± 1.52	96.15 ± 1.19	<0.0000001
DAY 2	94.94 ± 2.68	97.06 ± 1.64	<0.0000001
DAY 3	94.78 ± 2.24	97.48 ± 1.30	<0.0000001

Table No.3: Effect of Emedica device on pulse rate in covid 19 positive patients

DAY	SPO2(Mean with SD)		P Value (t test)
	BEFORE	AFTER	
DAY 1	92.09 ± 5.76	84.28 ± 12.51	<0.0000001
DAY 2	94.68 ± 4.91	89.27 ± 7.42	<0.0000001
DAY 3	96.12 ± 4.48	90.53 ± 5.73	<0.0000001

Total 132 Covid positive patients were enrolled in research to study the effect of emedica device on improvement in health status of patients. It was found that mean temperature of Covid positive patients decreases after a session of 60 minutes duration in a day. It was also found that mean temperature of patients decreases subsequently on day 2 & 3 after its use and the difference was statistically significant. (P <0.05).

Similarly, one of the crucial parameter in Covid patients i.e. oxygen saturation shows drastic increase in SPO2 & the difference was statistically significant. (P<0.05) Mean pulse was also reduced subsequently after the use of emedica device, & difference was also statistically significant. Thus, it can be concluded that, use of emedica device in Covid 19 positive patients can be a potent adjuvant to reduce the body temperature, pulse rate & improve the oxygen saturation in very short continuance of its utility.

BLOOD PRESSURE

Table No.4: Effect of Emedica device on systolic blood pressure in diagnosed case of hypertension (n= 110)

DAY	SYSTOLIC BLOOD PRESSURE (Mean with SD)		P Value (t test)
	BEFORE	AFTER	
DAY 1	147.73 ± 15.63	125.93 ± 16.45	<0.0000001
DAY 2	139.70 ± 11.55	131.5 ± 13.52	0.000002496
DAY 3	143.30 ± 9.12	133.94 ± 9.73	<0.0000001

Table No.5: Effect of Emedica device on diastolic blood pressure in diagnosed case of hypertension

DAY	DIASTOLIC BLOOD PRESSURE (Mean with SD)		P Value (t test)
	BEFORE	AFTER	
DAY 1	90.21 ± 9.87	88.85 ± 13.70	0.3992
DAY 2	84.71 ± 8.00	74.77 ± 6.89	<0.0000001
DAY 3	86.72 ± 7.86	82.68 ± 7.70	0.0001547

Total 110 diagnosed cases of hypertension were studied to see the effect of Emedica device on its effect on lowering blood pressure. It was found that both systolic and diastolic blood pressure get decreases after the use of eMedica device. Also the difference was statistically significant. (P < 0.05)



How eMedica Acts On Medicines

How eMedica Acts On Medicines

CONTENT:

1. **Drugs and their electric effect.**
2. **Types Of Drugs.**
3. **How e-Medica Supports Drug Absorption & Types Of Interactions.**

1. **Drugs and their electric effect :**

It's indeed a science, how a drug is taken in any form and any mode manages to reach the target site and does the necessary action within a time span.

We often have medicines, but have you wondered how they reach the specific action site and do not lose their way?

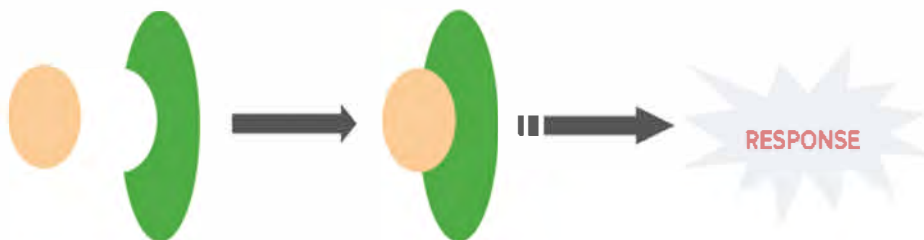
The answer is Electrical signals, also known as biochemical reactions, which occur inside the body. These signals run between the drug molecule and the cell receptor.

Here are a few important terms to understand before we understand this simple, yet incredible science.

a) **Receptors**

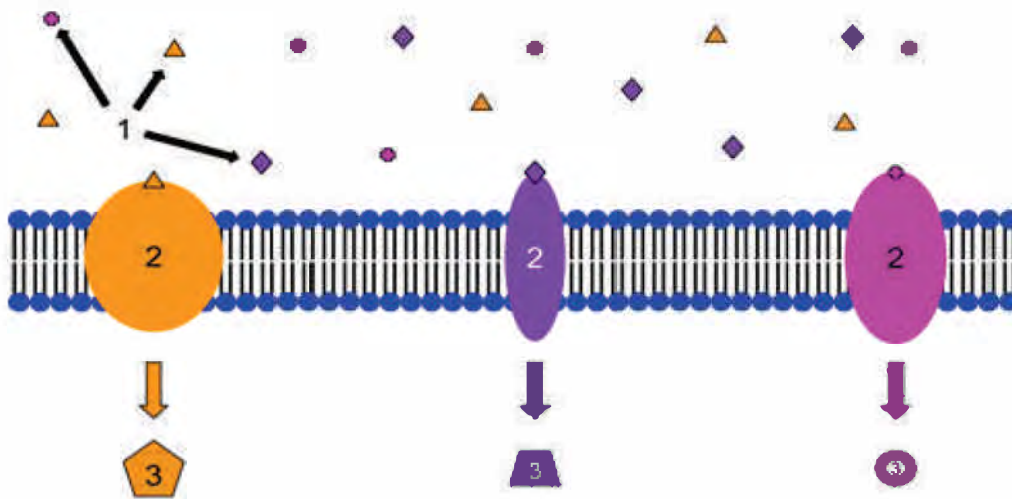
Receptors are large protein molecules embedded in the cell wall or membrane. They receive (hence "receptors") chemical information from other molecules – such as drugs, hormones, or neurotransmitters – outside the cell.

These outside molecules bind to receptors on the cell, activating the receptor and generating a biochemical or electric signal inside the cell. This signal then makes the cell do certain things such as making us feel thirst, pain or any other reaction.



b) Ligands

In biochemistry and pharmacology, a ligand is a substance that forms a complex with a biomolecule to serve a biological purpose. The etymology stems from ligare, which means 'to bind'. In protein-ligand binding, the ligand is usually a molecule that produces a signal by binding to a site on a target protein. Each drug is a ligand for a particular receptor. And drugs, depending on their properties, can be agonistic or antagonistic to a receptor and the specific physiological processes associated with it.



Membrane Receptors

Ligands

Receptors

Secondary Messengers

These are examples of membrane receptors typically, they are proteins that are embedded in the membrane. Although there are many different ligands located outside of the cell, membrane proteins are specific, and only certain ligands will bind to each one. That is why each protein has a different ligand and also induces a different cellular response. The response may be a transcription of a gene, cell growth, or any other cellular action.

2. Types of Drugs:

a) Agonist Drugs

Those molecules that bind to specific receptors and cause a process in the cell to become more active are called agonists. An agonist is something that causes a specific physiological response in the cell. They can be natural or artificial.

Simply put, an agonist is like the key that fits in the lock (the receptor) and turns it to open the door (or send a biochemical or electrical signal to exert an effect). The natural agonist is the master key but it is possible to design other keys (agonist drugs) that do the same job.

b) Antagonist drugs

An antagonist is a drug designed to directly oppose the actions of an agonist.

Again, using the lock and key analogy, an antagonist is like a key that fits nicely into the lock but doesn't have the right shape to turn the lock. When this key (antagonist) is inserted in the lock, the proper key (agonist) can't go into the same lock.

So the actions of the agonist are blocked by the presence of the antagonist in the receptor molecule.

3. How E-Medica supports drug absorption & types of interaction :

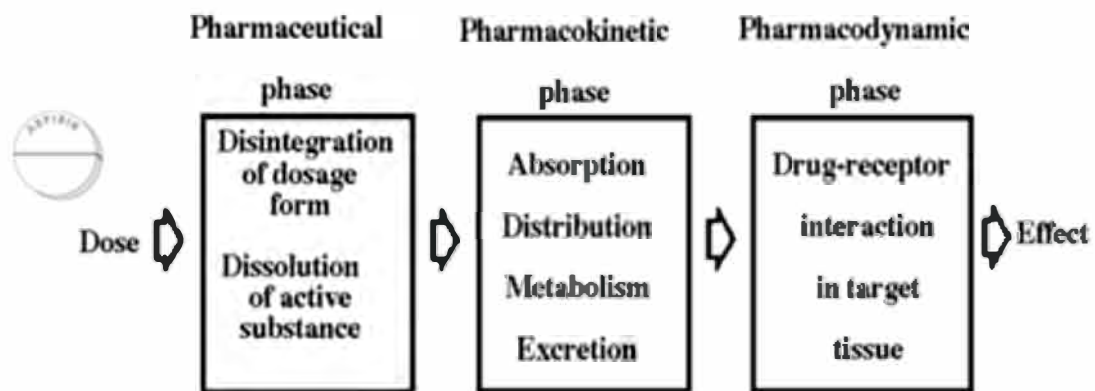
eMedica Effects : Before we understand the type of drug ligands that binds with the cell, we must know that there are many factors that affect the reaction of the cell and the drug.

eMedica positively affects the drug action in the pharmaceutical, pharmacokinetic, and pharmacodynamic phases by modulating the blood temperature and enhancing blood circulation.

It enhances the polarity of the cells, which optimizes its cell permeability which leads to a faster passive absorption and catalyzes the active absorption (requires a carrier enzyme or protein to move the drug against a concentration gradient requires energy).

“eMedica is able to do so as it acts as an “Electro Donor”

Figure 1. Phases of drug action.



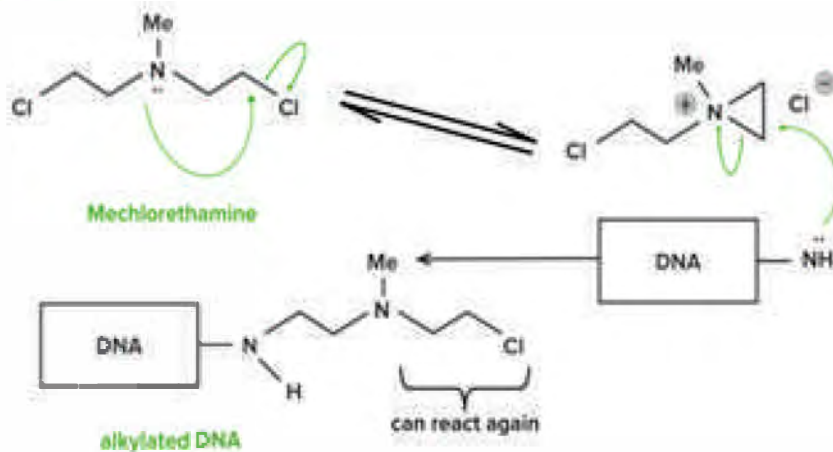
Types of Drug Interaction :

The type of binding between ligands and receptors is governed by the concept of chemical bonding. Intra- and intermolecular forces of attraction play a big role in understanding the binding chemistry between ligands and receptors.

These interactions include covalent bonding, ionic bonding, and dipole-dipole interactions.

When the ligand approaches the receptor and is within an appropriate distance, a bond is formed and the drug's mechanism of action occurs (e.g. agonism or antagonism)

A. Covalent Bonding- A small number of drugs can also make covalent bonds with their targets. Covalent bonds are strong and hence drugs forming them will usually be permanently bound to their target. Some anti-cancer drugs alkylate the DNA within tumor cells. The alkylated DNA cannot function and hence the cell dies (e.g. mechlorethamine).



E-Medica's Action :

eMedica's negative ion therapy works on strengthening the cell membrane of the cancer cells by reducing the pH level of the cellular DNA by alkylating the cells with a negative charge.

Thus killing the cancer cells and treating cancer without medication!

It will also simultaneously assist the drug therapy work faster, as it works simultaneously on the same lines.

Ionic interactions are more reversible, compared to their covalent counterpart. Thus due to increased blood circulation, this type of bond is effective at greater distances between the charges. The strength of this interaction is dependent on the distance between the charges.

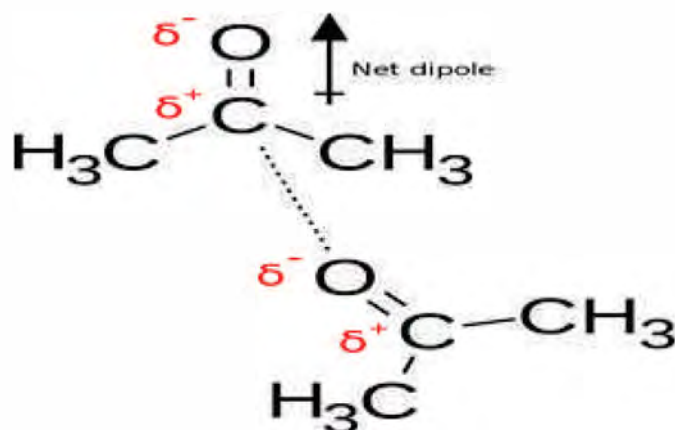
B. Electrostatic Interactions :- In an electronic dipole, a polarized bond is formed. In it there is a partially positive end and a partially negative end. The interaction between the positive and negative ends of different compounds forms electrostatic bonds with other polar molecules or ionized compounds.

E-Medica action :

By enhancing the ionicity of the drug and the solvent (water in the case of the human body) eMedica, by providing a good conductive medium, it will help to enhance such electrostatic interactions between the drug and the receptor.

C. Dipole-dipole Interaction - When interactions are between two polar compounds, a dipole-dipole interaction will occur. In this type of electrostatic interaction, the partially positive end of the compound will interact with the negative end of the other compound. This specific interaction is very weak as there is no formation of permanent bonds.

In many molecules, there are permanent dipoles due to the difference in electronegativities of atoms sharing chemical bonds.



E-Medica's Action :

eMedica works on the principle of cell charge and hence will maintain the polarity of the cell receptors.

D. Ion-dipole bonds- In ion-dipole interactions, an ion close to a polar molecule will be attracted to the end of the polar molecule which has a partial opposite charge to it. When there is an appropriate distance between the two molecules, an electrostatic interaction will happen. This means a positive ion will go near the negative end of the polar molecule, while a negative ion will approach the polar molecule in its positive end. Many drug molecules have ionized functional groups. The charges on these groups will bind with permanent dipoles.

This type of bonding plays a key role in the water solubility of a drug.

E-Medica's action:

eMedica enhances circulation and cell charge simultaneously. Thus it plays an important role in a low-charged (diseased) body.

E) Van Der Waals bonding

Van der Waals bonds exist between all atoms. They arise because the electron cloud associated with an atom or molecule is constantly moving so that the electrons are never evenly distributed. Small, local, instantaneous dipoles (charge separations) occur. Dipoles behave like small magnets and will attract one another.

Van der Waals forces are weak. The larger the surface area and the larger the number of electrons in the molecules the larger the interaction will be. These interactions will only occur between molecules very close together: 0.4—0.6 nm apart. The forces drop off quickly if the molecules move apart. Force equals $1/d^6$ where d is the distance between the molecules.

These forces are insignificant for individual atoms but can be important in parts of molecules with lots of atoms, especially if the surface of the molecules are the right shapes to allow for a close fit.

eMedica's Action :

By donating electrons, it increases the number of electrons.

It increases the cell potency, thereby it increases the cell size which gives a larger surface area.

This in turn will enhance the bonds between ligands of the drug, thus moving them close to the receptors.

PLEASE NOTE

E-Medica is a great Support System for a Patient
for Medicines to Reach the Blood Cell,
it Prevents from Cancer, Reduces the Possibilities of Cardiac Arrest,
Improves Blood Flow,
Reduces the Stress of Medication
which in-turns Reduces Chances of Kidney Failure.



How eMedica Battles With Virus

How eMedica Battles With Virus

CONTENT:

1. **What Is Virus.**
 2. **eMedica Destroys Viruses.**
 3. **Virus Have a Frequency.**
 4. **Research Based Evidences.**
 5. **E-Medica Helps in Destroying Viruses.**
-

It is a well-known fact that the yogis of ancient times practised meditational techniques to get rid of diseases and stay healthy. Meditations induce the positive vibrations which are known to kill many of the harmful microorganisms which get into our body. Recently eMedica in its Electrical technology is exploring the possibility of using external excitations to vibrate a virus to its death.

1. What is a Virus?

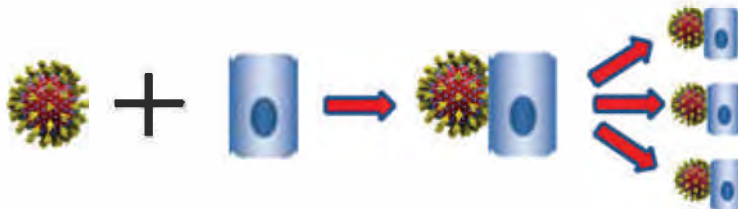
A virus is an infectious microbe consisting of a segment of nucleic acid (either DNA or RNA) surrounded by a protein coat (capsid). A virus cannot replicate alone; instead, it must infect cells and use components of the host cell to make copies of itself. Often, a virus ends up killing the host cell in the process, causing damage to the host organism. Well-known examples of viruses causing human disease include AIDS, COVID-19, measles and smallpox.

2. How Does eMedica Destroy Viruses?

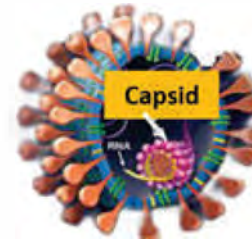
eMedica works on innovative techniques of treating illnesses by restoring cell voltage with ideal frequency for each therapy and maintaining optimal temperature for natural healing.

3. Do viruses have a frequency?

The genetic material of a virus is DNA/RNA enclosed within the protective protein shell (Capsid). Every cell in the human body has a natural tendency to vibrate at frequency known as the natural frequency, and so the virus. Natural frequency values of these vibrations are very high compared to healthy cells, and depend on the molecular structure and differ from virus to virus. For example, lowest natural frequency of HIV: 18 GHz; Hepatitis B: 37 GHz; Ebola: 19 GHz.



Virus needs a living cell to grow or reproduce



In-side the virus

4. Research Based Evidences :

In the past few decades, tremendous efforts have been made to kill airborne viruses such as Severe Acute Respiratory Syndrome (SARS) Coronavirus or Influenza, which have caused catastrophic illness worldwide.

Many approaches for airborne virus epidemic prevention have been used in public space including strong chemical inactivation, UV irradiation and microwave thermal heating. All these methods affect the open public. In 1980s, Robachet al.¹ and Cerf² demonstrated that ultrasonic energy can be absorbed by viruses.

In 2000, Babincová et al.³ hypothesised that viruses can be inactivated by generating the corresponding resonance ultrasound vibrations of viruses, which is in the GHz region. Based on this hypothesis, several groups started investigating the vibrational modes of viruses in this frequency range.

a) Research from the Applied Physics Letters :

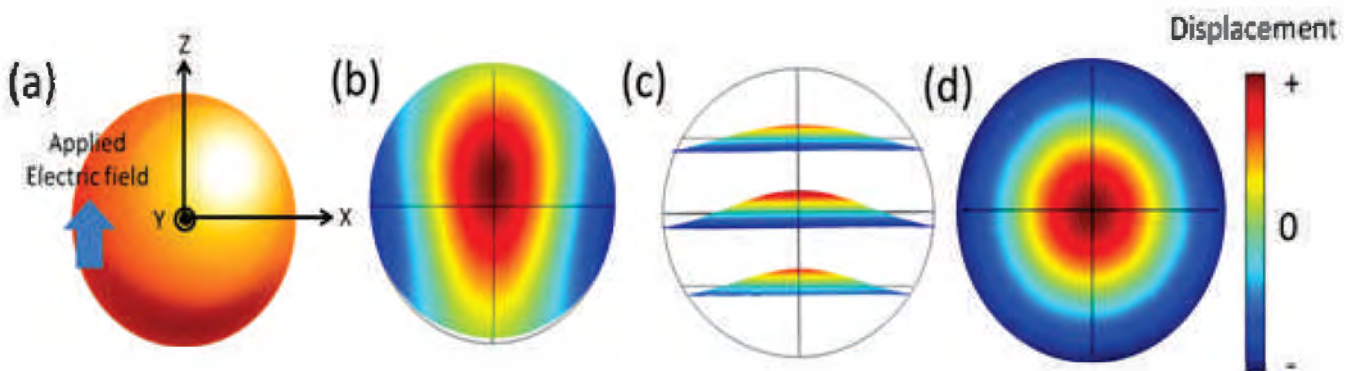
Microwave resonant absorption of viruses through dipolar coupling with confined acoustic vibrations

Appl. Phys. Lett. 94, 043902 (2009); <https://doi.org/10.1063/1.3074371>

In this letter, with an electric double layer on the surface of spherical viruses, we confirm that one of the microwave resonant absorption (MRA) mechanisms of viruses is through dipolar coupling with confined acoustic vibrations. By treating spherical virions as free homogeneous nanoparticles, we found that the

MRA frequencies agree well with that of $l=1$

$l=1$ dipolar modes predicted by the elastic continuum theory. The magnitude of MRA was also found to change with the amount of adsorbed charges on the surface of virions. Our results provide a method to observe three-dimensionally confined acoustic vibrations in biological systems.



Reference links : <https://aip.scitation.org/doi/abs/10.1063/1.3074371>

(a) Schematic showing a homogeneous sphere and applied electric field (b) Displacement field distribution of the x-z plane ($y = 0$) of the sphere, (c) side view of the distortion of the x-y plane at different z location and (d) top view of the displacement field distribution of the equator plane ($z = 0$) of the sphere when dipolar resonance mode is excited.

b) Research from the journal of mechanics and physics of solids

Effect of receptors on the resonant and transient harmonic vibrations of Coronavirus.

Implication for the life cycle of the Coronavirus

It was concluded in this study that ultrasound waves and frequency will be able to kill viruses.

Excerpts from the research :

Ultrasound is known to cause shattering of wineglass at about 620 Hz, Skeldon et al. (1998) and Prikhodko et al. (2011) breaking of kidney stones, and opening the lipid shell of liposome for drug delivery.

Large, potentially damaging deformation of the viral shell with spikes can be achieved at the frequencies and powers routinely used in ultrasound imaging and diagnostics.

Ultrasound uses sound waves however , eMedica sends frequencies, electrons via current which not only does kill the bacteria, it enhances the immunity of the body by improving cell voltage and charge. It increases the body temperature to an optimum level, killing the virus.

c. Research from the Journal of Clinical Microbiology and Biochemical Technology.

Coronavirus COVID-19 surface properties : Electrical charges status

Abstract :

Aim of this work is to analyse the coronavirus viral surface properties related to the pattern of electrical features.

This chemical physical property is relevant and crucial to set the profile of diffusion, severity of disease, efficacy of therapeutic strategy and in order to search new ways to fight COVID-19 and the NEW VARIANT.

The phenomena of immune evasion and the different pattern of efficacy towards variants of some vaccine or some antibodies combination produce the need to verify if considering the electrical feature of viral surface can be a right tool or not.

As a result of this research it is possible to submit to the scientist that the viral surface properties and electrical features can be an element to be considered in various preventive or treatment measures.

The specificity of action of some vaccines or antibodies seem to tell us that also the specific methods are useful.

A specific chemico physical factor can influence the electrical charges' viral surface behaviour.

Hypertonic saline solution, humidity, electrical charge barrier in mask are simply examples of the effect.

That can be obtained action on viral surface chemico-physical properties

<https://www.heighpubs.org/hcmbt/ijcmbt-aid1021.php>

5. How will eMedica help to Destroy the Virus and Correct Cell Parameters ?

Every physical system has a set of natural frequencies at which the system vibrates naturally (Free vibration). Such systems can also be excited by externally applied mechanical vibration (Forced vibration through electric current). Resonance occurs when the excitation frequency matches with any of the natural frequencies of the system, and may cause severe damage to the system.

A typical example will be an opera singer shattering a wine glass. Here, the sound waves produced by the singer shatter the wine glass due to resonance.

Protective protein shell (Capsid) of viruses is influenced by mechanical excitations in the form of electrical waves, when focused on it.

Excitations tuned to the natural frequency of the virus shell result in resonance. At resonance, for sufficient

wave energy, the protective shell undergoes alternating compression and rarefaction which induce mechanical stress severe enough to shatter the virus shell just like the wine glass. Virus becomes inactive with the destruction of its protective shell.

eMedica has pre-set programmes (specific frequency and charge) for the virus, which is derived post extensive research in the laboratory.

It not only kills the virus, but also enhances the lost cell charge of the body by improving blood circulation, enhancing pH, modulating blood temperature, non-invasively and hence without a side effect.

As most of the antiviral drugs come with a host of side effects with minimal benefits, eMedica smartly has become the healing of choice in the Covid 19 pandemic.

Correcting Cell Parameters :

A viral infection leaves the body with low immunity and general weakness. Even with the SARS Coronavirus, the overall condition of the body remains impaired with lethargy and weakness.



eMedica corrects the cell parameters by charging the low voltage cells, through improved blood circulation. eMedica works on the principle of rejuvenating the external cell by sending appropriate electric current into the body.

It is programmed in the specific frequency, voltage and charge to kill the virus.

By doing so, it modulates blood circulation, thereby maintaining optimum body temperature and pH level in the body ideal for killing the VIRUS.

It boosts the lost cell charge due to infection and increases cell voltage. Thus it recharges all the immune cells.

It helps to detoxify the blood from pus and cell debris, and increases the oxygen carrying red blood cells. The oxygen saturation in the body increases, thus reducing the acidic pH of the body.

By choosing eMedica, we reduce the side effects of the strong antibiotics on our kidneys and gastrointestinal systems.



How eMedica Battles With Bacteria

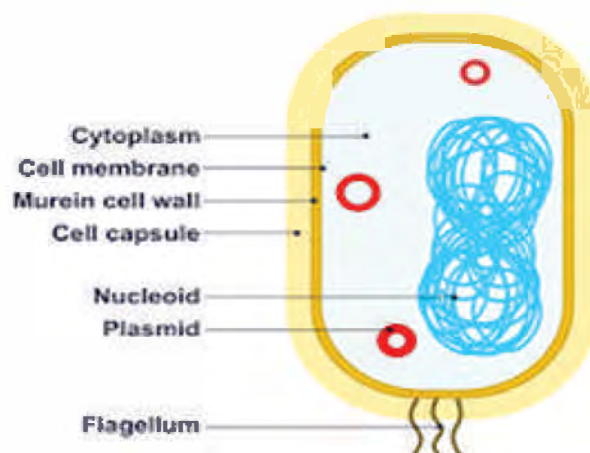
How eMedica Battles With Bacteria

CONTENT:

1. What Bacteria Is.
2. Bacteria Attacking Human Cell.
3. Bacteria Carrying Electric Charge.
4. The Response of the Host to the Bacteria.
5. Bacteria Destroyed by Electric Pulse.
6. The Role of eMedica in Fighting the Bacteria.

1. What is a Bacteria ?

Bacteria are small single-celled organisms. Bacteria are found almost everywhere on Earth and are vital to the planet's ecosystems. Some species can live under extreme conditions of temperature and pressure. The human body is full of bacteria, and in fact is estimated to contain more bacterial cells than human cells. Most bacteria in the body are harmless, and some are even helpful. A relatively small number of species cause disease.



2. How Do Bacteria Attack Human Cells?

A bacterial infection occurs when bacteria enter the body, increase in number, and cause a reaction in the body. Bacteria can enter the body through an opening in your skin, such as a cut or a surgical wound, or through your airway and cause infections like bacterial pneumonia.

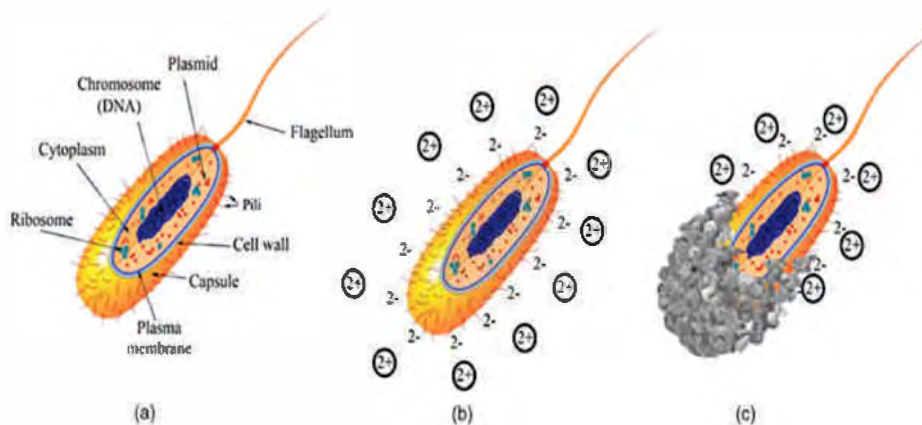
Sometimes bacteria multiply so rapidly they crowd out host tissues and disrupt normal function. Sometimes they kill cells and tissues outright. Sometimes they make toxins that can paralyse, destroy cells' metabolic machinery, or precipitate a massive immune reaction that is itself toxic.

3. Does Bacteria Carry Electric Charge?

A number of investigators have studied the nature of the electric charge of bacteria. Bechhold (1904) was the first to record the fact that bacterial cells carry a negative charge. Cernovodeanu and Henri (1906) studied a larger series of bacteria and reported that all species, except *B. dysenteriae* (Flexner), carried a negative charge; but the claim that the dysentery bacillus is electropositive has been contradicted by Szent-Gyorgi (1921). Since then a number of investigators have reported that bacteria migrate to the anode (Szent-Gyorgi (1921); Putter (1921); Winslow, Falk, and Caulfield (1923); Govaerts (1923)).

In 2011, Cohen et al. revealed electrical spiking in *E. coli* at up to 1 Hz using a fluorescent voltage-indicating protein

Since many kinds of bacterial cell walls are negatively charged, positively charged nanoparticles can strongly interact with a broad spectrum of bacteria via electrostatic interactions.



Charged Cell structure :

Bacteria, based on the structure of their cell walls, are categorised as either gram-negative or gram-positive.

- **Gram Negative bacteria :**

By definition, gram-negative bacteria are bacteria that do not retain the crystal violet stain used in the gram staining method of bacterial differentiation.

Gram-negative bacteria feature two lipid membranes, an outer and a cytoplasmic membrane, with a thin peptidoglycan layer in-between, The outer membrane is heavily populated with lipopolysaccharides (LPS), which have been suggested to protect bacteria from antibiotics. Cell surfaces are negatively charged primarily due to phosphate groups as well as carboxylate groups present in sugar acids.

- **Gram Positive bacteria :**

In bacteriology, gram-positive bacteria are bacteria that give a positive result in the gram stain test, which is traditionally used to quickly classify bacteria into two broad categories according to their type of cell wall.

Gram-positive bacterial cell walls are composed of a thick peptidoglycan layer (15–100 nm) with polymeric teichoic acids, and a cytoplasmic membrane underneath. Cell surfaces are negatively charged, largely due to the teichoic acid polymeric chains which contain anionic phosphate groups in the glycerophosphate repeat units.

The teichoic acid chains, as well as the peptidoglycan layer, are essential for maintaining cellular integrity and have been suggested to be binding sites for divalent cations in solution.

4. The Host Response To The Bacteria :

The body reacts to disease-causing bacteria by increasing local blood flow (inflammation) and sending in cells from the immune system to attack and destroy the bacteria. Antibodies produced by the immune system attach to the bacteria and help in their destruction. They may also inactivate toxins produced by particular pathogens, for example tetanus and diphtheria.

Serious infections can be treated with antibiotics, which work by disrupting the bacterium's metabolic processes, although antibiotic-resistant strains are starting to emerge. Immunisation is available to prevent many important bacterial diseases such as Haemophilus influenzae Type b (Hib), tetanus and whooping cough.

5. Can Electric Pulse Destroy the Bacteria ?

According to a recent study by University of Arkansas, Ultra-low voltage electricity is effective at killing bacteria because it causes membranes that surround bacteria to leak, according to a new study by University of Arkansas researchers. The research advances work to fight drug-resistant bacteria.

Using E. coli bacteria, the team demonstrated that ultra-low voltage applied for 30 minutes created holes in the cell's membrane that allowed leakage of small molecules, ions and proteins both in and out of the cell, killing the bacterium.

While the antimicrobial property of electricity has long been known, it was not completely understood how ultra-low voltages damage and ultimately kill bacteria until this new finding, said Yong Wang, assistant professor of physics and part of the team that published the findings in the journal Applied and Environmental Microbiology. "The electric power we used is very low," said Wang. "A household battery can provide enough power. So can a one-centimetre square solar panel."

Such low voltage could, for example, be used to sterilise a doorknob or other high-touch surfaces that harbour bacteria without causing any harm to users, said Wang. It could also be used to hinder biofilm formation in water purification and storage applications, he added.

<https://news.uark.edu/articles/54413/ultra-low-voltage-proven-effective-at-killing-bacteria-study-finds>

6. The Role of E-Medica in Fighting The Bacteria :

eMedica's technology understands the human physiology in attacking foreign body/antigen and works in sync with the body to fight bacteria.

However, the above action is just the added benefit of the work eMedica does in killing bacteria.

Every physical system has a set of natural frequencies at which the system vibrates naturally (Free vibration). Such systems can also be excited by externally applied mechanical vibration (Forced vibration through electric current). Resonance occurs when the excitation frequency matches with any of the natural frequencies of the system, and may cause severe damage to the system.

E-Medica works on the principle of rejuvenating the external cell by sending appropriate electric current into the body.



It is programmed in the specific frequency, voltage and charge to kill the bacteria.

By doing so, it modulates blood circulation, thereby maintaining optimum body temperature and pH level in the body ideal for killing the bacteria.

It boosts the lost cell charge due to infection and increases cell voltage. Thus it recharges all the immune cells.

It helps to detoxify the blood from pus and cell debris, and increases the oxygen carrying red blood cells. The oxygen saturation in the body increases, thus reducing the acidic pH of the body.

By choosing eMedica, we reduce the side effects of the strong antibiotics on our kidneys and gastrointestinal systems.



How Does eMedica Treats Hypertension

How Does eMedica Treats Hypertension

CONTENT:

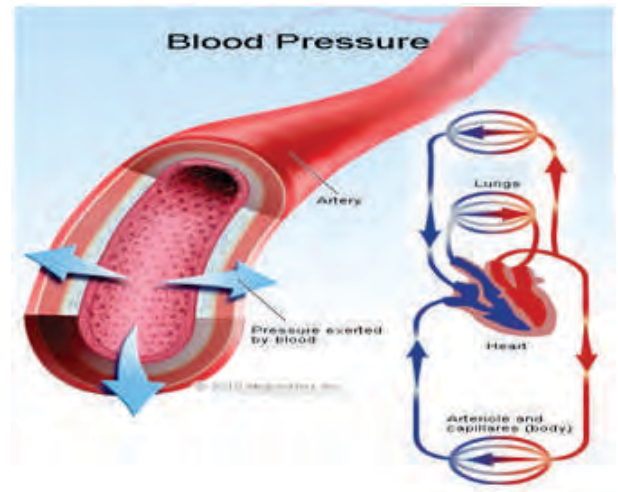
1. What Is Hypertension.
2. Main Factors Influencing Hypertension.

1. What is Hypertension :

It is a long term medical condition in which the blood pressure in the arteries is persistently elevated.

High blood pressure (BP), or hypertension, is defined by two levels by 2017 American College of Cardiology/American Heart Association (ACC/AHA) guidelines:

- (1) elevated BP, with a systolic pressure (SBP) between 120 and 129 mm Hg and diastolic pressure (DBP) less than 80 mm Hg, and
- (2) stage 1 hypertension, with an SBP of 130 to 139 mm Hg or a DBP of 80 to 89 mm Hg.



2. What are the Main Factors that Influences the Blood Pressure?

Blood pressure increases with increased cardiac output, peripheral vascular resistance, volume of blood, viscosity of blood and rigidity of vessel walls.

- A.) Cardiac Output
- B.) Peripheral Vascular Resistance
- C.) Peripheral Vascular Resistance

A. Cardiac Output : Cardiac output is the volume of blood flow from the heart through the ventricles, and is usually measured in litres per minute (L/min). Cardiac output can be calculated by the stroke volume multiplied by the heart rate. Any factor that causes cardiac output to increase, by elevating heart rate or stroke volume or both, will elevate blood pressure and promote blood flow. These factors include sympathetic stimulation, the catecholamines epinephrine and norepinephrine, thyroid hormones, and increased calcium ion levels. Conversely, any factor that decreases cardiac output, by decreasing heart rate or stroke volume or both, will decrease arterial pressure and blood flow. These factors include parasympathetic stimulation, elevated or decreased potassium ion levels, decreased calcium levels, anoxia, and acidosis.

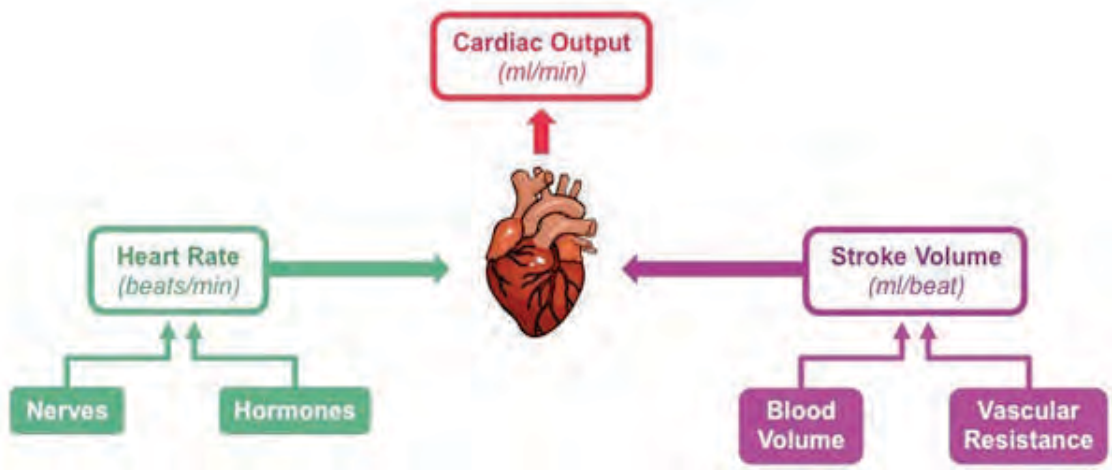
How does E-Medica Work on Cardiac Output?

eMedica works on modulating cardiac output :The most important principle of the circulatory system is to regulate blood flow per the demands of the local tissues.

Electrical stimulation induces sympathetic tone to block vasoconstriction fibres, which inhibits nerve activity and reduces tension in the arterial muscles, improving blood circulation.

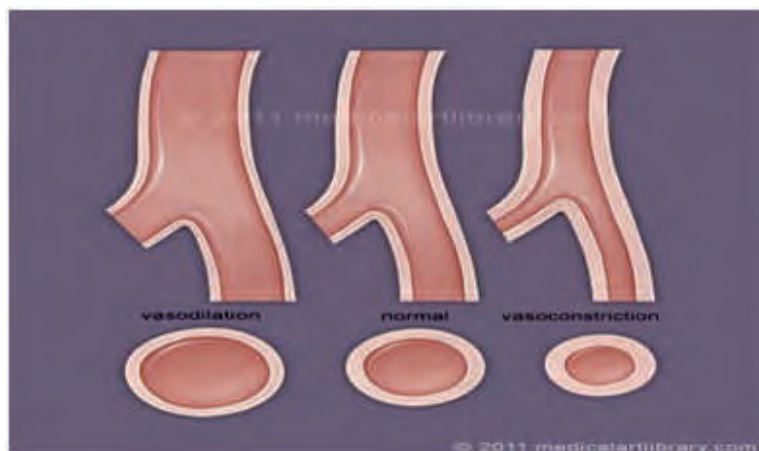
In addition, electrical stimulation is effective at reducing the incidence of cardiac vein thrombus and the risk of pulmonary embolism and increases venous return due to increased venous and muscular tension caused by sympathetic tone.

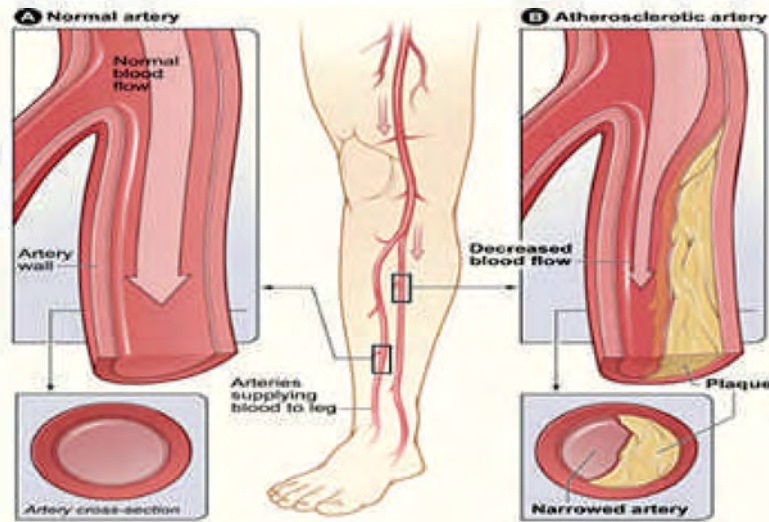
During an elevated blood pressure, the electrons are not accepted by the overcharged cells which are released out of the body with no harm. However, it does reduce blood pressure as it burns the fat (excess layer of cholesterol) around the inner layer of the blood vessel. The electrons bind to the positive calcium ion levels of the body thus reducing the heart beat per minute.



B. Peripheral Vascular Resistance :

Peripheral vascular resistance refers to compliance, which is the ability of any compartment to expand to accommodate increased content. A metal pipe, for example, is not compliant, whereas a balloon is. The greater the compliance of an artery, the more effectively it is able to expand to accommodate surges in blood flow without increased resistance or blood pressure. Veins are more compliant than arteries and can expand to hold more blood. When vascular disease causes stiffening of arteries (e.g., atherosclerosis or arteriosclerosis), compliance is reduced and resistance to blood flow is increased. The result is more turbulence, higher pressure within the vessel, and reduced blood flow. This increases the work of the heart.





How Does E-Medica Work on Modulating Peripheral Vascular Resistance?

eMedica increases the body temperature by a slow and low voltage current, which physiologically causes vasodilation. It causes the widening of your blood vessels, which in turn increases blood flow and lowers blood pressure.

It also burns the excess fat deposit (plaque) in the blood vessels. Thus treating atherosclerosis. (Atherosclerosis is a hardening and narrowing of your arteries caused by cholesterol plaque lining the artery overtime. It can put blood flow at risk as your arteries become blocked).

C. Viscosity Of Blood :

Viscosity of blood is a measure of the blood's thickness and is influenced by the presence of plasma proteins and formed elements in the blood. Blood is viscous and somewhat sticky to the touch. It has a viscosity approximately five times greater than water. Viscosity is a measure of a fluid's thickness or resistance to flow, and is influenced by the presence of the plasma proteins and formed elements within the blood. The viscosity of blood has a dramatic effect on blood pressure and flow. Consider the difference in flow between water and honey. The more viscous honey would demonstrate a greater resistance to flow than the less viscous water. The same principle applies to blood.



E-Medica Work in Lowering Blood Viscosity :

E-medica has proven it before as well through dark field microscopy, which revealed how red blood cells responded to electrical stimulation.

The clamped and less efficient RBC's separated on stimulation, their oxygen saturation increased, which also increased their circulation and mode of delivery.

These "separated" RBC's working in their full capacity, reduce the viscosity of the blood and thus reducing resistance and over all blood pressure.

A Note From eMedica :

eMedica aims to reduce high blood pressure in hypertensive patients. It maintains the normal physiological action in the body without causing any side effects. It is designed at a pre-set frequency and voltage and thus does not disturb the other healthy parameters of the body.



How Does eMedica Reduces Cholesterol

How Does eMedica Reduces Cholesterol

CONTENT:

1. What Is Cholesterol.
 2. Causes Deposition of Cholesterol (Atherosclerosis)
 3. Difference between Atherosclerosis and Arteriosclerosis
 4. Electric Current having an Effect on Cholesterol
 5. E-Medica Helping Reduce Cholesterol
-

1. What is Cholesterol?

Cholesterol : A waxy, fat-like substance made in the liver, and found in the blood and in all cells of the body. Cholesterol is important for good health and is needed for making cell walls, tissues, hormones, vitamin D, and bile acid. Cholesterol also comes from eating foods taken from animals such as egg yolks, meat, and whole-milk dairy products. Too much cholesterol in the blood may build up in blood vessel walls, block blood flow to tissues and organs, and increase the risk of developing heart disease and stroke.

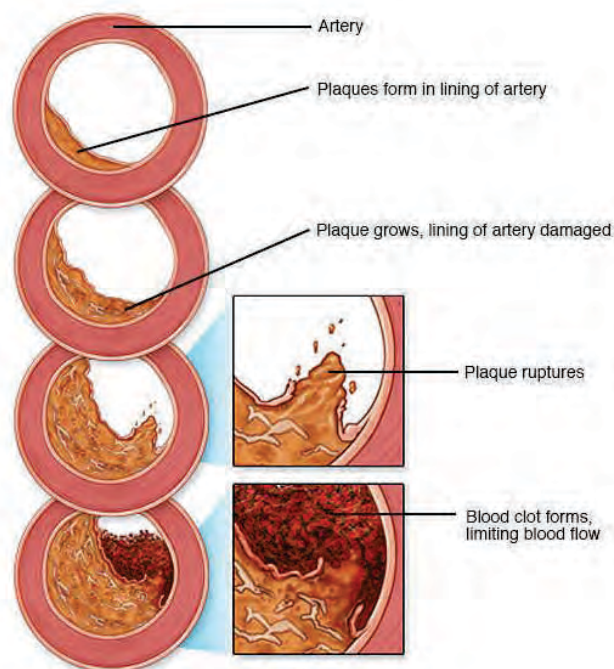
Types of Cholesterol :

Cholesterol is needed by every cell in the human body. Most of it is made in the liver. Only a small proportion comes from our diet. The bloodstream transports cholesterol from the liver to the other organs and tissues in the body. Spare cholesterol is carried back to the liver in the bloodstream. Like fats, cholesterol does not dissolve in water (or blood), so our bodies need a special system to transport it. Cholesterol is packed into tiny parcels in the liver. The parcels are made up of cholesterol, proteins, fats (lipids) and other things in our blood. They can be transported through our bodies in the bloodstream. Because they are mainly made up of lipids and proteins, the parcels are called "lipoproteins." There are two different kinds of lipoproteins, which differ in how densely they are packed:

- "LDL" cholesterol: "LDL" stands for "low-density lipoprotein." This type of parcel transports cholesterol from the liver to the rest of the body. High levels of LDL cholesterol are associated with a higher risk of cardiovascular disease, which is why it is sometimes referred to as "bad" cholesterol.
- "HDL" cholesterol: "HDL" stands for "high-density lipoprotein." This type of parcel transports cholesterol back to the liver from the body's organs and tissues. Because high levels of HDL cholesterol are associated with a lower risk of cardiovascular disease, it is sometimes called "good" cholesterol.

2. What Causes Deposition of Cholesterol (Atherosclerosis)?

Atherosclerosis is the pathologic process of lipid accumulation, scarring, and inflammation in the vascular wall, particularly the subendothelial (intimal) space of arteries, leading to vascular wall thickening, luminal stenosis (narrowing), calcification, and in some cases thrombosis. (Thrombosis is the formation of a blood clot, known as a thrombus, within a blood vessel. It prevents blood from flowing normally through the circulatory system).

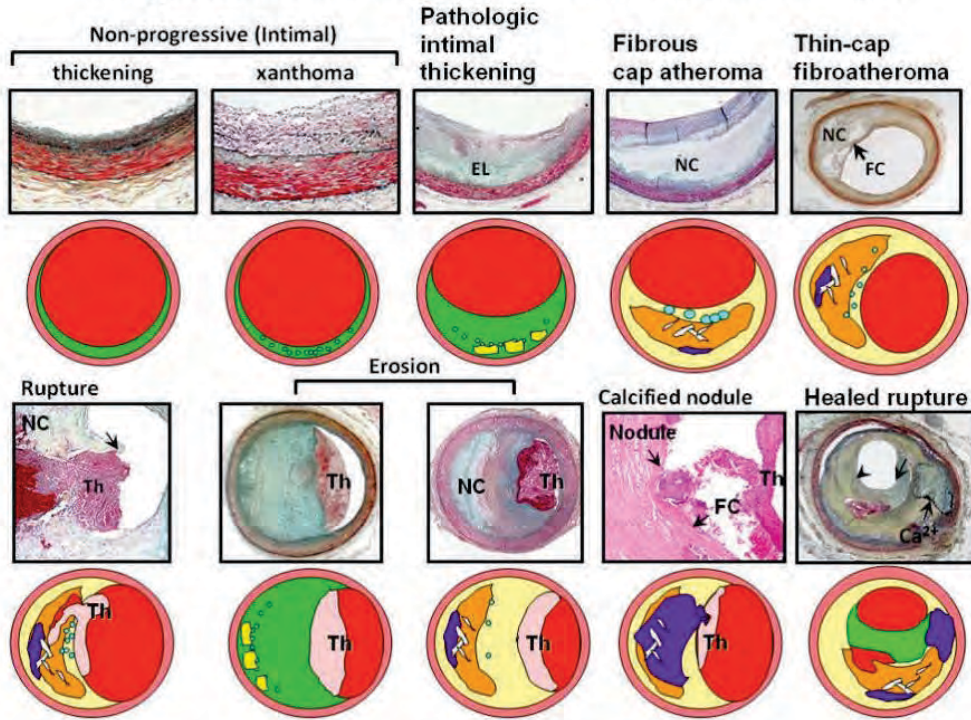


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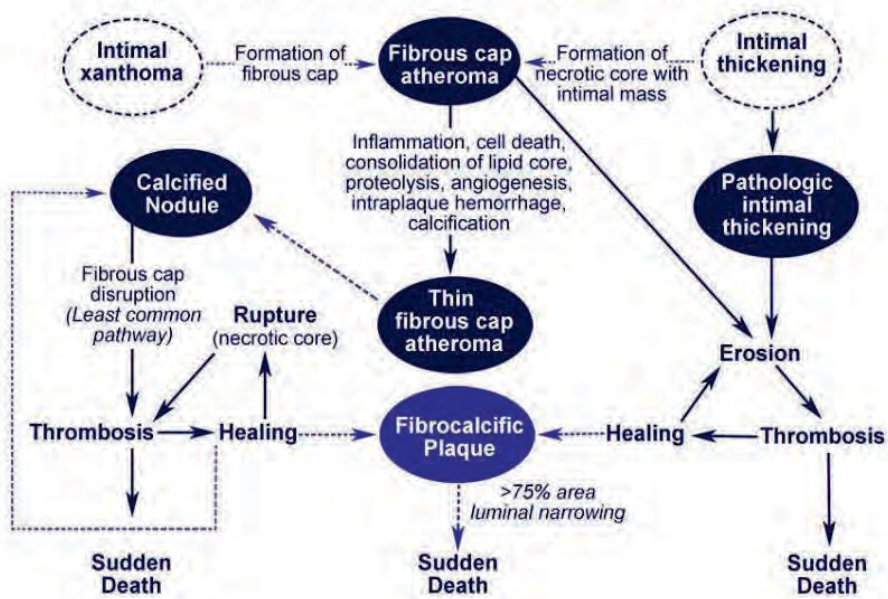
Aetiology

The aetiology of atherosclerosis is unknown, but there are multiple factors that contribute to atherosclerotic plaque progression. These include genetic and acquired factors. Processes involved in atherosclerosis include coagulation, inflammation, lipid metabolism, intimal injury, and smooth muscle cell proliferation (see the image below).

Progression of Human Coronary Atherosclerosis



Simplified scheme for classifying atherosclerotic lesions modified from the current AHA recommendations



3. Difference between Atherosclerosis and Arteriosclerosis?

Arteriosclerosis and atherosclerosis are sometimes used to mean the same thing, but there's a difference between the two terms.

Arteriosclerosis occurs when the blood vessels that carry oxygen and nutrients from your heart to the rest of your body (arteries) become thick and stiff—sometimes restricting blood flow to your organs and tissues. Healthy arteries are flexible and elastic, but over time, the walls in your arteries can harden, a condition commonly called hardening of the arteries.

Atherosclerosis is a specific type of arteriosclerosis.

Atherosclerosis is the build-up of fats, cholesterol and other substances in and on your artery walls. This build-up is called plaque. The plaque can cause your arteries to narrow, blocking blood flow. The plaque can also burst, leading to a blood clot.

Although atherosclerosis is often considered a heart problem, it can affect arteries anywhere in your body. Atherosclerosis can be treated. Healthy lifestyle habits can help prevent atherosclerosis.

Signs and symptoms of atherosclerosis:

The signs and symptoms of coronary artery atherosclerosis include the following:

- Chest pain or pressure
- Jaw pain
- Shortness of breath
- Weakness, fatigue, reduced exertional capacity
- Dizziness, palpitations
- Leg swelling (when left ventricular dysfunction is present)
- Weight gain (when left ventricular dysfunction is present)
- Diaphoresis : sweating, especially to an unusual degree as a symptom of disease or a side effect of a drug.
- Stable angina pectoris : is a type of chest pain that happens when your heart muscle needs more oxygen than usual but it's not getting it at that moment because of heart disease

- Intermittent claudication : is muscle pain that happens when you're active and stops when you rest. It's usually a symptom of blood flow problems like peripheral artery disease
- Tachycardia: (Common in persons with acute coronary syndrome (ACS) and acute myocardial infarction (AMI)) - is the medical term for a heart rate over 100 beats a minute
- Atrial fibrillation : is an irregular and often very rapid heart rhythm (arrhythmia) that can lead to blood clots in the heart
- Ventricular tachycardia or ventricular fibrillation :the lower heart chambers contract in a very rapid and uncoordinated manner.
- High or low blood pressure
- S4 gallop: A common early finding of diastolic dysfunction
- S3 gallop: An indication of reduced left ventricular function and a poor prognostic sign
- Heart murmurs
- Tachypnea : abnormally rapid breathing
- Syncope: Fainting or a sudden temporary loss of consciousness
- Pulmonary edema (in acute cases of myocardial infarction or congestive heart failure)

4. Does Electric Current have an Effect on Cholesterol?

Scientists across the globe are finding out different methods to reduce cholesterol and its proven that

low voltage electric current will reduce the cholesterol intake in the body.

Med Sci Monit. 2003 Aug;9(8):BR302-6.

Low frequency electrical impulses reduce atherosclerosis in cholesterol fed rabbits

Valeria S Cherkasov¹

Affiliations: [+](#) expand

PMID: 12942026

Abstract

Background: This investigation studied whether low frequency electrical impulses (EI) induce or prevent development of new atherosclerotic plaque in previously diseased vessels.

Material/methods: In all rabbits an electrode was sutured to the left psoas major muscle close to the upper part of the abdominal aorta (AA) and a pacemaker was implanted on the opposite side of the AA just below diaphragm. Group 1 received a high cholesterol diet (HCD) to induce atherosclerosis but no EI (control). Euthanasia followed after 3 weeks (series I), 8 weeks (series II) and 11 weeks (series III) of HCD. In series IV animals received HCD alone for 3 weeks then EI was added to the HCD for another 8 weeks (weeks 4-11) at a rate of 30 impulses per minute (IPM) at 3V. Euthanasia followed after 11 weeks. Atherosclerotic thickness grades were assigned using a 0 (low) to 4 (high) grading system and the surface area involved in disease was calculated.

Results: In control rabbits, after 11 weeks of HCD atherosclerotic thickness grade in lower abdominal aorta was 1.68 +/- 0.25. In rabbits exposed to EI (30 IPM at 3V) this grade was 0.5 +/- 0.37 (p<0.05). The involved surface area was only 8.5 +/- 4.89% (series IV) vs. 32.5 +/- 4.0 % in control.

Conclusions: When applied near the AA, electrical impulses (30 IPM at 3V) decrease atherosclerotic deposits despite continuation of a high cholesterol diet.

Though the above experiment was done invasively, eMedica with its unique pre-set frequency, charge and voltage is specifically designed to lower high cholesterol in the body, works non-invasively and claims no side effects.

5. How Does E-Medica Help Reduce Cholesterol?

1. eMedica increases the body temperature to an optimum range which activates the enzymes needed for faster metabolism, thus burning off the stored fat in the body.
2. The flow of electrons via the blood vessels burn the deposited cholesterol inside the lumen clearing the blockages and the plaque.
3. eMedica works on low voltage current and frequency, it charges the adipose (fat storing cells) of the body, which have become lethargic/dormant due to excess deposition of the fats.
4. These excited cells are able to metabolise the lipoproteins by energy generated from the charged electrons.
5. The electrons flowing through the device in the body bind with the free radicals present in the LDL cholesterol (bad cholesterol), it stops the excessive oxidation of LDL in the body, thus reducing plaque formation in the arteries.
6. Various researchers have proved that many metabolic diseases like dyslipidaemia and diabetes mellitus have a direct relation with electrolyte imbalance in the body. Electrolytes are charged ions and they maintain a proper osmotic balance inside the body essential for higher metabolic rate. eMedica helps by sharing negative ions and maintains the lost electrolyte balance. Thus it helps in digestion of lipids in the long run.



How E-medica Treats Diabetes

How E-medica Treats Diabetes

CONTENT:

1. Types Of Diabetes
2. Beta Cells Generating Insulin
3. Beta Cells Carrying Electrical Charge
4. Cause Of Insulin Resistance
5. Diabetes Causing Cancer
6. Diabetes Causing Cardiac Arrest
7. Diabetes Causing Kidney Failure
8. Diabetes Reduces Blood Flow
9. How eMedica TREATS DIABETES
 - a. eMedica Prevents Cardiac Arrest
 - b. eMedica Prevents Kidney Failure
 - c. eMedica Prevents Cancer

1. Diabetes: Type 1 diabetes, & Type 2 diabetes,

Type 1 diabetes :

With Type 1 diabetes, the pancreas doesn't make insulin or makes very little insulin. Insulin helps blood sugar enter the cells in your body as energy. Without insulin, blood sugar can't get into the cells and spread in the bloodstream. High blood sugar, is damaging to the body and causes many of the symptoms and complications of diabetes. The immune system destroys cells that make the hormone that controls blood sugar levels. It is an auto immune condition.

Type 1 diabetes was once called insulin-dependent or juvenile diabetes. It usually develops in children, teens, and young adults, but it can happen at any age.

Type 2 diabetes

Type 2 diabetes, the most common type of diabetes, is a disease that occurs when your blood glucose, also called blood sugar, is too high. Blood glucose, is your main source of energy and comes mainly from the food you eat. Insulin, a hormone made by the pancreas, helps glucose get into your cells to be used as energy. In type 2 diabetes, your body doesn't make enough insulin or doesn't use insulin well. Too much glucose then stays in your blood, and not enough reaches your cells.

2. How do β -cell Help In Generation Of Insulin?

Beta cells (β -cells) are a type of cells, found in pancreatic islets that synthesize and secrete insulin and amylin. Beta cells make up 50–70% of the cells in human islets. In patients with Type 1 diabetes, beta-cell mass and function are diminished, leading to insufficient insulin secretion and hyperglycaemia.

The pancreatic β -cell plays a key role in glucose homeostasis by secreting insulin, the only hormone capable of lowering the blood glucose concentration. Impaired insulin secretion.

3. Do β -cell Carry Electrical Charge?

Electricity is everywhere, even in the human body. Our entire body is electrified. Our cells are specialized to conduct electrical currents. Electricity is required for the nervous system to send signals throughout the body and to the brain, making it possible for us to move, think and feel.

4. Does Fat Deposition Cause Insulin Resistance?

These reports suggest that visceral adipose tissue and ectopic fat deposition play an important role in development of insulin resistance in human obesity independently of total body fat mass.

5. Could Diabetes Be the Cause For Cancer

The hormone insulin, used to control blood sugar levels in diabetes patients, also stimulates cell growth, which may increase the risk of cancer. The fatty tissue in overweight people produces adipokines at higher levels. These hormones may cause inflammation causing another risk factor for cancer.

6. Could Diabetes Be The Cause Cardiac Arrest ?

High blood sugar levels can change your consistency of the blood. According to Health.com, the excess sugar could cause your blood to be less runny and more of a thick, viscous consistency. As a result, your extremities might get numb and certain organs may suffer, because blood isn't easily flowing to them, A heart attack occurs when the flow of blood to the heart is blocked. The blockage is most often a build-up of fat, cholesterol and other substances, which form a plaque in the arteries that feed the heart coronary

arteries.

7. Could Long-Term Medication Cause Kidney Failure ?

Diabetes is the leading cause of kidney disease. About 1 of 3 adults with diabetes, suffer from kidney (Renal) disease. The main job of the kidneys is to filter wastes and extra water out of your blood in the form of urine. Your kidneys also help control blood pressure and make hormones that your body needs, to stay healthy.

8. Could Diabetes Reduce the Blood Flow In The Human Body ?

Excess blood sugar decreases the elasticity of blood vessels and causes them to narrow down, impeding blood flow. This can lead to a reduced supply of blood and oxygen. Increasing the risk of high blood pressure and damage to large and small blood vessels.

9. HOW CAN EMEDICA HELP ?

(eMedica modulates the electromagnetic frequency of a human body to its optimal potential. It treats various diseases in the human body by correcting the cell parameters using a dedicated & specified frequency, voltage and current for each disease).

eMedica device uses a diabetes program (as preprogrammed & fed in the device), at a specified frequency, voltage & current (for diabetes).

- eMedica device transmits specific voltages and frequencies with the specific electric charge into the human body. As this 3-dimensional technology passed through the blood stream, it enhances the charge of the β -cell in the pancreas, which in-turn improves the function of the organ helping it to produce more insulin.
- As a specific combination of voltage-frequency-current is passed through the blood stream, it burns the fat/deposit/plaque from the blood vessel. This allows the insulin generated from the (β -cell) pancreas to penetrate into the blood cells. As the natural insulin (produced by β -cell) reached the blood stream it immediately balances the Blood Sugar Level, hence controlling diabetes.

a. Preventing Cardiac Arrest: As we know the deposits/ plaques which is accumulated on the walls of the arteries can narrow or completely block the arteries, which effects the whole body and results in

causing a cardiac arrest. The eMedica device infuses a specific electric charge with a specific frequency & voltage in the body. This process increases the blood temperature to a certain level. The heat produced due to the temperature burns the deposits/ plaques built upon the walls of the arteries. When the deposits/plaques are reduced & eventually removed from the blood stream, it eliminates the chances of a cardiac arrest.

b. Preventing Cancer : Due to various external reasons the cell charge of the organ gradually reduces and becomes positively charged. If the cells of any organ go up-to or above +30, the cell turns into a Cancer cell. With eMedica the negative electrons are infused in the body, which enhances the cell charging into a negatively charged cell. As the cell charge is improved, it eventually improves the process of oxygen absorption in the blood-cells and blood circulation is elevated to its optimum level. This reduces clumping of the cells. So, the negatively charged & healthy cells prevent & reduce the chances of Cancer in the body.

c. Preventing Kidney Failure : Diabetes and high blood pressure are the two most common causes of kidney failure. The kidney disorder can be due to various reasons like- (1.) due to toxic exposure of environmental pollutant & certain medicines (especially diabetic & blood pressure medications); (2.) due to insufficient blood flow to the kidney, (3.) severe dehydration etc. When eMedica Device is used constantly, it reduces the side-effects of the harsh diabetic medications on the kidney. Hence the stress level on the kidney is highly reduced. While using the device the oxygen is rightly passed through kidney cells and they perform with their optimal efficiency. Therefore the chances of Kidney failure are reduced to a great extent.

PLEASE NOTE:

E Medica is a great support system for a Diabetic Patients.

It Prevents from Cancer,

Reduces possibilities of Cardiac Arrest,

Improves Blood Circulation & Oxygenation,

Reduces the Stress of Medication, in-turns Reduces chances of Kidney Failure.



How Does eMedica Removes Heart Blockages

How Does eMedica Removes Heart Blockages

CONTENT:

1. Heart Blockage
2. Electrical System of the Heart
3. How does the heart create a "Beat"?
4. What is a "block" in the Heart ?
5. What are the Symptoms of Heart Block?
6. How does E-Medica Help in Treating Heart Block?

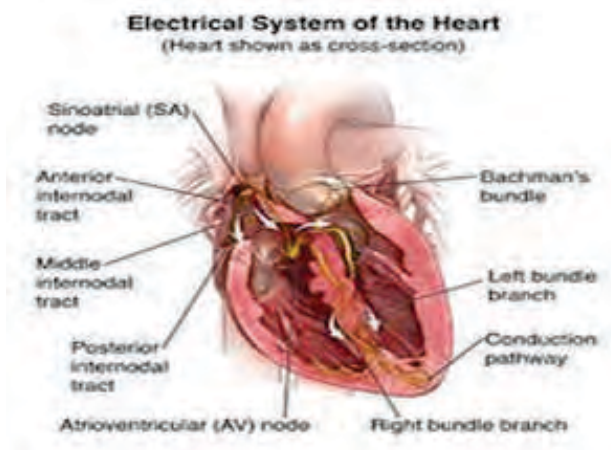
1. What is Heart Block?

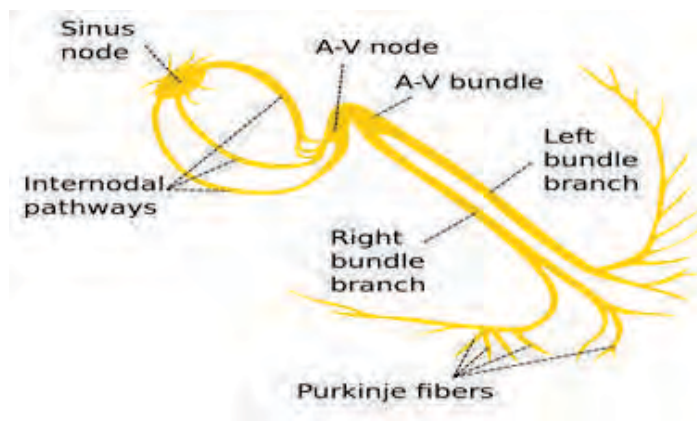
Atrioventricular (AV) block commonly known as heart block is an interruption or delay of electrical conduction from the atria to the ventricles due to conduction system abnormalities in the AV node or the His-Purkinje system. Conduction delay or block can be physiologic if the atrial rate is abnormally fast or pathologic at normal atrial rates. AV block is generally defined based on a regular atrial rhythm.

2. What is the Electrical System of the Heart?

Cells in the cardiac conduction system (cardiomyocytes) can generate electrical impulses and then distribute the signal throughout your heart. While all cells in your heart can conduct electricity, the cells in this system conduct it at very specific speeds.

The purpose of the electrical system of the heart is to coordinate the pumping of the four chambers of the heart and to control the heart rate so that the heart speeds up and slows down as the demands of the body change.





Sino Atrial Node :

The sinoatrial node (SA node) : It is a specialised myocardial structure that initiates the electrical impulses to stimulate contraction, and is found in the atrial wall at the junction of superior caval vein and the right atrium.

Internodal Pathway : Internodal pathways are the connecting pathways that form a direct connection between the sinoatrial node and the atrioventricular node in the right atrium of the heart.

The atrioventricular node (AVN) : The atrioventricular node or AV node electrically connects the heart's atria and ventricles to coordinate beating in the top of the heart; it is part of the electrical conduction system of the heart. The AV node lies at the lower back section of the interatrial septum near the opening of the coronary sinus, and conducts the normal electrical impulse from the atria to the ventricles. It is a complex structure that performs a variety of functions in the heart. The AVN is primarily an electrical gatekeeper between the atria and ventricles and introduces a delay between atrial and ventricular excitation, allowing for efficient ventricular filling.

The atrioventricular bundle (A-v bundle) : It is the extension of the atrioventricular node from the atrium across the fibrous skeleton of the heart to the ventricles. It passes from the anterior and inferior part of the AVN as a group of specialised myocytes within an insulating sheath of connective tissue.

The left bundle branch : The left bundle branch of the cardiac conduction system is the continuation of conducting fibres from the atrioventricular bundle of His. It forms within the interventricular septum at the junction of the membranous and muscular parts.

The right bundle : The right bundle branch of the cardiac conduction system is the continuation of conducting fibres from the atrioventricular bundle of His. It forms within the interventricular septum at the junction of the membranous and muscular parts. It runs to the right within the muscular part of the septum as a fine tract.

Bundle of His : The bundle of His is named after its discoverer, German cardiologist Wilhelm His (1836–1934). They are specialised heart muscle cells that transmit electrical impulses from the AV node in the heart to the muscle cells of the heart wall, which contract in response producing the heart beat.

Purkinje fibres : Also known as Purkinje cardiomyocytes are part of the whole complex of the cardiac conduction system, which is today classified as specific heart muscle tissue responsible for the generation of the heart impulses.

3. How does the heart create a “Beat”?

- In normal hearts, a natural pacemaker that tells the heart when to beat is present. The master pacemaker called the sinoatrial (SA), or sinus node is located in the right atrium and acts like a spark plug that fires in a rhythmic, regular pattern to regulate the heart’s rhythm. It sends signals to the rest of the heart so the muscles will contract properly.
- First, as soon as the signal is sent, the atrium contracts. The electrical signal from the sinus node spreads through the atria, like a pebble dropped into a pool of water.
- Next, the signal travels to the area that connects the atria with the ventricles. This connection is critical because without it, the signal would never reach the ventricles, the main pumping chambers of the heart.
- The electrical signal then reaches another natural pacemaker called the atrioventricular node (AV node). As the signal continues and crosses to the ventricles, it passes through the bundle of His.
- The bundle divides into wire-like thin structures called bundle branches that extend into the left and right ventricles. The electrical signal travels down the bundle branches to thin fibres.
- Finally, these fibres send out the signal to the muscles of the ventricles, which cause them to contract and pump blood into the arteries

- In a normal heart, these electrical signals occur about once every second, and maintain the steady, rhythmic pattern of the heart's beat.

Although the heart generates its own beat, the heart rate and strength of contraction of the heart are modified by the sympathetic and parasympathetic divisions of the autonomic nervous system.

The sympathetic system acts as an accelerator, speeding up and increasing the contractile force of the heart. Whenever oxygen demands increase, e.g. during exercise or if blood pressure drops, the sympathetic input increases, causing heart rate and strength of contraction to increase. Sympathetic influence increases during inhalation.

The parasympathetic input acts like a brake, slowing down the heart. When you relax, the parasympathetic input becomes dominant and the heart rate slows. Parasympathetic influence increases during exhalation.

4. How is the Heart Able to Generate its Own Electric Potential?

Cardiomyocytes are the cells responsible for generating contractile force in the intact heart. Specialised cardiomyocytes (Pacemaker cells) have the unique property of being able to generate action potentials spontaneously (i.e. without input from the nervous system). They can generate an action potential because their **resting membrane potential (-60mV) is unstable**.

Electrophysiology of the heart:

The normal sequence and synchronous contraction of the atria and ventricles require the rapid activation of groups of cardiac cells. An activation mechanism must enable rapid changes in heart rate and also respond to the changes in autonomic tone. The propagating cardiac action potential fulfills these roles.

Because the membrane potential never "rests" it is called a pacemaker potential.

This potential exists because the pacemaker cells have unusual channels that are permeable to both Na⁺ and K⁺.

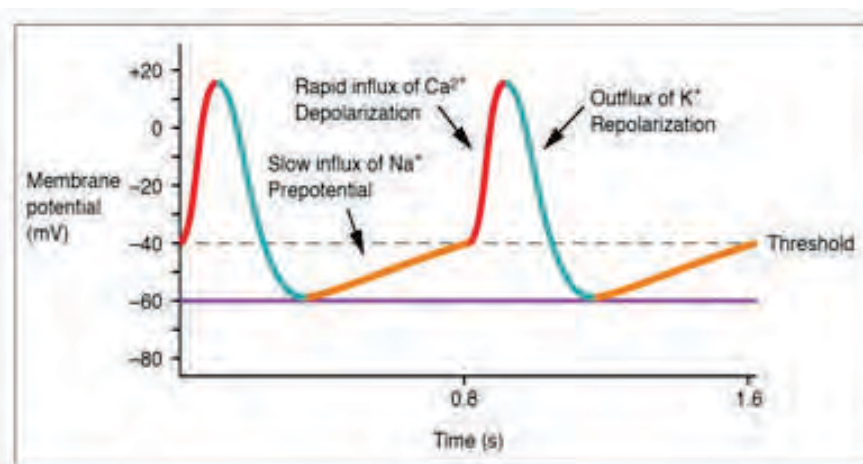
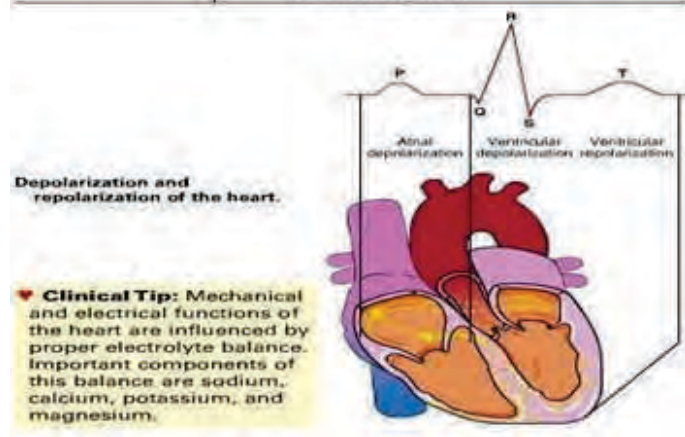
When the channel opens, the influx of Na⁺ exceeds the efflux of K⁺ and the net influx of positive charges slowly depolarizes the cell.

As the membrane potential becomes more positive, the channels close and the Ca^{++} (L and T) channels open transiently, which further depolarizes the cell.

When the threshold potential is reached, a burst of Ca^{++} L channels open, more Ca^{++} rushes in, and a steep phase of depolarization occurs.

At the peak of the action potential, K^+ channels open, K^+ rushes out of the cell and the cell repolarizes.

Depolarization	The electrical charge of a cell is altered by a shift of electrolytes on either side of the cell membrane. This change stimulates muscle fiber to contract.
Repolarization	Chemical pumps re-establish an internal negative charge as the cells return to their resting state.



5. What is a “block” in the Heart?

Heart block, also called AV block, is when the electrical signal that controls your heartbeat is partially or completely blocked. This makes your heart beat slowly or skip beats and your heart can't pump blood effectively.

Degenerative changes (eg. fibrosis, calcification, or infiltration) are the most common cause of nonischemic AV block. Idiopathic fibrosis or calcification of the AV conduction system, commonly seen in the elderly, can cause complete AV block.

OTHER CAUSES INCLUDE:

- Ischemia
- Degenerative changes
- Infection (myocarditis) and infiltrative processes such as Lyme disease and sarcoidosis
- Drugs (beta blockers, calcium antagonists) that slow AV nodal or block His-Purkinje (eg, procainamide, flecainide) conduction or lengthen AV node refractoriness
- Bezold-Jarisch reflex: An inferior myocardial infarction may cause a temporarily increased vagal tone leading to transient Mobitz I or complete AV block.

Types of heart block:

- i. First-degree heart block. This is the least severe. The electrical signals slow down as they move from your atria to your ventricles. But they continue to reach the ventricles.
- ii. without interruption. You generally don't need any treatment for first-degree heart block.
- iii. Second-degree heart block. This means that the electrical signals between your atria and ventricles can intermittently fail to conduct. There are 2 types of second-degree heart block:
 - a. Mobitz type I. The electrical signals get slower and slower between beats. Over time your heart drops a beat and then the process repeats.
 - b. Mobitz type II. The electrical signals sometimes get to the ventricles, and sometimes they don't. There is no progressive slowing of the electrical signal. This type of heart block can often progress to third-degree heart block.

iv. Third-degree heart block (complete heart block). This is the most severe. In this type of block, electrical signals don't pass from your atria to your ventricles at all for periods of time. There is a complete failure of electrical conduction. This can result in no pulse or a very slow pulse if a backup heart rate is present.

6. What are the Symptoms of Heart Block?

Symptoms depend on the type of heart block you have: First-degree heart block may have no symptoms.

Second-degree heart block might cause:

- Dizziness
- Fainting
- The feeling that your heart pauses for a beat
- Trouble breathing or shortness of breath
- Nausea
- Severe tiredness (fatigue)

Third-degree heart block can be fatal. In addition to the symptoms above, it might cause:

- Intense tiredness
- Irregular heartbeats
- Cardiac arrest

7. How does E-Medica Help in Treating Heart Block?

eMedica sends a mild pulse of negative electrons which maintains the resting membrane potential of the heart.

It is important to note here that the ongoing current and charge flowing during the healing process is designed to work on the cardiovascular system by the scientist. It causes no side effect to the heart rate in any

manner.

eMedica is an electronic medical device, which sends very low and optimal voltage & a mild current with dedicated frequency to charge the cardiomyocytes.

eMedica, with its very low electric current of about 20 mA, increases the temperature of the blocked signal, which burns the deposited plaque (either made of cholesterol, calcium or fibrin) and clears the pathway of the electrical stimulation. Thus, reducing the block percentage and maintaining optimum cardiac output.

It maintains optimum blood flow to the heart and the electrolyte balance of the blood by maintaining the pH of the blood. It is a very important role as all the important electrolytes working as ions, Na⁺, K⁺, Mg⁺ and Ca⁺ are necessary for maintaining the heart rhythm, thereby the risk of heart attack is reduced in patients with heart block. (Electrolytes are substances that help trigger and sustain the heart's electrical impulses. Potassium, sodium, calcium, and magnesium are necessary electrolytes in the blood that are vital to cell function)

It controls the influx of calcium channels thus avoiding the extended depolarization of the heart. (Due to external supply of negative electrons, the overall time required for the cycle is maintained in cardiovascular patients)

eMedica detoxifies the blood from the free radicals by adding electrons to these free protons, thus neutralising them, it will simultaneously increase the antioxidants and oxygen capacity of the cells, thus revitalising the cells of the heart.



How eMedica Treats Asthma

How eMedica Treats Asthma

WHAT IS ASTHMA : A condition in which a person's airways become inflamed, narrow and swollen and sometimes may also produce extra mucus, which makes it difficult to breathe.

CAUSES OF ASTHMA: Asthma can happen due to various reasons. It can be due to a combination of environmental and inherited (genetic) factors. Exposure to various irritants and substances that triggers allergies. That in-turn triggers the signs of asthma. Asthma triggers are different from person to person. It could be due to:

- Airborne allergens (dust, pollen, pet particles, pest waste etc.)
- Respiratory infections, such as the common cold
- Cold air
- Air pollutants and irritants, such as smoke
- Strong emotions and stress

HOW EMEDICA CAN HELP :

eMedica device uses the lungs program (*as preprogrammed & fed in the device*), the specified frequency, voltage & current (*for asthma*) reaches out to the EPITHELIAL Cells of the Organ- LUNGS and starts to recharge **the cells and oxygenates blood**.

Due to the external conditions when our body gets effected in various ways, the **airway pipe** gets effected and due to infection, it gets inflamed and the pipe swells & gets narrowed. This results in producing extra mucus and the **breathing becomes difficult**.

At this stage to **treat Asthma naturally eMedica** with its specified frequency, voltage & current with its Non-Invasive technology, targets the **epithelial cells and starts to recharge**, the recharged cells works at its **optimal efficiency and reduces the Inflammation and swelling** of the airway pipe, which helps in passing the inhaled oxygen to the lungs freely.

During this process the technology in eMedica with its **immunity programme** it helps to increase the immunity which prevents further infections and also protects from allergens.

eMedica is apt for the Asthmatic Patients.



How would eMedica Treats Parkinson

How would eMedica Treats Parkinson

CONTENT:

1. About Parkinson
2. Cause of Neurodegeneration
3. About Substantia Nigra
4. About Neuromelanin
5. About Dopamine
6. Neuronal pathways for Motor Control
7. How eMedica Helps Treating Parkinson

1. What is Parkinson's disease?

Parkinson's disease (PD) is a neurodegenerative disorder that affects predominantly dopamine-producing ("dopaminergic") neurons in a specific area of the brain called substantia nigra.

PD is one of the most common neurologic disorders, affecting approximately 1% of individuals older than 60 years and causing progressive disability that can be slowed, but not halted, by treatment.

2. Cause of Neurodegeneration?

Only an extremely small proportion (less than 5%) of neurodegenerative diseases are caused by genetic mutations. The remainder are thought to be caused by the following:

- A build-up of toxic proteins in the brain
- A loss of mitochondrial function that leads to the creation of neurotoxic molecules
- A common crossroad in multiple mechanisms of neurodegeneration is an impairment of iron homeostasis, a condition affected by several factors including ageing, mitochondrial dysfunction, oxidative stress, protein aggregation, etc. The increased accumulation of iron in specific brain regions (neuromelanin deposit in the substantia nigra) observed in normal ageing is enhanced in many neurodegenerative diseases (Rouault 2013; Ward et al., 2014), and is often associated with oxidative stress and cellular damage.

3. What is Substantia nigra?

Substantia nigra (latin name - black substance)- made of basal ganglia. Substantia nigra along with four other nuclei, is a part of the largest nucleus in midbrain.

Humans have two substantia nigra one on each side of the midline

It appears dark due to neuro melanin (formed of dopaminergic cells).

- **Substantia Nigra is made up of two parts :**
- o **Pars Reticulata :** The pars reticulata of the substantia nigra is an important processing centre in the basal

ganglia. The GABAergic neurons in the pars reticulata convey the final processed signals of the basal ganglia to the thalamus and superior colliculus. In addition, the pars reticulata also inhibits dopaminergic activity in the pars compacta via axon collaterals.

- o **Pars Compacta** : The most prominent function of the pars compacta is motor control, though the substantia nigra's role in motor control is indirect; electrical stimulation of the substantia nigra does not result in movement, due to mediation of the striatum in the nigral influence of movement.

4. What is Neuromelanin?

Neuromelanin is found in large quantities in catecholaminergic cells (group of cells that contain neurotransmitters or norepinephrine)

It protects neurons from iron induced oxidative stress and increases with age.

Cell death in substantia nigra is partially due to oxidative stress. The oxidation is relieved by neuro melanin.

Even the excess of dopamine produced is phagocytosed and stored as neuromelanin.

Thus the 2 major neuropathologic findings in Parkinson disease are loss of pigmented dopaminergic neurons (neuromelanin) of the substantia nigra pars compacta and the presence of Lewy bodies and Lewy neurites.

5. What is Dopamine?

Dopamine is a monoamine neurotransmitter that belongs to the catecholamine family; the catecholamine family includes dopamine, norepinephrine, and epinephrine. Dopamine is mainly produced in the nervous system and adrenal medulla; it plays a role in many brain functions like behaviour and cognition.

6. Effects of Dopamine :

Aside from its "feel good" function, dopamine is involved in many body functions. These include:
blood flow

1. Digestion
2. Executive functioning
3. Heart and kidney function
4. Memory and focus
5. Mood and emotions
6. Motor control
7. Pain processing
8. Pancreatic function and insulin regulation

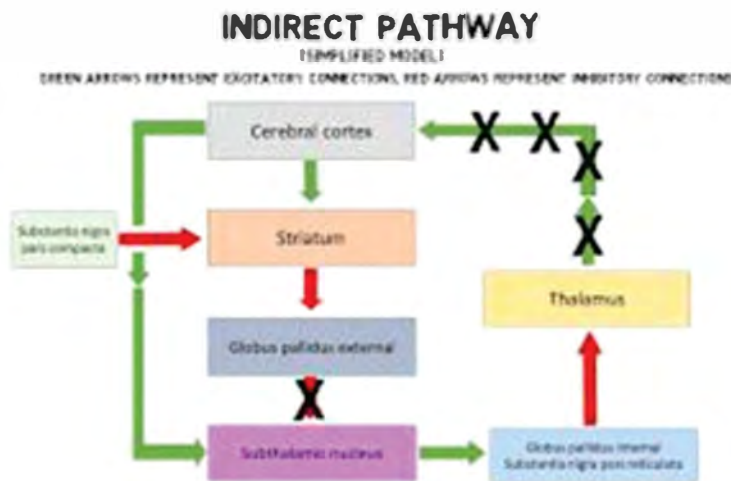
9. Pleasure and reward seeking behaviour
10. Sleep
11. Stress response

• **Dopamine Producing Areas :**

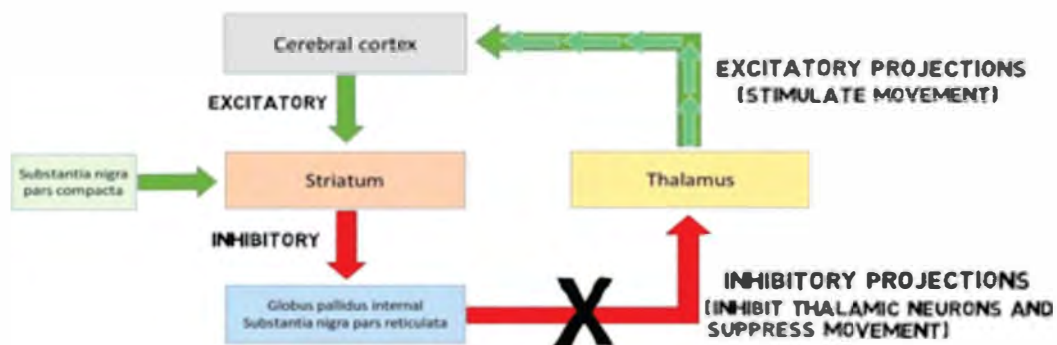
1. Ventral Tegmental Area
2. Substantia Nigra
3. Hypothalamus
4. Olfactory Bulb Area
5. Retina

6. Neuronal pathways for Motor Control :

1. The GABAergic neurons of the pars reticulata spontaneously fire action potentials. In rats, the frequency of action potentials is roughly 25 Hz. The purpose of these spontaneous action potentials is to inhibit targets of the basal ganglia, and decreases in inhibition are associated with movement.
2. The subthalamic nucleus gives excitatory input that modulates the rate of firing of these spontaneous action potentials. However, lesion of the subthalamic nucleus leads to only a 20% decrease in pars reticulata firing rate, suggesting that the generation of action potentials in the pars reticulata is largely autonomous,
3. The pars compacta is heavily involved in learned responses to stimuli. In primates, dopaminergic neuron activity increases in the nigrostriatal pathway when a new stimulus is presented. Dopaminergic activity decreases with repeated stimulus presentation. However, behaviorally significant stimulus presentation (i.e. rewards) continues to activate dopaminergic neurons in the substantia nigra pars compacta.



DIRECT PATHWAY (SIMPLIFIED MODEL)



7. How will eMedica help Treating Parkinson?

Parkinson's essentially is inability of the body to initiate movement, which is due to lack of dopamine and disturbance in the direct and the indirect pathway which controls the motor activity of the brain.

eMedica enhances cell potency by charging the nerve cells which will excite the striatum of the substantia nigra to send inhibitory impulse to the GABAergic neurons, helping control the involuntary movements and enhancing the dopamine circuit to perform better.



How eMedica Helps In Healing Male Genital Dysfuction

How eMedica Helps In Healing Male Genital Dysfunction

Erectile dysfunction, or ED, is when it is hard to get or keep an erection that's firm enough for sex. ED affects as many as 30 million men.

An erection begins with sensory and mental stimulation. During sexual arousal, nerve messages begin to stimulate the genital. Impulses from the brain and local nerves cause the muscles of the corpora cavernosa to relax, allowing blood to flow in and fill the open spaces.

Our entire Body Is electrified. Each cell in our body has a voltage. The elements like sodium, potassium, calcium, and magnesium carry a specific electrical charge. **Almost all of our cells can use these charged elements, called ions, to generate electricity.**

A disruption in electrical parameters in the cells of our body can lead to illness.

1. Does a Sperm Cell have a Electric Charge?

- Yes, it does. Sperm can have different electric charges depending on their chromosome status, whether they are X (+ve charge) or Y (-ve charge). The sperm of infertile men frequently have an isoelectric point (neither + or -) set consistently higher compared to fertile men.

2. Does a Nerve Cell have a Electric Charge?

- Nerve cells generate electrical signals that transmit information. Although neurons are not intrinsically good conductors of electricity, they have evolved elaborate mechanisms for generating electrical signals based on the flow of ions across their plasma membranes.

3. Does a Muscle Cell have a Electric Charge?

- Your body uses electricity to communicate and control parts of the body. Though all cells have ionic gradients across their membranes, the most well-known organ systems that use electricity are the brain, the muscles, and the heart.

4. Does Improved blood circulation to your genital improve erection?

- Increased blood flow in the genital causes stronger erections of greater duration. Some men experience enhanced tissue growth, meaning that the right amount of blood flow and optimal charge of the cell increases the size of the genital.

HOW EMEDICA CAN HELP:

eMedica device uses the **male genital dysfunction** program (*as preprogrammed & fed in the device*), the specified frequency, voltage & current.

- 1) Enhancing the nerve, sperm & muscle cell charge with specific voltages and frequency, it in-turn **improves the function of the organ,**
- 2) Burning the blood fat from the vessel of the cell using mild current **improves blood circulation.**
- 3) Enhancing the blood cell charge infusing negative electrons **would improve the cell charge of the organ, which improves oxygen levels within the cells and reduces clumping of the cells.**

**E Medica is a Great Support System for
Healing Male Genital Dysfunction.**

**In Addition, eMedica Prevents Cardiac Arrest,
Improves Blood Circulation,
Reduces the Stress of Medication which in-turn Reduces Chances of
Kidney Failure**

Certificates

Certificate of Compliance

North Directive (2006/95/EC) of the European Parliament and of the Council on the restriction of use of certain hazardous substances in electrical and electronic equipment.

Certificate No. ROHS-SAPP-20-0700155

Manufacturer
Name: SWATANTRA POWER PRIVATE LIMITED
Address: 201, MANISH PLAZA, OPP. BHARAMA MAJESTIC, N.I.B.M RD, KONDHWA KHURD, PUNE-411048, MAHARASHTRA, INDIA
FACTORY ADDRESS: GATE NO. 37, KHED SHIVAPUR-SASWAD ROAD, OFF PUNE SATARA HIGHWAY, KASURDI KHEDEBADI, TAL. BHOR, PUNE-412205, MAHARASHTRA, INDIA
Product: MANUFACTURER OF ELECTRONIC MEDICAL DEVICE E-MEDICA™

This is to certify that the above mentioned products, in compliance with North Directive (2006/95/EC) of the European Parliament and of the Council on the restriction of use of certain hazardous substances (Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent Chromium (Cr6+), Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE)) in Electrical and Electronic Equipments.

RoHS compliant

Authorized Signatory

QA Certification
Cellular, Repetitive, 30 Ratings, 5000
This certificate is valid for three years from the date of issue of this certificate. The certificate is valid only for the product and the manufacturer mentioned in this certificate. The certificate is not valid for any other product or manufacturer. The certificate is not valid for any other product or manufacturer. The certificate is not valid for any other product or manufacturer.

Certificate of Registration

This is to certify that:

SWATANTRA POWER PRIVATE LIMITED
201, MANISH PLAZA, OPP. BHARAMA MAJESTIC, N.I.B.M RD, KONDHWA KHURD, PUNE-411048, MAHARASHTRA, INDIA
FACTORY ADDRESS: GATE NO. 37, KHED SHIVAPUR-SASWAD ROAD, OFF PUNE SATARA HIGHWAY, KASURDI KHEDEBADI, TAL. BHOR, PUNE-412205, MAHARASHTRA, INDIA

has been independently assessed by QVA and is compliant with the requirement of the standard

ISO 13485:2016
Quality Management System For Medical Devices

For the following scope of activities

"MANUFACTURER OF ELECTRONIC DEVICE TO MEDICAL DEVICE E-MEDICA™"

Certificate Number: QMS-SAPP-20-0700156

Verify this certificate visit at www.qvas.in

Date of Certification: 07th April 2020
Issuance Date: 07th April 2020
1st Surveillance Due: 06th April 2021
2nd Surveillance Due: 06th April 2022
Re-Certification Due: 06th April 2023

Authorized Signatory

QA Certification
Cellular, Repetitive, 30 Ratings, 5000
This certificate is valid for three years from the date of issue of this certificate. The certificate is valid only for the product and the manufacturer mentioned in this certificate. The certificate is not valid for any other product or manufacturer. The certificate is not valid for any other product or manufacturer. The certificate is not valid for any other product or manufacturer.

Certificate of Compliance

We hereby declare that the technical file of product complies with the requirement of directive 2006/95/EC on LVD

Manufacturer
Name: SWATANTRA POWER PRIVATE LIMITED
Address: 201, MANISH PLAZA, OPP. BHARAMA MAJESTIC, N.I.B.M RD, KONDHWA KHURD, PUNE-411048, MAHARASHTRA, INDIA
FACTORY ADDRESS: GATE NO. 37, KHED SHIVAPUR-SASWAD ROAD, OFF PUNE SATARA HIGHWAY, KASURDI KHEDEBADI, TAL. BHOR, PUNE-412205, MAHARASHTRA, INDIA
Product: "ELECTRONIC DEVICE TO MEDICAL DEVICE E-MEDICA™"

Complies with the requirements applicable to it

The Certification body has performed an audit of the above product quality system covering the design, manufacture and final inspection of the certified product. The quality system has been assessed, approved and is subject to continuous surveillance according to the directives 2006/95/EC on LVD.

This certificate is issued under the following conditions:

- It applies only to the quality system assessed in the manufacture of above referenced products and it does not substitute the design or type-examination procedures, if required.
- The certificate remains valid until the manufacturing conditions or the quality systems are changed.
- The certificate validity is conditioned by positive results or surveillance audits.
- After fulfilling the relevant EU legislation, the manufacturer shall affix to each device, of the above referenced model.
- The CE mark as shown above can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of conformity and compliance with all relevant EC Directives. The statement is based on a single evaluation of one sample of above mentioned product. It does not imply an assessment of the whole production.

Certificate No. CE-SAPP-20-0700154

Certificate can be verified at www.qvas.in

Date of Certification: 07th July 2020
1st Surveillance Due: 06th July 2021
2nd Surveillance Due: 06th July 2022
Certificate Expiry (subject to the company maintaining its system to the required standard): 06th July 2023

Authorized Signatory

QA Certification
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This certificate is valid for three years from the date of issue of this certificate. The certificate is valid only for the product and the manufacturer mentioned in this certificate. The certificate is not valid for any other product or manufacturer. The certificate is not valid for any other product or manufacturer. The certificate is not valid for any other product or manufacturer.

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HI PHYSIX LABORATORY INDIA PVT. LTD
B-32/1/2, MIDC, Ranjangan, Pune, Maharashtra
info@hiphysix.com, info@india@hiphysix.com
Phone : 02138 - 232901, 232902, 232903
CIN : U74120DL2009PTC194754
Mobile 1 : +91 7768005400
Mobile 2 : +91 7768005411
Mobile 3 : +91 7768005422

TEST REPORT

Page No. 1 of 10

TEST REPORT AS PER :- IS 13450 (Part 1)/ IEC 60601-1 SRF No: 21040014

Name & Address of Customer:
e-Medica
Office No A3/A4/A5 Royal Arcade,
Pune Satara Road, Near Shankar Mahara
Math, Pune - 411043

ULRE No.: TC51002100000450F
Discipline: Electrical
Group: Safety Testing Facility
Test Report No: HPL/TST/2104001401
Date of Issue: 04/05/2021
Customer Ref. & Date: 09/04/2021

Date of Sample Receipt:	Start of Test Dates:	End of Test Dates:
09/04/2021	09/04/2021	30/04/2021

PART A - PARTICULARS OF THE SAMPLE SUBMITTED

Sample description	e-Medica (Wellness Device)
Grade/ variety/ type/ class/ size etc.	e-Medica (Wellness Device)
Declared values, if any	e-Medica (Wellness Device); Input Rating: 19.0Vdc, 1.0A AC/DC Adapter: Input Rating: 100-240V ac, 50-60Hz, 0.3A Output Rating: 19.0Vdc, 1.0A
Code no., BIS seal and IO's sign, if any	Nil
Batch no., date of manufacture and Brand name	Model No. e-Medica (Wellness Device) Brand Name: e-Medica
Quantity	01
Condition of the sample	Good
Reference specification (s)	IS 13450 (Part 1)/ IEC 60601-1 (Tests have been carried out as per customer request)
Environmental conditions	Temperature (25±5)°C & Relative humidity <70%
Statement of Conformity	N/A
Decision Rule	N/A

PART B - SUPPLEMENTARY INFORMATION

- Deviations from the test methods as per relevant specifications/ work instructions, if any;
- Details of the drawings, graphs, tables, sketches or photographs as referred in the test report, if any; ANNEXURE A attached
- Testing procedure according to work instruction : HPL/03/Test-Medical/WI-01 to 07
- The Management System is maintained in accordance with IS/ISO/IEC 17025:2017 and testing Standards/ Instruments are traceable to National/ International Standards.

Notes: i) This report is not to be reproduced wholly or in part without our special permission in writing.
ii) This report refers only to the particular sample detailed above.
iii) The results reported in this certificate are valid at the time of and under the stipulated conditions of measurement.

Tested by: *[Signature]* **Checked by:** *[Signature]* **Approved by:** *[Signature]*

Format No: HPL/04/EE/01
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Registered Office : B-9/51, Sector-18, Rohini, Delhi - 110089.

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**Few pictures of awards received and
manufactory setup**





Patent by : Hemant Karamchand Rohera
755 Hank Aaron, DrSE, Atlanta, GA, 30315, USA
Website: emedica.in

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