Non-linear hexagonal/pentagonal ultrasound waves exchange between Covid-19 and dermatologic antenna

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Abstract: In this research, we propose an antenna model for cells and determine the shape and the wavelength of DNA ultrasound waves which are emited or received by dermatologic antenna. In this model, we show that the structure of a DNA within a nucleus is very similar to an inductor within a speaker/microphone and produce some ultrasound waves. We divide the structure of a DNA into several linear and curved inductors. Linear inductors emit linear magnetic fields and curved inductors produce curved waves. Also, DNA inductors are built from hexagonal and pentagonal bases and consequently emit hexagonal and pentagonal waves. On the other hand, nuclear membranes play the role of magnets within a speaker/microphone. Charged particles out and within nucleus, produce some electric fields along nuclear membranes. These fields produce some currents along membranes. These currents emit some magnetic fields which interact with DNA inductors. The interactions between magnetic fields of membrane and DNA inductors lead to their motions. By motions of charged particles within DNA inductors, some currents are emerged. These currents emit some extra magnetic fields. These magnetic fields interact with nuclear membranes and vibrate them. In these conditions, membranes play the role of plastic within a speaker/microphone. By vibrating nuclear membranes, some linear/curved hexagonal/pentagonal ultrasound waves are emerged. Frequency of these waves (10^{-27}m) are more than frequency of light waves and their wavelengths are smaller than size of air molecules. Thus,

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these waves pass air molecules and propagate in any empty vacuum. These waves could be taken by viral RNAs in COVID-19 and move them. These RNAs act like the round inductors, vibrate and lead to the vibrations of viral membranes. By vibrations of RNA membranes, some new waves are emerged that are taken by dermatologic antennas. Exchanging waves between Covid-19 and dermatologic antennas causes to absrorptions of viruses by biological human's body. Wavelenths of Coronaviruses are in the range of wavelengths in 5G technology. Thus, using waves in this technology, we can control COVID-19. On the other hand, millimeter waves in 5G technology could be absorbed by the cell membranes. These waves move molecules within cells and produce some stronger waves. These new waves pass the nuclear membranes, move DNAs and produce some hexagonal/pentagonal holes. To fill these holes, some bases are emerged. These bases join to each other and form some viral RNAs like RNAs of Coronaviruses. Thus, millimeter waves in 5G technology could play the role in constructing Coronaviruses within cells.

Keywords: Dermatology, Ultrasound waves, DNAs, Speakers, Cell

I. Introduction

Coronavirus disease (COVID-19) is the main problem in this year that involve with all people in the world [1]. This is an infectious disease caused by a newly discovered coronavirus. Totally, this virus is a member of related viruses that cause diseases in mammals and birds. In humans, coronaviruses cause respiratory tract infections that can be mild, such as some cases of the common cold (among other possible causes, predominantly rhinoviruses), and others that can be lethal, such as SARS, MERS, and COVID-19.Among them, COVID-19 is an enveloped viruses with a positive-sense single-stranded RNA genome and a nucleocapsid of helical symmetry. The genome size of coronaviruses ranges from approximately 27 to 34 kilobases, the largest among known RNA viruses [2,3]. Until now, many scientists have tried to find method to cure this disease [4,5], however, they don't succeed. In this paper, we will use of exchanged information between virus and skin cells to control Coronavirus.

Up to date, many researchers have tried to propose a model for extracting information within cells [6,7]. In most of these models, waves of DNAs play the main role. These waves could be transverse electromagnetic fields or

longitudinal ultrasound waves. A DNA is built from charged particles and according to laws of physics, by any motion of these particles, some electromagnetic waves are emerged [8]. Also, the structure of a DNA is similar to the structure of an inductor [9] in a speaker/microphone and can produce ultrasound waves. The effects of ultrasound and sound waves on biological systems have been considered extensively. For example, some authors have investigated the effectiveness of the Ultrasound Tongue Scraper (UTS) to disrupt the structural morphology of the bacteria and their biofilm. [10]. Some other authors have shown that sound/ultrasound waves could control the rate of microbial growth [11]. In another research, authors have shown that the efficiency of the combination of ultrasonic waves under pressure with heat (MTS) for bacterial spore inactivation is directly correlated with the thermal resistance [12]. In another paper, authors have developed the new methodology of strategic ultrasound treatment on lactic acid bacteria (LAB) to induce stress response for the enhancement of β-glucosidase activity that can be used for the biotransformation of glucosides into aglycones isoflavones in soymilk [13]. In another investigation, ultrasound application on bacterial inactivation in municipal wastewater (MWW) has been evaluated [14]. In another work, it has been shown that by combinations of ultrasound, hydrogen peroxide, and active lactoperoxidase system, microbiota and selected spoilage and pathogenic bacteria in milk become inactive [15]. In other article, diagnostic accuracy of ultrasound scanning for prenatal microcephaly in the context of Zika Virus Infection has been considered [16]. In another research, authors have compared the clinical characteristics and imaging features on contrast-enhanced ultrasound (CEUS) of hepatitis B virus (HBV)-related combined hepatocellular–cholangiocarcinoma (CHC) and hepatocellular carcinoma (HCC) [17]. Motivated by these researches and using the similarity between DNAs within cells and inductors within speaker/microphones, we propose a model for determining shape and frequency of DNA ultrasound waves which are emitted by skin cells. In this model, skin cells act like dermatologic antenna which emits very short nonlinear ultrasound waves. These considerations could help us to diagnose some skin diseases like melanoma [18]. Also, by considering skin waves, we may consider amount of effects of COVID-19 on the skin cells [19].

The outline of this papers is as follows: In section II, we propose a theoretical model for DNA ultrasound waves and show that a DNA within the skin cell could emit some ultrasound waves with short wavelengths and hexagonal-pentagonal shapes. These waves could be taken by viral RNAs within Coronaviruses (COVID-19). In section III, we consider results of this theory and estimate the topology and the wavelength of DNA ultrasound waves. In

section IV, we discuss about the origin of results. The last section is devoted to conclusion.

II. Theoretical Method

A speaker/Microphone is buit from an inductor, a magnet and a platic. The magnet induces a constant magnetic field within inductor. Any external field produces an extra current within wires of this inductor. According to laws of physics, inductor produces some currents which remove effects of external fields. Interactions between this inductor and external fields lead to the vibration of system. This vibration is transformed to the platic. By motion of plastic, molecules of air move and vibrate. Vibrations of molecules of air produce sound. Now, we can show that DNAs within cells play the role of inductors within speakers/microphones and produce some sound waves. Previously, it has been shown that DNAs act like inductors and emit or receive electromagnetic waves [12]. This is because that a DNA is formed from charged particles like electrons and atoms and according to laws of physics, by their motions, some electromagnetic fields are emerged. The structure of a DNA is very similar to an inductor within speaker/microphone (See figure 1).

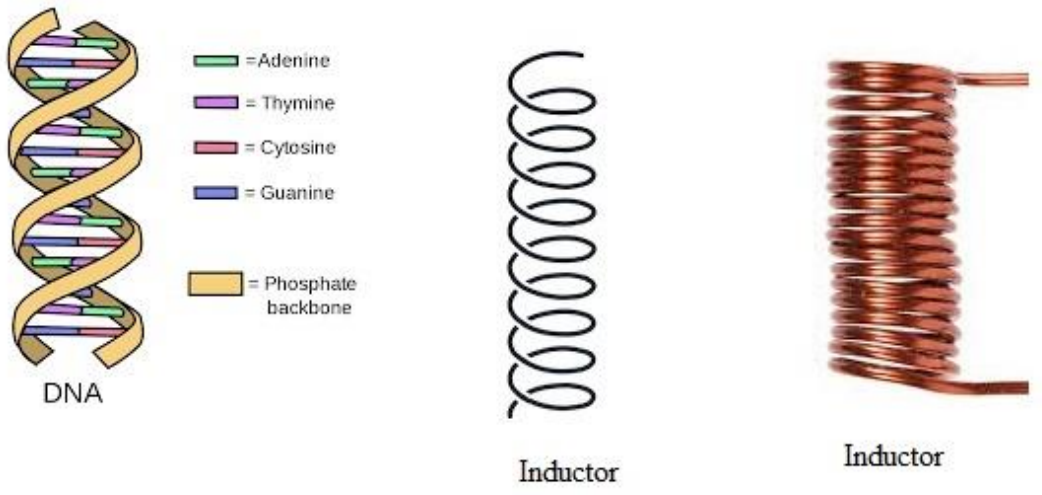

Fig 1 : Similarity between inductors and DNAs

On the other hand, charged particles out and interior of nucleus, produce some electrical fields along nuclear membrane. This current produces a magnetic field and consequently, a nuclear membrane plays the role of a magnet within a

speaker/microphone. In addition, there are some other biological matters like protein and RNAs which their structures are similar to some inductors. These objects are formed from charged particles and by their motions, some currents are emerged. These currents can produce some magnetic fields. Magnetic fields of nuclear membrane, RNAs and other biological matters interact with DNAs within cells, lead to their motions and production of new currents. These currents produce new magnetic fields. These magnetic fields move nuclear membranes, RNAs and proteins and produce some vibrations. These vibrations produce ultrasound DNA waves. Thus, nuclear membranes, RNAs and proteins could be biological sound producer so. They could play the role of plastic in a speaker/microphone (See figure 2).

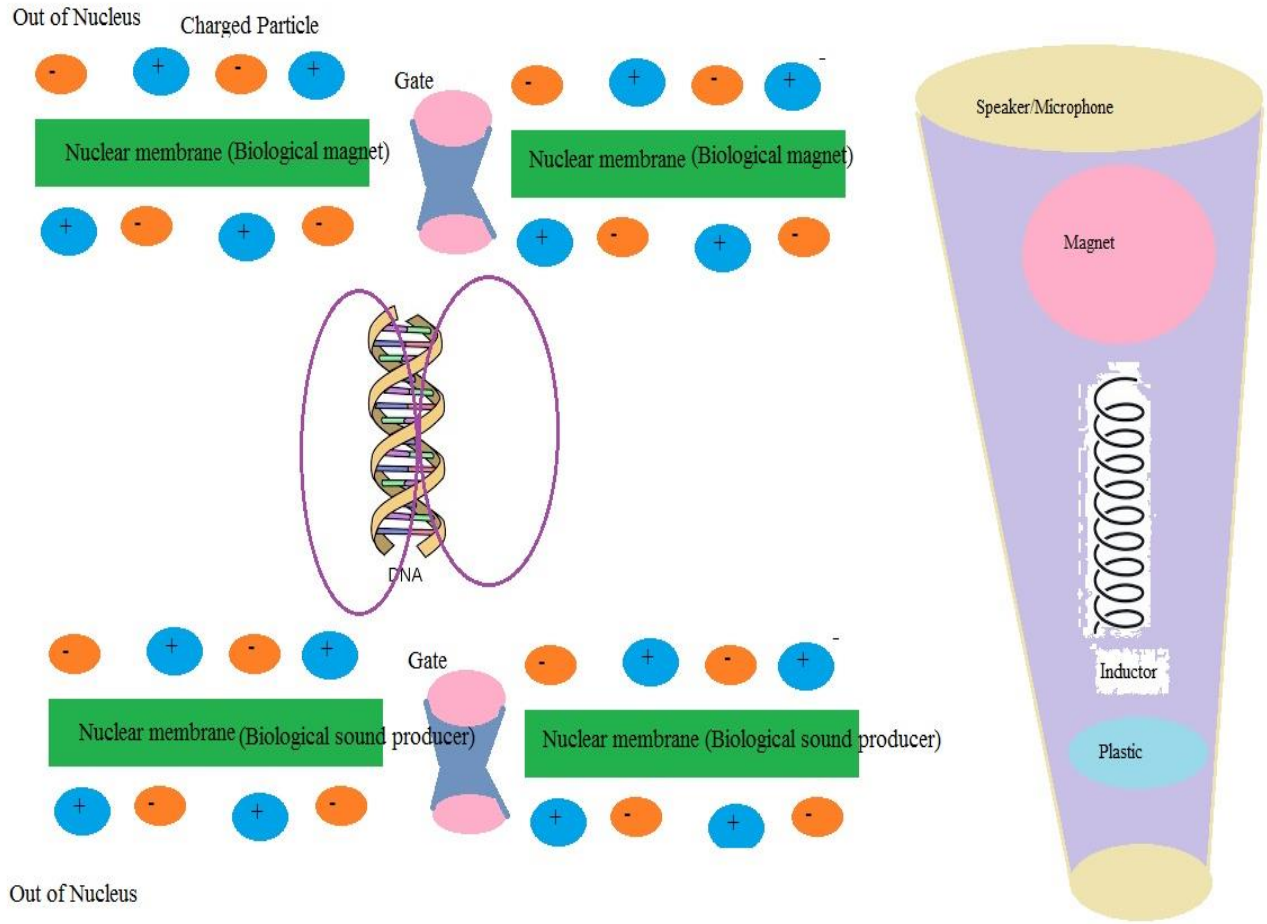

Fig 2. Nucleus acts like the speaker/Microphone

Now, the question arises that what is the relation between topology of a DNA and topology of its emitted sound waves. A DNA is constructed from hexagonal and pentagonal bases. When a DNA interacts with external magnetic fields, its hexagonal and pentagonal molecules vibrate and produce hexagonal and pentagonal sound waves. Thus, these waves join to each other and form total DNA sound wave (See figure 3).

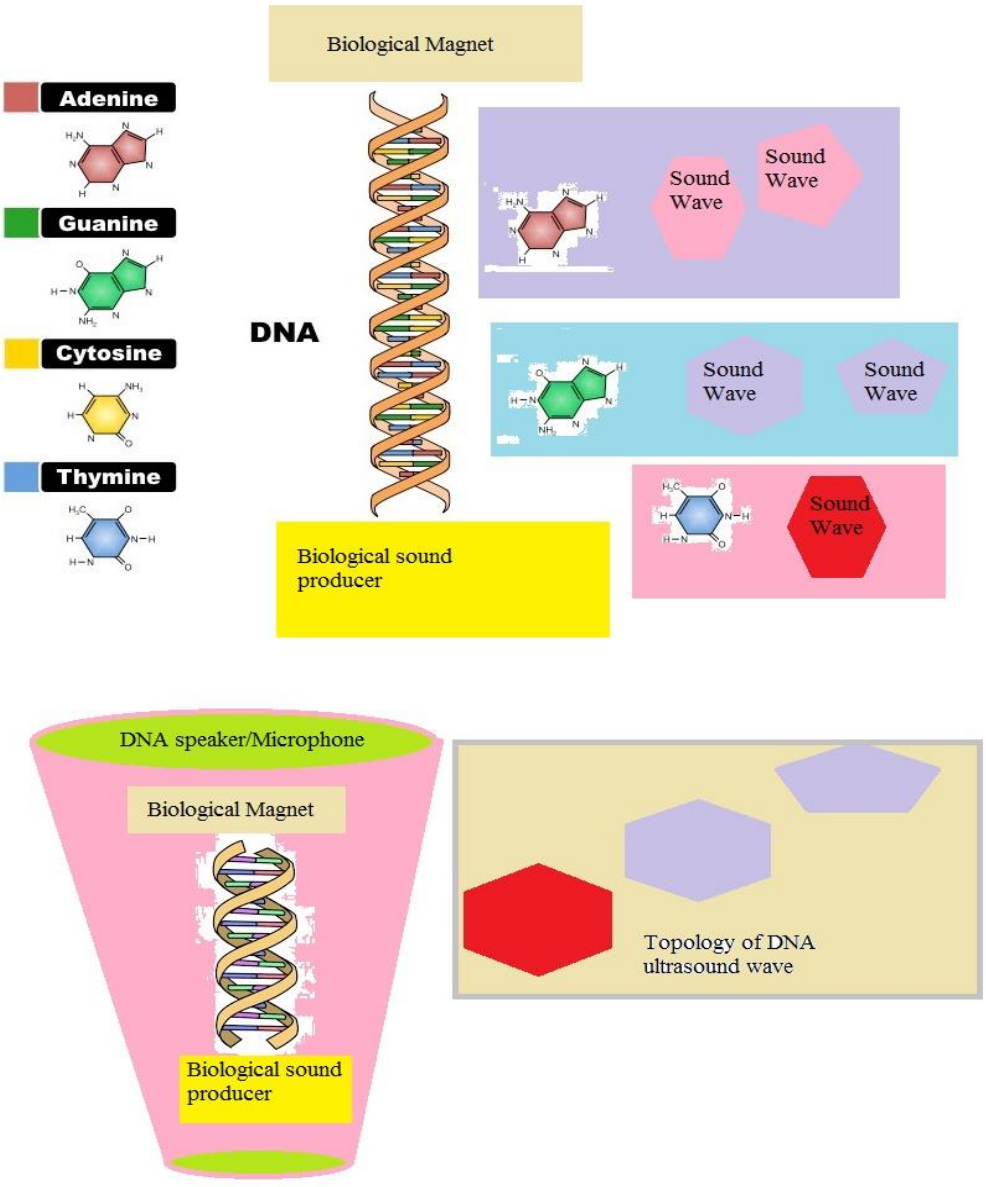

Fig 3: Topology of DNA ultrasound waves

In addition to the structure of hexagonal and pentagonal manifolds, there are some extra parameters which have direct effects on topology of a DNA. For example, a DNA is coiled around a core histone and produces an structure like the structure of a toroid inductor. Vibration of this inductor is different from a linear inductor and produce new type of sound waves (See figure 4.)

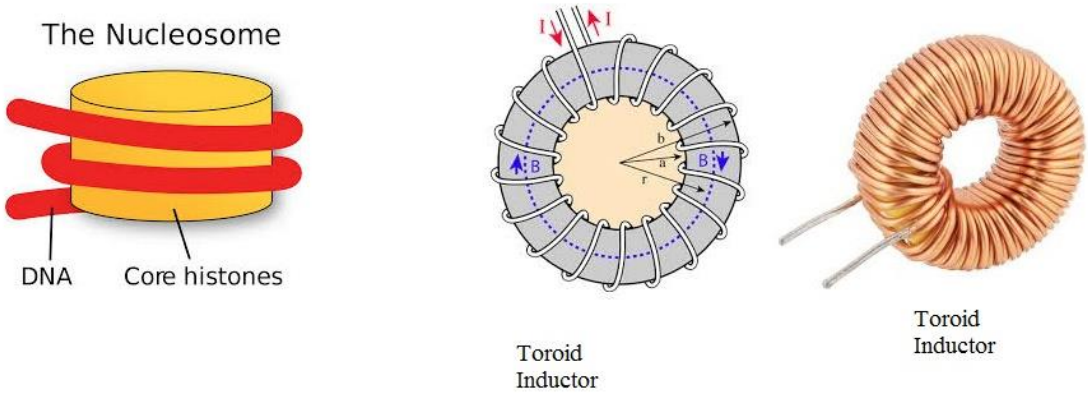

Fig 4 : A DNA could be coiled like toroid inductors

In addition to this coiling, a DNA could be coiled several times around different axes and by each coiling, its vibration changes and new type of electromagnetic waves are emerged. In fact, we can divide a DNA inductor to several new inductors. Some of them are linear and produce linear magnetic fields. Some are curved inductors and produce curved magnetic fields. Some others are toroid inductors and produce circle-like waves. These magnetic fields join to each other and form very complicated magnetic fields (See figure 5). If we regard hexagonal and pentagonal shapes of bases, we could have waves with topology of their DNA sources. In fact, waves take topology of DNAs and thus could be taken only by detectors with similar topology.

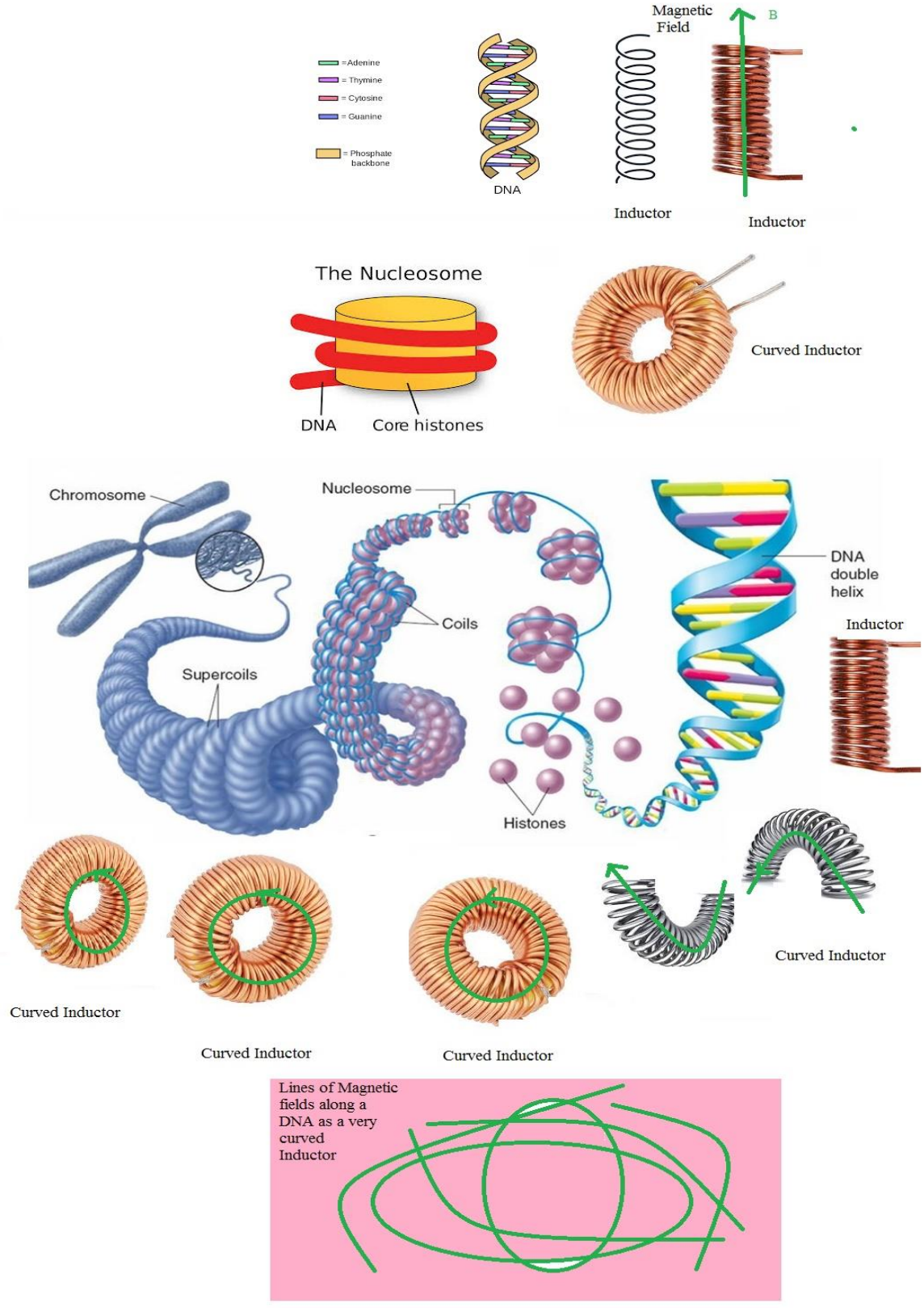

Fig 5: A DNA could be coiled several times and produce various types of magnetic fields and ultrasound waves.

To consider evolutions of a DNA, we should simulate it with several types of inductors. Some of them are linear inductors and vibrate linearly. They interact with linear biological magnets. These linear magnets could be some RNAs or some parts of nuclear membranes. These magnets interact with linear inductors of a DNA, move them and produce some extra currents. These currents produce some extra magnetic fields and these fields move nuclear membranes, RNAs and proteins and vibrate them. In these conditions, nuclear membranes, proteins and RNAs play the role of plastic in a speaker/microphone, vibrate and produce sound waves. In addition to linear inductors, there are some curved and toroid inductors within the structure of a DNA. These inductors interact with curved and toroid parts of nuclear membranes. By vibrations of these matters, some curved and toroid sound waves are emerged (See figure 6).

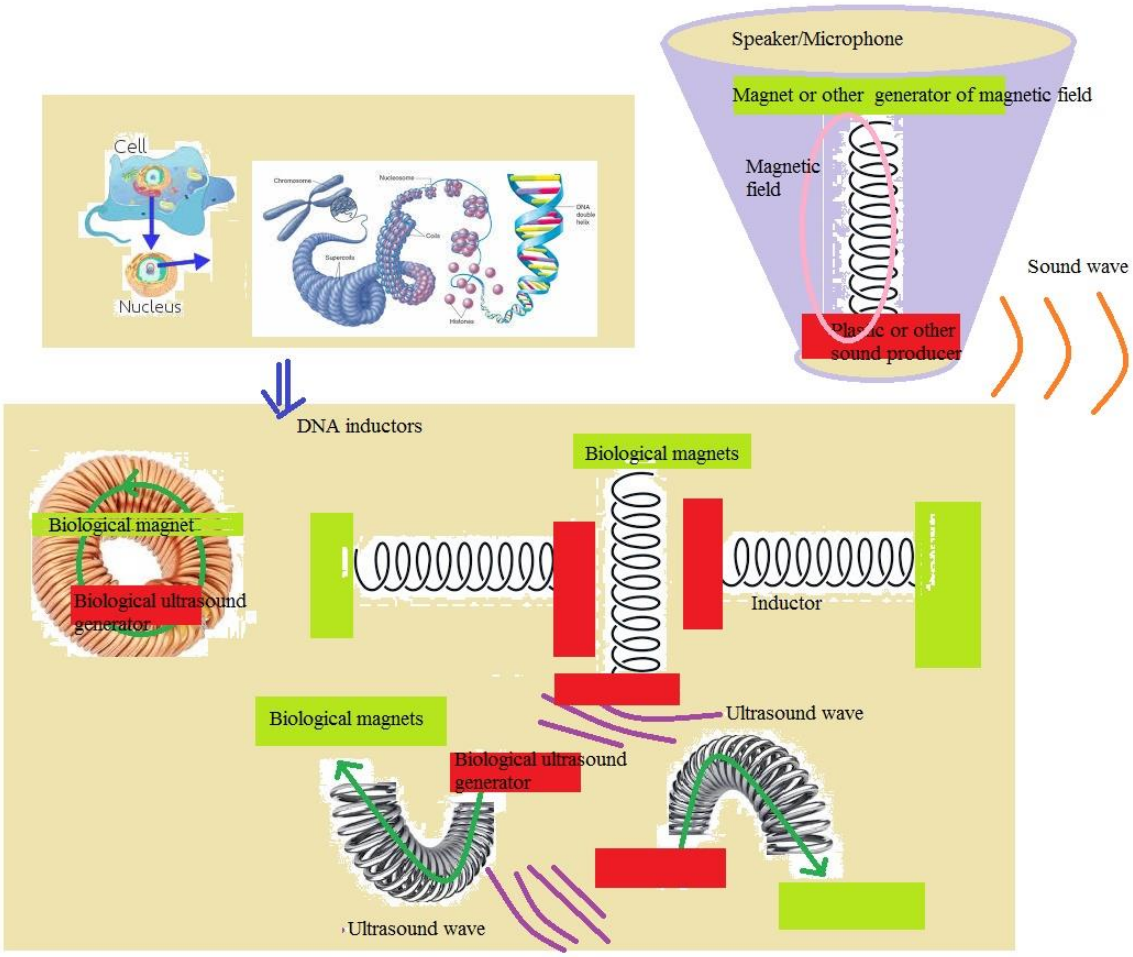

Fig 6: The behavior of a DNA could be explained by several types of inductors.

DNA ultrasound waves may play the main role in evolutions within skin cells. They could turn on some genes by removing repressors or turn off them. They also force to polymerases and contribute in replication and transcriptions. They can accelerate productions of new DNAs and RNAs and cause to the emergence of some diseases like cancers. They can also connect various types of cells and exchange information between them (See figure 7).

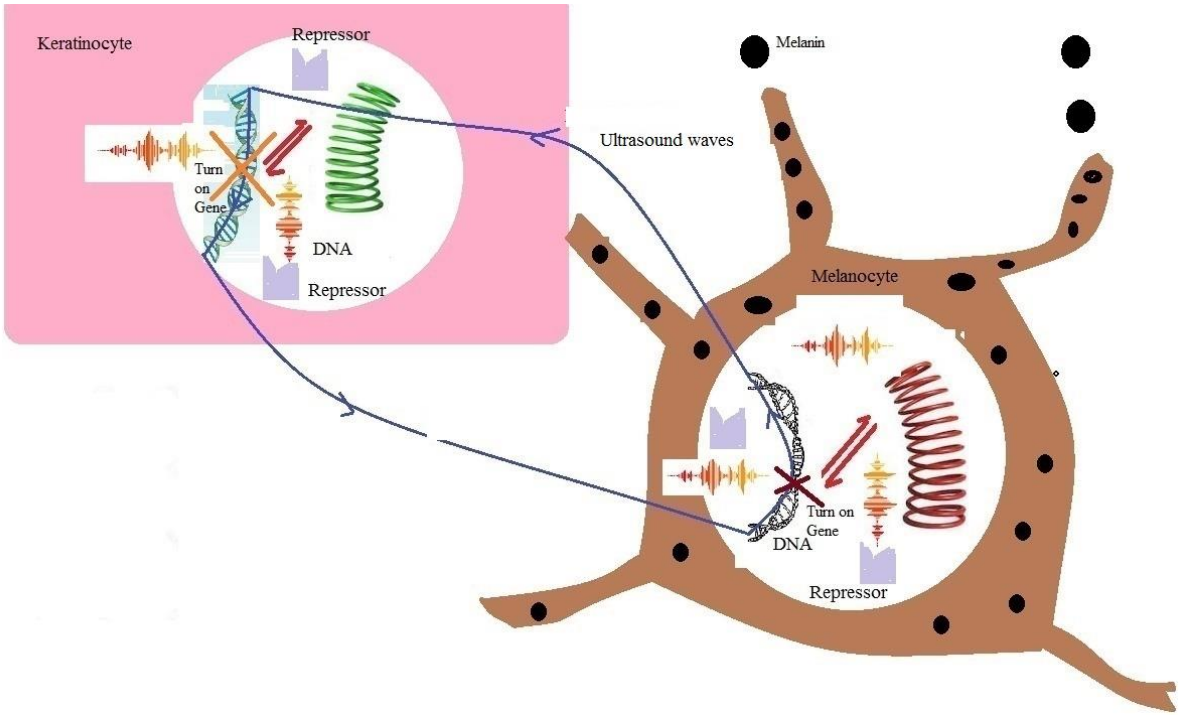

Fig 7. DNA ultrasound waves could be transmitted between cells and contribute in gene expression

Some of ultrasound DNA waves could be taken by RNAs within Coronaviruses. These RNAs are formed from charged electrons and atoms and by their motions, produce some waves. The structure of these viral RNAs is like the structure of round inductors. These RNA inductors could interact with DNA inductors and vibrate. These vibrations lead to the emergence of new electromagnetic waves. These waves lead to the vibrations of viral membranes and emergence of new ultrasound waves. These waves are taken by DNAs within dermatologic antennas and help in absorption of Coronaviruses by human's body (See Figure 8).

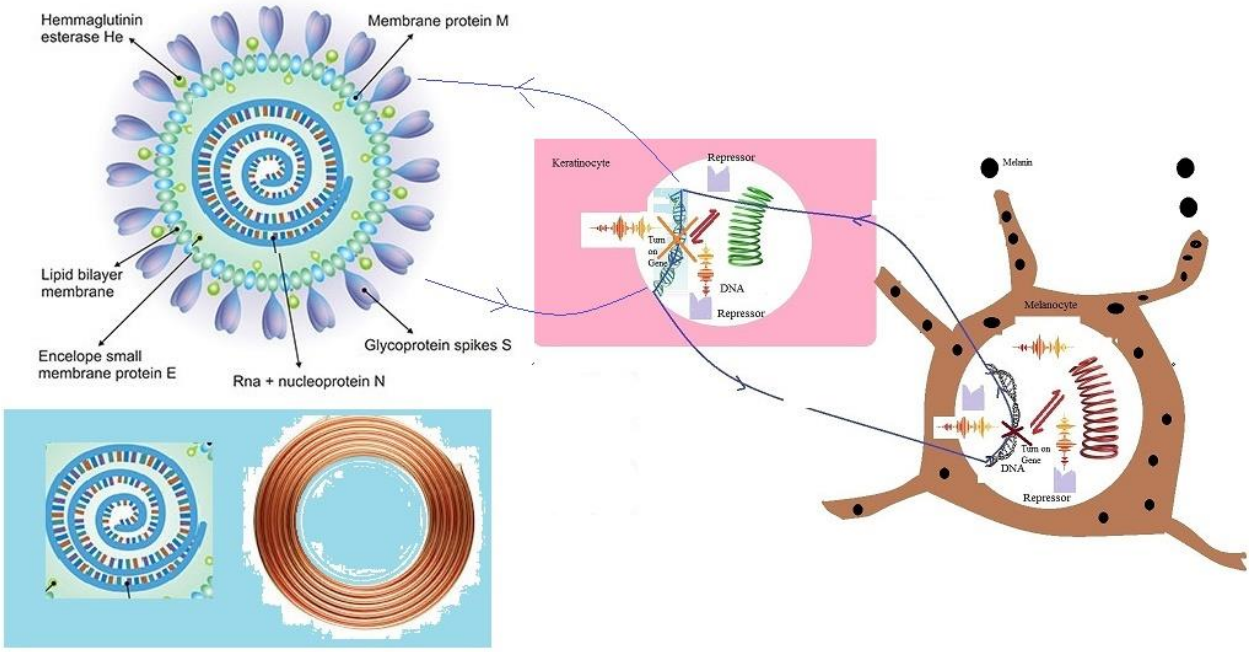

Fig 8. Exchanging waves between DNA inductors of dermatologic cells and RNA inductors of Coronaviruses

III. Results: Determining the topology and the wavelength of DNA ultrasound waves

At this stage, we calculate the frequency and wavelength of a DNA sound wave. To this aim, we replace a DNA with two types of inductors. One type of these inductors are linear and vibrate linearly. In these conditions, we can write:

$$\mathbf{F = M\,a = K\,x} \qquad (1)$$

Where F is the force, K is the inductor's constant and M is its mass. For this oscillation, frequency could be obtained from below equation:

$$\boldsymbol{\nu = (1/2\pi)\omega = (1/2\pi)\,[K/M]^{1/2}} \qquad (2)$$

where ν is the frequency and ω is the angular velocity.

Another type of these inductors are curved and we can write:

$$\boldsymbol{\tau = I_\theta\,\alpha = K_\theta\,\theta} \qquad (3)$$

where $\boldsymbol{\tau}$ is torque, I_θ ($I_\theta = M_{DNA}\, r^2$) is the rotational inertia, K_θ is a constant and α is the rotating acceleration. For this inductor, the frequency can be obtained from below equation:

$$\boldsymbol{\nu = (1/2\pi)\omega = (1/2\pi)\,[K_\theta / I_\theta]^{1/2}} \quad (4)$$

To calculate above frequencies, we should obtain constants and masses. We assume that a DNA acts like an inductor and thus, we write below equation for its magnetic field:

For linear inductor: $\boldsymbol{B_{DNA,\,linear} = \mu_0\, n_{gene}\, I_{gene}}$ (5)

For curved inductor: $\boldsymbol{B_{DNA,\,curved} = \mu_0\, n_{gene}\, I_{gene}/2\pi r_{histone}}$ (6)

Where n_{gene} is the density of genes [20] within DNAs**,** $r_{histone}$ is the size of histone (3×10^{-10}) [21] and I_{gene} is current which moves along genes. We assume that each gene is in fact a long wire that is coiled around the axis of a DNA. A DNA may have 50000 or more gene (N_{gene}) [20] and each gene has around 10^{-12} meter long (L_{gene}) within a cell. Thus, we can calculate density of genes (n_{gene}):

$$\boldsymbol{n_{gene} = N_{gene}/L_{gene}} \quad \textbf{(7)}$$

$$\boldsymbol{N_{gene} = 50000}\textbf{[15]} \quad \textbf{(8)}$$

$$\boldsymbol{L_{gene} = 10^{-12}}\textbf{m[22,23]} \quad \textbf{(9)}$$

$$\boldsymbol{n_{gene} = 5 \times 10^{16}} \quad \textbf{(10)}$$

To calculate current along genes, we should calculate total effective charge of all genes (Q_{gene}) and their velocity (V_{gene}).

$$\boldsymbol{I_{gene} = Q_{gene}\, V_{gene}} \quad \textbf{(11)}$$

Effective charges of all genes are different from their normal total charges. A gene may have a few normal charges, because its charges cancel the effect of each other in the static state. However, during the gene expression and DNA evolutions, each charge has a separate effect. For this reason, we should regard total charges of all genes. To obtain this charge, we should write:

$$\boldsymbol{Q_{gene} = N_{gene}\, q_{gene}} \quad \textbf{(12)}$$

Where N_{gene} is the number of genes and q_{gene} is the effective charge of a gene. Again, we insist that effective charge of a gene is different from its normal

charge. In fact, we should regard all electrons and atoms that contribute in gene expression. For this reason, we should write:

$$\mathbf{q_{gene} = N_{base}\, q_{base}} \quad \mathbf{(13)}$$

where N_{base} is the number of base pairs within a gene [20,21] and q_{base} is the effective electrical charge of a base. We can put approximate numbers and obtain the effective charge of all genes:

$$\mathbf{N_{base} = 10^{9}\ [24,25]} \quad \mathbf{(14)}$$

$$\mathbf{q_{base} = (10\text{-}20)\ q_{electron} = (10\text{-}20) \times 1/6 \times 10^{-19}} \quad \mathbf{(15)}$$

$$\mathbf{Q_{gene} = 5 \times 10^{-5}} \quad \mathbf{(16)}$$

Now, we calculate the effective velocity of genes:

$$\mathbf{V_{gene} = L_{gene}\omega_{gene}} \quad \mathbf{(17)}$$

This velocity depends on the length of a gene (L_{gene}) and its rotating velocity (ω_{gene}).

$$\mathbf{L_{gene} = 10^{-12} m\ [22,23]} \quad \mathbf{(18)}$$

The rotating velocity of a gene (ω_{gene}) can be obtained by summing over rotating velocities of all its effective charges (ω_{charge}):

$$\mathbf{\omega_{gene} = n_{charge}\, \omega_{charge}} \quad \mathbf{(19)}$$

To obtain number of charges, we multiply number of bases and number of atoms/electrons

$$\mathbf{n_{charge} = N_{base}\, N_{atom}} \quad \mathbf{(20)}$$

Now, we put approximate values for numbers and obtain velocity of genes:

$$\mathbf{N_{base} = 10^{9}\ [22,23]} \quad \mathbf{(21)}$$

$$\mathbf{N_{atom} = 10} \quad \mathbf{(22)}$$

$$\mathbf{n_{charge} = 10^{10}} \quad \mathbf{(23)}$$

$$\mathbf{\omega_{charge} = 2\pi / T_{charge}} \quad \mathbf{(24)}$$

$$\mathbf{T_{charge} = .1} \quad \mathbf{(25)}$$

$$\mathbf{\omega_{charge} = 6.28 \times 10} \quad \mathbf{(26)}$$

$$V_{gene}=6.28 \times 10^{-1} \quad (27)$$

Substituting values of velocity from equation (27) and charges from equation (16) in equation (11), we can obtain the current of genes:

$$I_{gene} =3.14 \times 10^{-4} \quad (28)$$

Putting the current from above equation (28) and density of genes from equation (10) in equations (5 ,6), we calculate magnetic field of a DNA within a cell.

$$B_{DNA,\ linear} =985.96 \times 10^{5} \sim 10^{8} \quad (29)$$

$$B_{DNA,\ curved} =985.96 \times 10^{15} \sim 10^{18} \quad (30)$$

Using these fields, we can obtain energy density of magnetic fields around a DNA within a cell.

$$\mu_0=4\pi \times 10^{-7} \quad (31)$$

$$U_{B,\ linear} =([B_{DNA,\ linear}]^{2}/2\ \mu_0) = 1.59 \times 10^{22} \quad (32)$$

$$U_{B,\ curved} =([B_{DNA,\ curved}]^{2}/2\ \mu_0) = 1.59 \times 10^{42} \quad (33)$$

At this stage, we assume that a DNA is similar to an inductor and calculate total energy of magnetic field around a DNA.

$$E_{B,\ linear} = U_{B,linear}\ V_{DNA} \quad (34)$$

$$E_{B,\ curved} = U_{B,\ curved}\ V_{DNA} \quad (35)$$

With below cylindrical area:

$$V_{DNA} = 2\pi\ [R_{DNA} + x_{DNA}][L_{DNA} + x_{DNA}] \quad (36)$$

We obtain:

$$E_{B,\ linear} =([B_{DNA,\ linear}]^{2}/2\ \mu_0)\ 2\pi\ [R_{DNA} + x_{DNA}][L_{DNA,linear} + x_{DNA}] \quad (37)$$

$$E_{B,\ curved} =([B_{DNA,\ curved}]^{2}/2\ \mu_0)\ 2\pi\ [R_{DNA} + x_{DNA}][L_{DNA,curved} + x_{DNA}] \quad (38)$$

Where V_{DNA} is the cylindrical space which occupied by a DNA, R_{DNA} is the radius of DNA inductor, L_{DNA} is the length of DNA inductor and x_{DNA} is a distance that a DNA oscillates, goes ahead and goes back. Using this energy, we can obtain forces (F_{DNA}) which are created by vibrations of a DNA inductor:

$$\mathbf{F_{DNA,\ linear} = d\ E_B/dx_{DNA} = [\ ([B_{DNA,\ linear}]^{\ 2}/2\ \mu_0)\ 2\pi]\ x_{DNA} + [\ ([B_{DNA,\ linear}]^{\ 2}/2\ \mu_0)\ 2\pi][\ R_{DNA} + L_{DNA,\ linear}]} \quad \mathbf{(39)}$$

We can rewrite equation (39) as follows

$$\mathbf{F_{DNA,\ curved} = K_{DNA,\ linear}\ x_{DNA} + constant} \quad \mathbf{(40)}$$

Where

$$\mathbf{K_{DNA,\ linear} = [\ ([B_{DNA,\ linear}]^{\ 2}/2\ \mu_0)]\ 2\pi} \quad \mathbf{(41)}$$

To obtain torque, we should multiply above force to radius of histones:

$$\mathbf{\tau_{DNA} = r_{histone}\ F_{DNA,\ curved} = K_\theta\ \theta} \quad \mathbf{(42)}$$

where

$$\mathbf{F_{DNA,\ curved} = d\ E_B/dx_{DNA} = [\ ([B_{DNA,\ curved}]^{\ 2}/2\ \mu_0)\ 2\pi]\ x_{DNA} + [\ ([B_{DNA,\ linear}]^{\ 2}/2\ \mu_0)\ 2\pi][\ R_{DNA} + L_{DNA,\ curved}]} \quad \mathbf{(43)}$$

And thus, we can write:

$$\mathbf{\tau_{DNA} = r_{histone}\ F_{DNA,\ curved} = r_{histone}\ [\ ([B_{DNA,\ curved}]^{\ 2}/2\ \mu_0)\ 2\pi]\ x_{DNA} + [\ ([B_{DNA,\ linear}]^{\ 2}/2\ \mu_0)\ 2\pi][\ R_{DNA} + L_{DNA,\ curved}]} \quad \mathbf{(44)}$$

Putting $x_{DNA} = r_{histone}\ \theta$, we can obtain:

$$\mathbf{K_\theta = [r_{histone}]^2\ [\ ([B_{DNA,\ curved}]^{\ 2}/2\ \mu_0)\ 2\pi]} \quad \mathbf{(45)}$$

Using equations (29, 30, 41 and 45), we can obtain linear and curved constants:

$$\mathbf{K_{DNA,\ linear} = [\ ([B_{DNA,\ linear}]^{\ 2}/2\ \mu_0)]\ 2\pi = 9.98\times 10^{22} \sim 10^{23}} \quad \mathbf{(46)}$$

$$\mathbf{K_\theta = [r_{histone}]^2\ [\ ([B_{DNA,\ curved}]^{\ 2}/2\ \mu_0)\ 2\pi] \sim 10^{24}} \quad \mathbf{(47)}$$

Putting above constants DNA mass ($M_{DNA} = 3.59\times 10^{-15}$ [26]) and rotating mass ($I_\theta = M_{DNA}\ [r_{histone}]^2$)in equations (3 and 4), we can obtain frequencies of DNAs:

$$\mathbf{\nu_{\ DNA\ ultrasound,\ linear} = (1/2\pi)\ [K_{DNA,\ linear}/M_{DNA}]^{1/2} \sim 10^{16}} \quad \mathbf{(48)}$$

$$\mathbf{\nu_{\ DNA\ ultrasound,\ curved} = (1/2\pi)\ [K_\theta / I_\theta]^{1/2} \sim 10^{27}} \quad \mathbf{(49)}$$

Frequencies of waves have reverse relation with their wavelengths.

$$\lambda_{\text{DNA ultrasound, linear}} = 1/\nu_{\text{DNA ultrasound, linear}} \sim 10^{-16} \quad (50)$$

$$\lambda_{\text{DNA ultrasound, curved}} = 1/\nu_{\text{DNA ultrasound, curved}} \sim 10^{-27} \quad (51)$$

Comparing above wavelengths with the size of air molecules (10^{-10}) [27], we conclude that ultrasound waves are very smaller than them. These short wavelengths show that ultrasound waves could pass the air molecules without any interaction with them. Thus these waves should propagate in any vacuum without needing to matter (See figure 9).

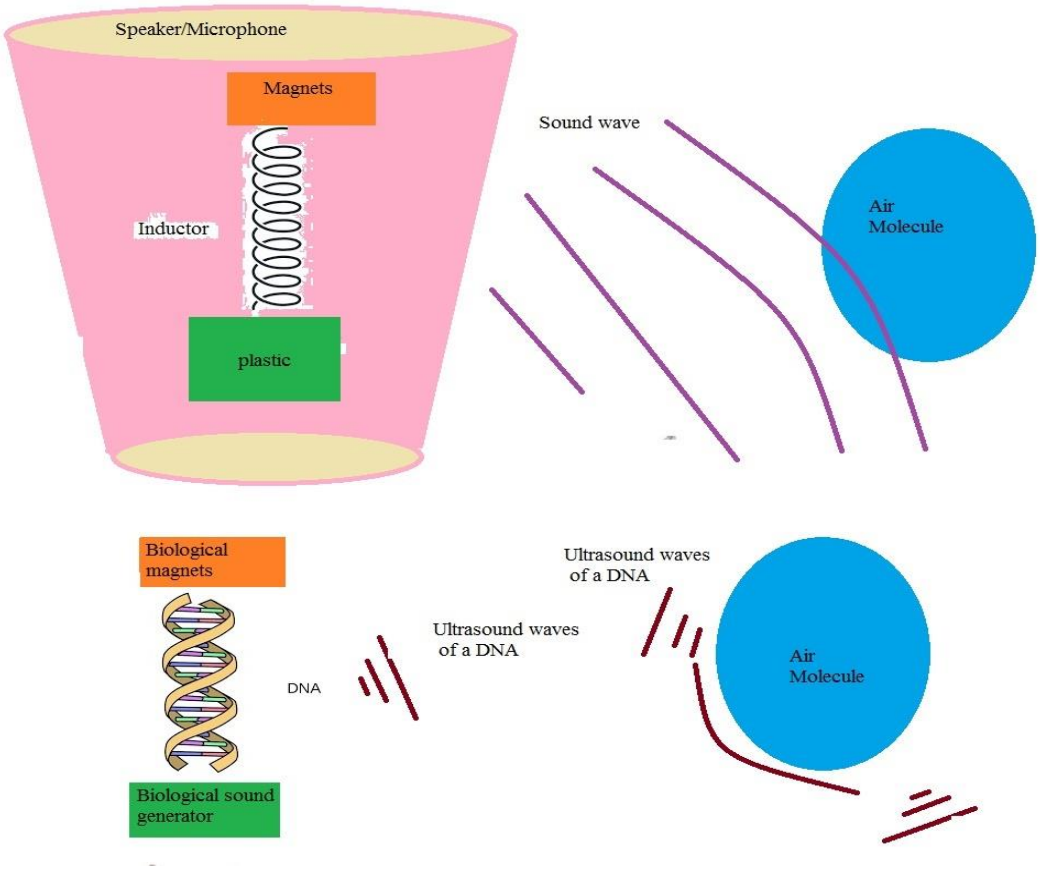

Fig 9: DNA ultrasound waves pass the air molecules

DNA ultrasound waves could be detected by viral RNAs within COVID-19 viruses. These RNAs are infact some viral inductors that exchange with DNA inductors within skin cells. These inductors act like the inductors within an speaker/microphone and viral membrane acts like the plastic. By vibrating viral inductors, some waves are emerged which move the viral membrane and produce some ultrasound waves. Exchanging ultrasound waves between skin cells and Coronaviruses leads to the absorption of viruses and emergence of COVID-19 (See Figure 10).

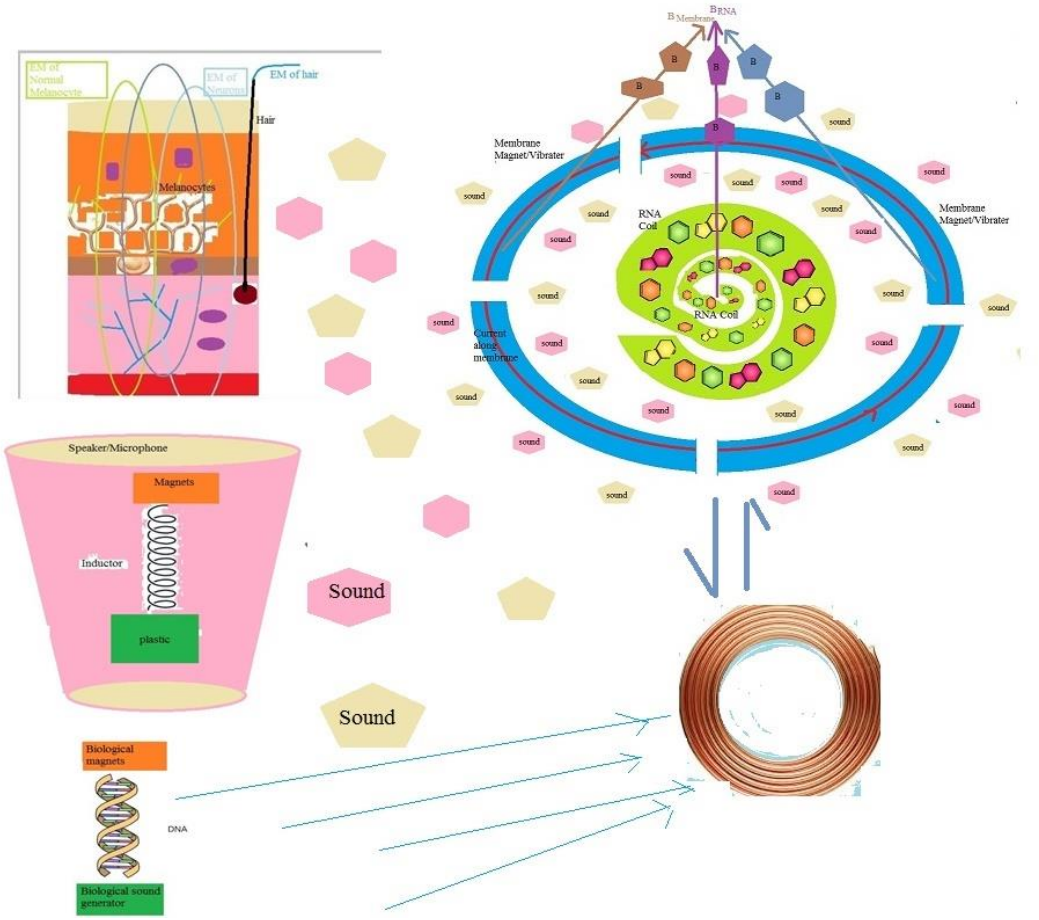

Fig 10. Dermatologic antennas exchange waves with Coronaviruses and absorbed them

Using this method and formulas in equations (1-50), we can obtain the wavelengths for viral waves. In figure 11, we show the dependency of viral wavelengths on the (viral number of bases/DNA base pairs). It is clear that long viruses with more numbers of bases, emit shorter wavelengths, while short viruses with less number of bases, emit longer wavelengths. For example, viruses in COVID-19 with 27 k base pairs emit millimeter waves. These

wavelengths could be radiated by towers in 5G technology. Thus, we can use of this technology for controlling COVID-19 (See Figure 12).

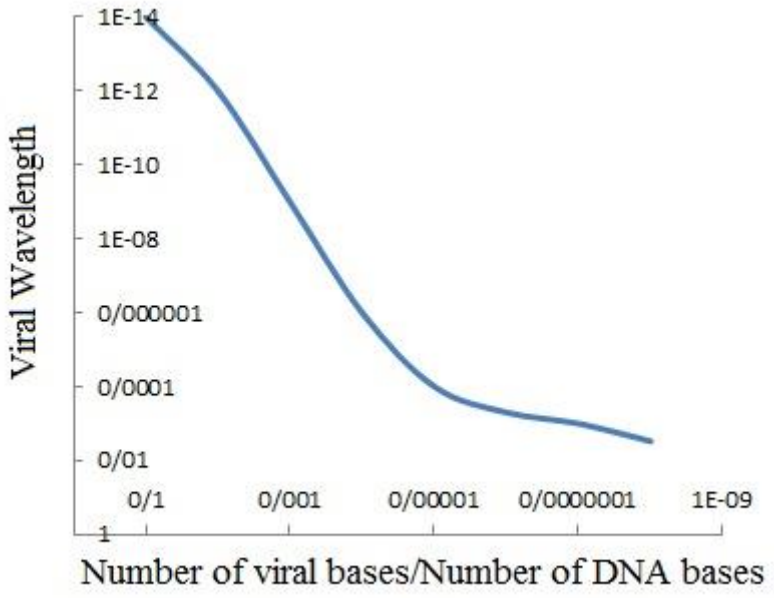

Fig 11. Viral wavelengths in terms of their number of bases

On the other hand, millimeter waves in 5G technology could be absorbed by the cell membranes. These waves move molecules within cells and produce some stronger waves. These waves achieve to nuclear membranes and move them. By motions of nuclear membranes, some stronger waves are emerged. These waves move DNAs and produce some hexagonal and pentagonal holes. To fill these holes, some bases are emerged. These bases join to each other and form some viral RNAs like RNAs of Coronaviruses. Thus, 5G technology could have the main role in producing Coronavruses within cells (See figure 12).

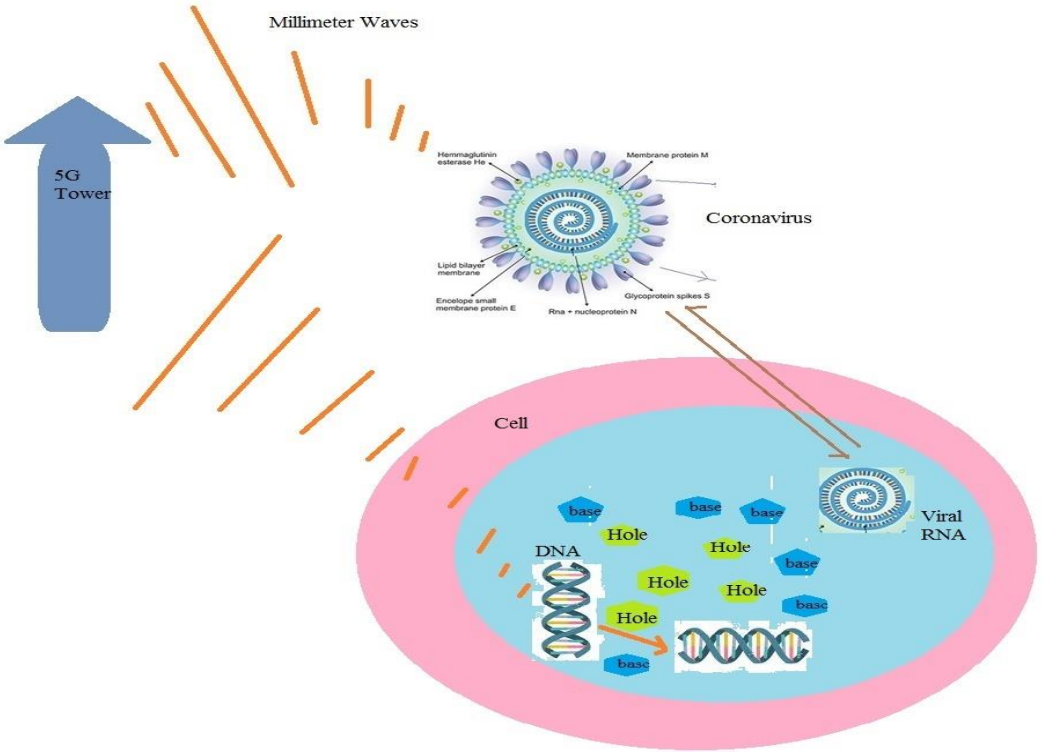

Fig 12. Controlling COVID-19 by millimeter waves in 5G technology.

IV. Discussion:

A DNA is formed from charged particles and according to laws of physics, by its motion, charges move and produce a current. This current could emit electromagnetic waves. Also, the structure of a DNA could be divided into some linear and curved inductors. Linear inductors produce linear magnetic waves and curved inductors produce curved waves. On the other hand, these inductors are built from hexagonal and pentagonal molecules and thus emit hexagonal and pentagonal waves. These waves interact with biological matters like RNAs, Proteins and nuclear membranes and cause to their vibrations. By these vibrations, some linear/curved hexagonal/pentagonal ultrasound waves are emerged. Frequencies of these waves are more than frequency of light and their wavelengths are less than the size of air molecules. Thus, they could pass the molecules of air and propagate in an empty vacuum. These waves could be taken by RNAs within Coronaviruses and absorb them. In response to these waves, Coronaviruses emit millimeter waves. These wavelengths could be observed in 5G technology. Thus, this technology could help us to prevent of progress of COVID-19.

V. Conclusions:

In this research, we have proposed a model for dermatologic antenna which lets us to estimate the frequency and the wavelength of DNA ultrasound waves within skin cells and determine their shapes. In this model, a DNA within a dermatologic cell plays the role of an inductor within a speaker/microphone. On the other hand, charged particles within and out of nucleus produce some electrical fields. These fields produce some currents along nuclear membrane and change it to a magnet which produces magnetic waves. These waves interact with the DNA inductor and leads to its motion. By motion of this DNA, its charged particles move and produce some currents. These currents emit some electromagnetic waves. These waves lead to the vibration of nuclear membranes and production of some ultrasound waves. In addition, we have shown that the structure of a DNA could be divided into linear and curved inductors. Linear inductors produce linear ultrasound waves and curved inductors produce curved ultrasound waves. Also, DNA inductors are built from hexagonal and pentagonal bases and by their vibrations, hexagonal/pentagonal ultrasound waves are emerged. Nonlinear DNA ultrasound waves are taken by viral RNAs within Coronaviruses. These RNAs act like the round inductors within a speaker/microphone. By vibrating viral inductors, new waves are emerged which cause to the vibration of viral membranes and the emergence of new ultrasound waves. Thus, dermatologic DNA inductors and viral inductors exchange waves and communicate with each other. We have calculated wavelengths of viruses and found that Coronaviruses emit millimeter waves. These types of waves could be observed in 5G technology. Thus, millimeter waves in 5G technology could be applied in controlling COVID 19. Also, these waves could be absorbed by cell membranes and move molecules within their liquids. Consequently, some more energetic waves are emerged. These waves pass the nuclear membranes and become more strong. These strong waves move DNAs and produce some holes. To fill these holes, some bases are emerged. These bases build viral RNAs like RNAs of COVID-19.

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