

SOME PSYCHOENERGETIC EXPERIMENTS IN RUSSIA

Dr. William A. Tiller

Ladies and gentlemen, it's a great pleasure to be with you today. Let me talk to you of my trip to Russia. The trip to Russia came about last September at the behest of the A.R.E., "The Association for Research and Enlightenment", who decided that they would take a group of professional people: two psychiatrists, two psychologists, two M.D.'s and myself, as a physicist, to investigate, as much as possible, what the Russians were doing in the area of psychoenergetics and to see if we could then, with this deeper understanding, spread in this country awareness of that deeper understanding. I suppose, in fact, my talk today is one of the consequences of that initial idea.

Psychokinésis.

It's very impressive, as a physicist, to be sitting at a table in a restaurant where there might be three, four or five hundred people. An individual comes in and sits down next to me and, with some small amount of coaxing, takes off her wedding ring and sets it three or four feet in front of her. She then sits back, hands folded in her lap, and looks at the ring. She moves her head slightly and that ring starts moving across the table. It slid, in jerky steps, about four feet across the table. You know, as one observes such a thing, he just cannot help but believe that, in nature, there's much more physics operating than we know about! She did another study while sitting there. She took a pen top and placed it vertically on the table and, with her cupped hands located about six inches to each side of the pen top, she moved the pen top across the table. It stayed in a vertical position as it moved across the table and moved with little slides and jerks as she moved her hands (without contacting the object). This person was Nelya Kulagina and she is illustrated in Fig. 1 levitating an object which weighed, of the order of 50 grams. I believe it was either a wooden or a plastic ball. Nelya is the person in Russia with the greatest manifested ability at the moment in this area. She is also an individual who suffers great stress during a performance of P.K. (psychokinesis). She loses between a pound to two pounds during a regular performance and suffers great pain at the base of her brain and in her eyes.

It turned out that the day we were there, she really wasn't going to perform for us because she had been ill for the previous three months and had been on vacation. However, the A.R.E. group are very warm and very spiritually-oriented people and I think the warmth of their loving radiation evoked in her a desire to serve our interests. Thus, she did perform for us and it took her only a minute or two to do these simple experiments for us. Afterwards, we immediately felt her pulse and found it going so fast that we could not count it. After about a minute it was down to around 150 and, after about ten minutes, it was down to normal. She suffered pain at that point in time, so we didn't press her to do any more. We hear that she is able to raise a burn on herself or someone else mentally and to also remove it mentally. We hear that she

can stop the heart of a frog that is hooked up electrically and is located across the room from her. The Soviets conduct experiments where they can electrically stop and start the organism, but when she stops it mentally, they cannot start it again. We hear that she can move up to the order of two pounds of material and, if you take a group of objects (some metallic, some non-metallic, some magnetic, some non-magnetic, it doesn't matter what the properties), it seems that she can move one or two objects amongst this group without moving all of them. She can specifically direct her energy in this way. One can place a screen around the objects and she can move them inside the screen. It appears that she cannot move objects in a vacuum. Her husband, who is an electrical engineer, suggests that this is primarily a psychological reaction with her, but she's not so sure. She is a very impressive individual in her performance of P.K.

The second person we saw who could manifest these qualities was Alla Vinogradova. We found her in Moscow (see Fig.2). Alla is very new to this practice and she's just learning. She's been experimenting with this for the order of one to two years and had initially decided that it wasn't necessary to manifest such stress as one notes with Nelya. She developed herself through the use of a system of autogenic training and she presently manifests no stress when she does P.K. Of course, she's still not doing many of the major experiments that Nelya does. Alla started her studies by moving objects against the resistance of rolling friction using a little aluminum cigar can on a transparent tabletop (a Lucite tabletop). She would first hold the canister and, after holding it for a while, she would then place it on the tabletop and bring her hand down with the edge of her palm facing the cylinder. It would move away from her palm, across the table, and then she would quickly move her hand to the other side of the table and the cigar can would stop rolling in the one direction and begin to move back. In this way, she would move it back and forth across the table top. After she had done this for a few minutes, she turned to me and said, "All right now, I think you can do it." I'm always game to try a novel experiment, so I tried and was amazed that I was able to do it. I was able to bring my hand down and cause it to move. It was quite delightful to move this thing back and forth across the table, and I thought, "By God, I really have it." Then, she brought me back to earth by saying, "All right now, I will stop it." I didn't believe that she could; however, she put her hand about three feet above the tabletop and, even though I tried to move it with all of my intensity, it didn't move at all! She just held her hand there above the table, then just rotated her hand and, to my astonishment, the cigar can rotated with her hand. It was abundantly clear that she was very much in control of the object and, although I had previously been in control, I was no longer. There were one or two other people there that she said could do it as well and they found that they could indeed move the object. I presume that, once she has charged it, it is very easy for someone else to move it.

I had a little glow tube in my pocket and put it in the vicinity of the cigar can and found that it glowed. Thus, there was considerable electrostatic energy in the vicinity of the can and I thought, "Well, look, it's just contact electrification." This means that if you hold an object and then separate the

object and your hand, the object takes on one sign of charge and your body takes on a deficiency of that charge. Then, if you bring the hand down towards the object, you'll get attractive forces operating between them. The dilemma, here, is that the attractive force would mean the can would move toward the hand instead of away from the hand. We could postulate that either she charges the object with an additional energy of some unknown kind and that this energy, in turn, interacts with electrostatic energy of the atmosphere to produce a sheath of electrostatic energy around the body. Thus, when we put the flow tube in the vicinity of the object, naturally we would see such a discharge phenomena. On the other hand, perhaps it is contact-electrification that is operating, but she is able to invert the charge on her body from the inside to the outside, which is a really great trick if you can do it. I think that this is much more unlikely.

One observation that was particularly interesting related to a comparison of Nelya's and Alla's work. With Nelya, they looked for electrostatic manifestations in the vicinity of the object and they found none. They placed objects in Faraday cages and she still moved them; they probed the objects with electroscopes and still found no apparent electrostatic manifestations. However, in Alla's case, such manifestations were ever present. In Alla's case, there was a subjective feeling of energy in the solar plexis region at the front and in the forehead at the front (more intense at the forehead). She feels and tries to move the energy down through her arms and out her hands. Often she feels that a discharge occurs from her fingers and it hurts. Nelya, on the other hand, feels the energy in the central part of the back and up the spine to the base of the brain; always at the back, in her case. So, obviously, these two ladies are doing it differently and it suggests that perhaps that neither of them are doing it optimally. That is, if there is a machinery in the body for invoking these energies which may include a combination of what they have been doing or maybe more (a synchronization of energies, perhaps). It should be clear that there are probably several ways of performing this function.

The Soviets developed a detector of the energy that functions during P.K. and noted that energy pulsations occurred in the vicinity of the object. The first such detector utilized Barium Titanate as the sensing material. A much better detector appears to be a plant with electrodes connected to the acupuncture points of the plant (see Fig. 4). They find that the energy pulsations occur in the vicinity of the object and these pulsations are synchronized with the respiration rate of the individual which are, in turn, synchronized with the alpha rhythm of the brain wave and the heart rhythm. In this process there appears to be a development of body coherence, and probably coherence may be a suggestive word here. However, one observation that is of interest to me is that when they move the instrument away from the object, either towards the operator or away from the object on the other side, they lose this energy manifestation. In our conventional kind of physics, we think in terms of an operator who is radiating some energy in our space/time frame (see Fig. 3) and, therefore, everywhere along the path we would detect energy but with continuously changing intensity. In the present case, it appears that there are zones wherein one cannot detect this energy, suggesting that maybe at least one of the important energies is functioning through a different space/

time frame than that which we are accustomed to considering. I find that an interesting speculation to look into in the future. Figure 4 shows the aspect of the plant detector where one basically puts electrodes on the acupuncture points of the plant, feeds the current output through a meter into an amplifier and then looks at the current output as a function of time. Then one sees a normal biocurrent which is modified by these energy pulsations which are detected as large current pulses. For the Barium citanate type detector, the current changes from something like 5 to 7 1/2 during pulse. For the plant detector, the change is from 5 to almost 100 (microamperes) so plants are really very good detectors of this type of energy.

Telepathy

The second topic that I found to be of real interest in Russia is telepathy. Today I intend to discuss aspects of 4 topics: psychokinesis, telepathy, Kirlian photography and acupuncture, because each of them indicates something special to us about, perhaps, new aspects of physics. In the telepathy area, one of the key things that the Russians brought to this work was to hook up the sender and receiver to electroencephalographs and, even if the sender and receiver were a thousand miles apart, they can monitor the brain waves. They find that when the sender starts to send, they see a change in the brain wave pattern of the receiver and then the receiver says, "I'm starting to get a message." They find that if they take the sender and, with the eyes closed, they play a strobe light on the eyes (i.e., a constant frequency pulsating light), this produces a characteristic change in the brain wave pattern of the sender and they find this same characteristic pattern in the brain wave of the receiver (along with the information about the message). The clincher occurred when they took binoculars and placed them on the eyes of the sender and then shone a strobe light of one frequency at one closed eye and another frequency at the other closed eye. This produced a type of circulatory pattern in the brain wave of the sender; it was a very complex pattern, one that tends to destabilize the sender, but he knows what is going on and so is able to hold himself stable. However, the receiver doesn't know what is going on and he just gets sick! That's a rather dramatic confirmation of telepathy. In addition, the Soviets have done experiments with the sender and receiver placed in Faraday cages, so I'm told, which indicates that the transmitted energy is not electromagnetic, as we know electromagnetic energy anyway. In another experiment in this general area, they took a mother rabbit and her children. They hooked the mother rabbit to an electroencephalograph. They also took the children down below the ocean in a submarine and they killed the children one at a time which is not a very nice experiment, but it really indicates something to us that is very important for us to realize. They recognized a characteristic change in the brain wave pattern of the mother every time a child was killed, which indicates a special connectedness of the organisms in this case; i.e., of the family of rabbits. This reinforces what we've heard from many sources; i.e., that we're all connected in some way at some level of nature. In addition, it indicates as well that we are probably not dealing with electromagnetic energy transmission here because it goes from above the ocean to well below the ocean and electromagnetic energy, as we know it, could not do that.

Kirlian Photography

This is a new form of photography using high voltage and yielding a variety of interesting results. Figure 5 indicates the results that you might get from a leaf. There is no applied light involved in this photography at all. One just applies a high voltage to the leaf. One places the leaf between electrodes (see Fig. 10) and applies some pulses of electrical power. In the photograph, one sees the outline of the leaf and all the inner structure via the little spots of light. With this edge corona of energy, the Russians thought that they were seeing the aura of the leaf. Subsequent work, I think, indicates why they thought it was the aura (see Fig. 8). Figure 6 represents a photograph of the palm of the hand where the bright lines are the main lines on the palm that the palmists look at. It turns out that these are regions lower in resistance than the surroundings and they're emitting more energy. Figure 7 shows a Russian coin, so we see that this operates also with inanimate objects; again we see the edge discharge around the coin.

Figure 8 represents one of the things that interests me so much about this work. Here we see a picture of the leaf exhibiting the corona discharge around its edge and we see, on the right hand side, a portion of the leaf really has been cut away and yet one still sees a pattern of energy photographed from the portion that was no longer there. The Russians thought that they were seeing, in fact, the aura of the leaf and they were seeing something which was like the lost-limb effect noted in humans; i.e., a man has his leg cut off and then feels that part which is no longer there physically. And here they feel they have seen this lost-limb or lost-leaf effect. It was interesting that in the book, "Psychic Discoveries Behind the Iron Curtain," the authors indicated that they could cut away up into a third of the leaf and still obtain this field effect. When I went to Russia, they said, "Oh, that wasn't quite true and that you could really only do this if a maximum of 1 or 2 percent of the leaf was cut away. Then, as I was leaving a meeting, someone stuck a photograph of a leaf in my hand and I noted that something of the order of 10 percent of the leaf had been removed and it was still showing in the photograph. I'm not sure what the correct answer is at this stage. With our instruments in this country, no one has been able to reproduce this particular effect. However, we are presently using a different kind of instrumentation than the Soviets. We must conclude that there is something very complex going on here.

At this stage of our understanding, we must think of the following as being a type of speculation; however, one could rationalize this result if at some level of substance there was a radiation of energy from information sources which emitted a coherent energy. It would produce something like a hologram of energy, a force field, if you like, having a particular pattern. That pattern or that force field would be the field of force within which physical matter was organized. In a somewhat analogous vein, experiments have been done in which one takes a rat and cuts out some of its muscle, grinds up the muscle, and then puts it back into the cavity and closes it up again. The body is found to organize that ground-up muscle so that it reproduces its original structure the way it was before the initial cutting. This suggests that, at some deeper

level of substance, there are force fields existing that already contain the basic information that leads to these structure at the physical level. If that is the case, if we are able to pursue this kind of study properly, perhaps we can do something about the regrowing of limbs (just as a salamander does). Again, this is very speculative; however, it is of value to project what are some of the possibilities that exist for us in the future if these experiments bear out.

Let us turn now to some details about the instrumentation. Basically, the power source is a pulse generator having the characteristics illustrated in Fig. 9. It is basically a square wave pulse, repeated about 60 times a second, which has a height of 20,000 to 100,000 volts. The distance between electrodes is such as to generate an electrical field of the order of 1 to 10 million volts per centimeter at the surface of the sample. Underneath the pulse envelope is radio frequency energy of 75 kilocycles (KH), to 3 megacycles (MH). Figure 10 illustrates the kind of instrumentation that one uses to take photographs. Basically, the power source feeds into a pair of electrodes and the whole device is held together with a sponge clamp to produce an even spacing. A dielectric sheet, which produces a uniform electric field, is placed between one electrode and the object. The application of the field stimulates the emission of energy from the object. What the Soviets think actually happens is that the surface of the object is a heterogeneous cathode; we have regions of low work function and regions of high work function. The regions of low work function are the acupuncture points and low work function means that the energy needed to allow an electron to leave the solid matter is smaller than at other locations so that more electrons stream out from such regions than from the surroundings. They stream out from the acupuncture points. They travel across the air space. They ionize some of the air and this produces a surrounding sheath of ions which focuses the electrons across this space. As the electrons accelerate in the field they pick up energy and, as they impinge upon the molecules, they give off energy in bursts of light and it is this light which then exposes the photograph. So we see, in this case, a series of transductions of energy or information, if you like. The information inherent within the body is, let's say, manifest in the electrons coming out of the acupuncture points. The information inherent, then, in the electron streams is transformed to bursts of light as they impact the molecules and the film is the final photographic transduction stage to put the information into a pattern that we see. In Fig. 11, we have a device which displays the information on a television-type screen. An electrode is placed behind the object outside of the device and, under the influence of the electric field, the electrons stream off the object. They produce a pattern on the back surface of the dielectric block at the left end of the device. The pattern is transposed to the inner side of the dielectric block via polarization forces and then electrons are pulled off from this pattern and accelerated with the electrodes to produce an image on the surface of the screen.

The Russians, by the way, have magnifications, at the moment, of up to about 400 times and they think it's possible to go up to the order of 10,000 times magnification. Figure 12 illustrates what is basically a microscope approach to

the problem. What one does is place an object on the centerline and place an electrode below it. If one is viewing the skin of the human body itself, then only one electrode is needed; one doesn't need to use two electrodes. For such a case, one places the skin on the centerline of the microscope, the electrical power is applied to the side electrode and is manifest at the bottom of the device. This causes electron emission from the object and the generated light focuses up through an iris into an objective lens, then up a collimating tube into an eyepiece of the microscope so that one can visually observe what is going on as experiments are performed on the subject. One sees flares of energy coming out of points on the body surface and the Soviets have correlated these points with the acupuncture points. Generally, they see many more points than are on the Chinese charts, but I suspect that just means we have many more acupuncture points to locate yet. They find that the intensity of the flares and the color of the flares depend on the emotional state, on the mental state and upon the physical well-being of the individual. They are able to detect indications of disease via these changing color patterns before the disease is physically manifest and can be observed by our conventional techniques.

Figure 13 shows another very interesting device modification. The Russians use a transparent, but elastic, dielectric and, in addition, they use a transparent electrode. What happens, basically, is that the information from the energy states of the body manifests as electron streams coming off this surface which then produce an information conversion into light. The light goes through this transparent electrode and one can monitor it with the eye or with a camera. We learned that the Russians are building garments out of this material so you can place the garment over the individual and one can then monitor various organs or body centers during particular experiments. For example, one can monitor the chakras or the endocrine glands during an out-of-the-body experiment or during various kinds of psychic experiments and one can see where the energy changes are taking place in the body and can see if, in fact, they are synchronized one with another. Thus, this is a tool for really learning a great deal about this whole area of evolution, of consciousness, medicine and parapsychology. I think it is a very useful tool and we'll hear much, more about it in the future.

The Russians did an interesting experiment with this device. They used such a device on the palm of a healer's hand when the healer was doing a healing experiment. They found that, as he was starting to heal, the acupuncture points were firing and they saw flares. Many of the points were flaring. But as he tuned closer and closer to really healing, the number of points firing decreased but the arcs of discharge around any one point increased. Eventually, when he was really attuned to the subject, there was just a luminous disk of the size of a dime in the center of his palm, and this was at the point where the patient says, "Yes, I really feel it now." It looks very much like a type of coherent energy coming through the palm that is doing the healing. But, again, the importance here is that the experiment definitely shows a cause and effect relationship. That is, we see some manifestation of this energy associated with the man's attempt to heal. Now, let me quickly state that I don't think that we are seeing a totally electromagnetic energy effect here even though

we see this luminous disk. It is doubtful that the energy involved in the healing is electromagnetic because we've looked for it with other E.M. devices and have never seen evidence for it. Very likely, we are dealing with this transduction condition again. One can visualize that some other form of energy comes through the flesh and at such an intensity that it changes the work function for the passage of electrons. Thus, the electrons just naturally spill out of the surface and are pulled across the air gap to produce this tremendous light manifestation. This is one of the things that one must realize in all of this work; i.e., although all the instrumentation is electromagnetic, the primary energies appear not to be electromagnetic. There are probably many different kinds of unknown energies involved (I prefer to think that there are). In addition, there is always a transduction phenomenon between one form of energy and another so that we can see electromagnetic manifestations without the primary action being electromagnetic.

I did a simple experiment with Thelma Moss' instrument at U.C.L.A. Figure 14 is a picture of my fingerprint in a normal state and, between this and the taking of Fig. 15, I tried to just mentally move energy through my body for about 30 seconds (with a constant breathing pattern). In Fig. 15, one can see a greater energy intensity after energy movement. Many people have suggested that what one is seeing here is not electron emission but, in fact, is associated with sweat glands and ionization. Thus, we did an experiment which led to Fig. 16. I first put my hand in a plastic bag for a little while and that made the hand get moist; then, taking the plastic bag off, I waited for the finger to dry partially. When all visible water was gone, a photograph was taken. One can see a much greater reduction of the energy flares on the finger after this treatment, which suggests that sweat is detrimental rather than beneficial to the result.

Figure 17 shows a photograph of Thelma's of a subject they are using in an alcohol experiment. Between this particular photograph and the next one (Fig. 18), the man has ingested 10 ounces of alcohol and here one sees a considerable energy change. The important point to realize here is the presence again of a direct cause and effect relationship. We don't necessarily know at this point which way is up and which way is down, which way is right or which way is left; but we are able to see a change as we do something and we can begin to study the influence of various drugs on individuals, the influence of one individual upon another, whether they relax, whether they become tense, the effects of various foods, and so on. As we perfect the instrumentation to really learn how it is working, then I think we will be able to say a great deal about the effects of these things on the physiology of the individual. Thelma Moss and her staff, using the U.C.L.A. instrument, have tried to reproduce the Soviet cut-leaf experiment. However, as I've mentioned, they do not see the fringing field. They see other things in their photographs that the Russians don't see. We have to go at the investigation of this subject very carefully to try to understand the differences between one type of equipment and another before we can say anything definitive as to whether, truly, there is this cut-leaf effect or not. However, the implications for man in this experiment are so great, it behooves us to chase it down very carefully. In addition,

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we should not focus too tightly on the electron emission type of explanation for the phenomena but keep our minds open to the possibilities of other particles and energies being operative.

Acupuncture

Let me now turn to acupuncture. In Fig. 19, we see some circuitry in the human android. As you may know, acupuncture is really an ancient Chinese art of preventative medicine, over 3,000 years old. The way they came upon it, I hear, is they found that some of their warriors would be struck with arrows in various places and yet other parts of their body would be paralyzed. By carefully trying to correlate these kinds of things, they found acupuncture points. Initially, they used the order of 60 that dominated various aspects of the body and then up to the order of 300, which they maintained for a long time. At the moment, we've discovered more than a thousand acupuncture points. I suspect that there are many more. You know, it's just like primary blood arteries and secondary and tertiary and then on down to the capillaries. The principal seems to be, or the ancient idea was, that there were 12 meridians in the body, these being circuits. Think of them, if you like, like electrical circuits, but not necessarily electrical, more like wiring in the body. There's a subsurface loop of this wiring and there's a deep inner loop of this wiring. The deep inner loop is connected in some way with all the glands and body systems. The subsurface loop is connected in some way with the surface at various points, these points being called the acupuncture points.

When I was in London and being treated for some gall bladder problems, the doctor put a needle in point #15 on my forehead and it was interesting to me to hear the crunch of the needle as it went in. There was no pain, no blood, just a noise heard from inside my head. I suspect that the needle touched the bone and maybe it went into a crevice in the bone to some degree. In terms of procedure, the doctor in London first felt my pulse. There are supposedly six pulses on each wrist via which one can feel the energy flow in these meridians. She checked my pulse and she said, "All right, you've got a problem with the gall bladder and liver meridians." Then, she took another instrument containing two electrodes, one of which I held in my hand as she moved the other over my body. When the second electrode touches certain points on the skin, the needle on a meter in the instrument swings upscale to a certain level and she's able, then, to determine the level of activity or vitality of the organs associated with these particular points. In this way, she was able to localize the glands which were giving the problems.

Figure 20 illustrates the Russian tobiscope which is basically a smaller modification of this same type of instrument that was being used in England. The backside of the tobiscope is metal and the tip is metal. One holds the back part and moves the metal tip over the surface of the skin. Inside, there is a balanced electrical bridge circuit. The bridge is balanced when one touches normal skin (there the resistance is of the order of 2 million ohms). Whereas, when one touches an acupuncture point, the resistance drops to the order of 100,000 ohms or less and that upsets the balance of the bridge. This imbalance generates a signal which is fed into a DC amplifier and that amplifies the signal which, in turn, activates a light in the front of the

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device. One could take that same energy and feed it into a little audio device so that a "beep" would be generated every time one touches an acupuncture point. As this kind of instrument is moved over the body, one finds a network of points of low resistance, which means that there are shunt paths through the body; i.e., some kind of circuitry which exhibits a low resistance compared to normal skin (lower by at least an order of magnitude). One also finds that the resistance of these points is very sensitive to one's emotional state, mental state, state of health and state of well-being. One finds a difference between the sleep state and the awake state. For example, at night-time, during sleep, the resistance is larger by a factor of 2 compared to the daytime awake value.

I was trying an experiment with my wife, measuring the resistance of some points on her knees (which related to an abdomen problem that she was having), and she was sitting on the couch. I noted that the meter kept drifting and it just wouldn't settle down to a fixed value. I suddenly looked up at her and realized that she was starting to doze off to sleep. As she was undergoing this consciousness change, the resistance change was also occurring. It made for unreliability in the measurements.

Basically, the first aspect of point characteristics to recognize is their electrical resistance. The second aspect to note is that if one takes dissimilar electrodes, like nickel and copper or nickel and silver, and places them on two acupuncture points, a voltage of the order of 50 millivolts can be developed and, if such electrodes are connected in series, one can obtain of the order of a half a volt (enough to run a small toy). Currents of the order of ten microamps can be drawn from one pair of electrodes. Thus, the body is acting like a Galvanic cell, if you like; it is performing a battery-type function. This measurement can be used as a technique to test one's own mental concentration. This is, one can concentrate on these two points to increase the potential, the electrical potential, and may increase it by as much as a factor of ten. This occurs purely as a result of mentally focusing attention on that intention. It's a very useful training device for an individual who wants to develop greater control over his organism or who wants to do P.K.

The ancient Chinese thought of this meridian system as a separate circulatory system of the body on par with the blood, lymph and nerve system, and I tend to think that's a good way to consider it at this point of time. At least, if we think of it as new and separate, we will try to learn a great deal about it, rather than saying, "Oh, it's just part of something else," and then sweep it under the rug so we don't have to study it carefully. The ancient Chinese have always felt that there was an energy called "Chi" flowing in these meridians and that it was important that the meridians be balanced with respect to each other. Disease was associated with an imbalance in these meridians. Individuals would go to the doctor about every 3 to 6 months, just as we go to the dentist, and the doctor would balance their circuits as a form of preventative medicine. He was paid for this and then, if the individual ever did get sick, the reverse situation took place and the doctor paid the patient in the sense that he cured them for nothing. That seemed to be the kind of system they had.

The key aspect of the model was that a fluid flowed in a unique circuit of many channels and a balance between the channels was needed. One had to have sufficient energy in these meridians for life functioning and it had to be balanced because if it was imbalanced, then one would find that there were regions of the body receiving insufficient energy and that was where bacteria and other disharmonies would develop. Now, a model that I would project to you as a possible model to think about is that, if it is a fluid-type system, then, like most fluid systems of the body, a primary component of the energy would be in the form of colloids. Thus, think of colloidal particles flowing through these tubes. They must be very small (the tubes) because otherwise we would have observed them in Western medicine; even if we didn't believe they were there, we would have still found them if they were large. Thus, they must be very small. So long as the colloids are dispersed, there is no problem. However, as disharmony develops at the deeper levels of man and moves towards the physical level, this is manifest as an alteration in an energy field which affects this colloid stability problem. Instead of remaining dispersed, the colloids begin to coagulate. Now, instead of having little particles flowing, one has a raft flowing downstream and it gets hung up at some eddies or junctures in the stream and produces a blockage. The fluid piles up and a pressure is produced in that fluid limb of the circuit compared to another limb of the circuit; i.e., a pressure differential is developed. What we find, in fact, is that if one puts a needle into a point that needs to be stimulated, the needle doesn't come out easily. One finds that the skin pulls up around it and there's almost a suction force holding it in. However, when it's been there long enough to change the energy balance and perhaps to have broken up this raft, the needle withdraws very easily; the skin doesn't pull up around it anymore. Thus, it seems as if there's an actual imbalance which takes the form of a differential pressure developed to hold this needle in at a point that needs stimulation.

Figure 21 shows an experiment that the Russians have performed to check different hypnotic states of the consciousness of an individual by monitoring the change in point resistance associated with different states. Artificial reincarnation is a dynamic type of hypnosis where an individual is super wakeful as indicated by the higher conductivity. Thus, by monitoring the resistance of these points, one can detect a change in the physiology of the individual.

Figure 22 shows the results of a Soviet experiment where they used a healer. They took an individual who was ill with respect to certain particular body systems and they illustrated on him what they have called "the semi-conductor effect." One has a symmetrical arrangement of acupuncture points on the left side versus the right side of the body. When one measures resistance from left to right, he gets a certain value. If he switches the electrodes around and then measures from right to left, he finds, if the individual is healthy, the same value. However, if the patient is unhealthy, then there will be a difference, and the degree of difference is proportional to the degree of advancement of the disease or dishealth, if you like, of that particular organ of the body. This malfunction affects the entire meridian. In the experiment, Victor Adamenko took an individual and looked at the particular meridian where he was having problems and monitored several points along this meridian (see Fig. 22). Adamenko also took a healer, someone who projects energy from

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his hands, and determined no difference in resistance on him before the experiment. However, after the individual had projected energy to the patient, there was a decrease in the differential resistance for the patient and an increase for the healer. So the healer unbalanced his circuitry in order to bring about some measure of balance in the particular meridians of the patient. Thus, we see via the change in the semiconductor effect that the healer can influence the patient (the energy transfer mechanism is unknown to us), and we can utilize the acupuncture points to monitor this cause-effect relationship.

The North Koreans have done some very, very interesting work in the area of acupuncture. Professor Kim Bong Han, with a team of investigators, did much work in the 50's and the early 60's. In one experiment, they injected radioactive phosphorus (P^{32}) into an acupuncture point on the stomach of a rabbit to test out the fluid circuit idea. As indicated in Figs. 23 & 24, he found that the radioactive phosphorus was located primarily along the meridian as distinct from regions adjacent to the meridian in the surrounding tissue. As can be seen from Fig. 23, they found about an order of magnitude difference laterally versus longitudinally to the meridian, which shows that there is a particularly organized channel for the passage of this fluid. They also found that, when they monitored these particular points, resistance-wise, there was a biorhythm which was of the order of 4 to 6 cycles per second and it existed as long as there was radioactivity present but disappeared when the radioactivity was gone.

In conclusion, what the Russians seem to be doing in this total area of psychoenergetics is to consider the information processes as biological information; this applies to telepathy, dowsing effects, various kinds of hypnosis, eyeless sight, and so on. They are also looking at the control of this energy through P.K., thoughtography and other things of this nature. Further, they are studying a variety of different tools for investigation, such as Kirlian Photography and various kinds of detectors, such as plants, insects and liquid crystals.

FIGURE CAPTIONS

1. Nelya Kulagina levitating a small wooden sphere.
2. Alla Vinogradova rolling an aluminum cigar can along a transparent lucite tabletop using P.K.
3. Radiation field during P.K. if prime energy operates in our conventional space-time frame.
4. Illustration of current pulses from a plant sensor during P.K. experiment (electrodes attached to the acupuncture points of the plants).
5. Kirlian photograph of a leaf (taken by V. Adamenko).
6. Kirlian photograph of skin in the palm of the hand (taken by V. Adamenko).
7. Kirlian photograph of a Russian coin (taken by V. Adamenko).
8. Kirlian photograph of a cut leaf.
9. Electrical output properties of energy source.
10. Simple electrode device for taking Kirlian photographs.
11. Cathode Ray Tube device for taking Kirlian photographs.
12. Microscope objective lens housing for direct observations of energy patterns.
13. Transparent electrode device for continuous monitoring of energy patterns.
14. Corona discharge around the author's finger in normal state.
15. Corona discharge around the author's finger after having mentally visualized the movement of energy through his body for 15 seconds.
16. Discharge effect after hand has been in a plastic bag.
17. Alcohol experiment - after patient has ingested 2 oz. of alcohol (courtesy of Thelma Moss).
18. Alcohol experiment - after patient has ingested 12 oz. of alcohol (courtesy of Thelma Moss).
19. Some meridian circuitry and some acupuncture points in the body.
20. Schematic diagram of the Adamenko tobiscope.
21. Illustration of acupuncture point conductivity change as a function of state of consciousness.
22. The "healer-patient" experiment.
23. Distribution of P^{32} (100_{mc}) three hours after its injection into an acupuncture point located in the abdominal skin.
24. Distribution of P^{32} after injection of P^{32} (100_{mc}) into the femur area.

Figure 1

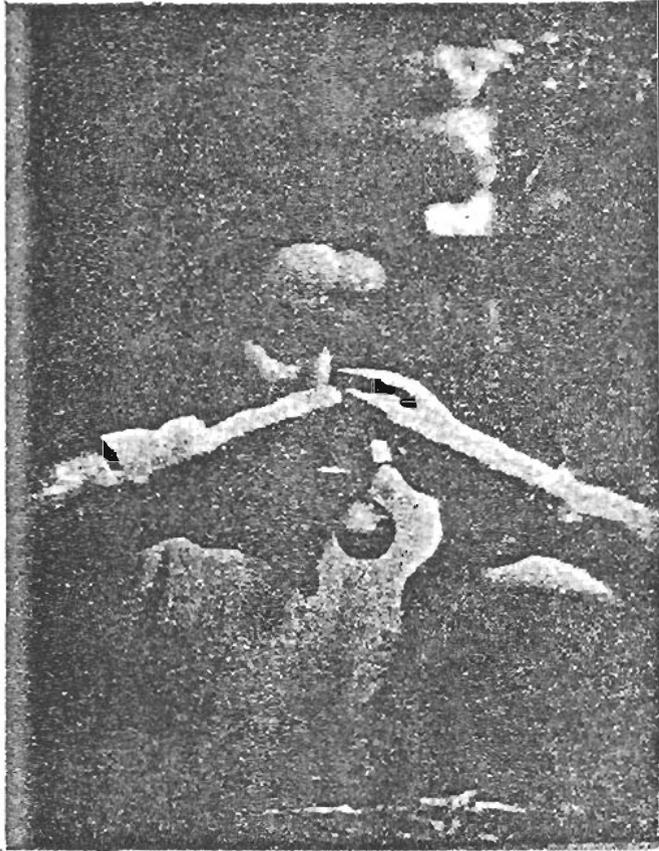


Figure 2



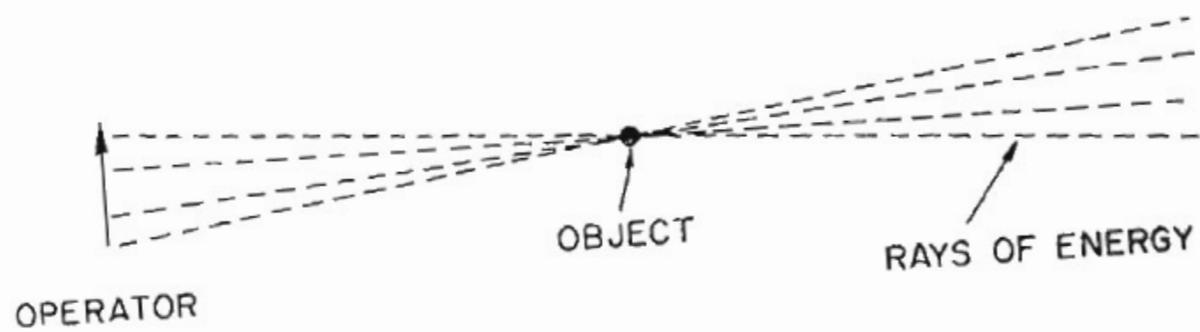


Figure 3

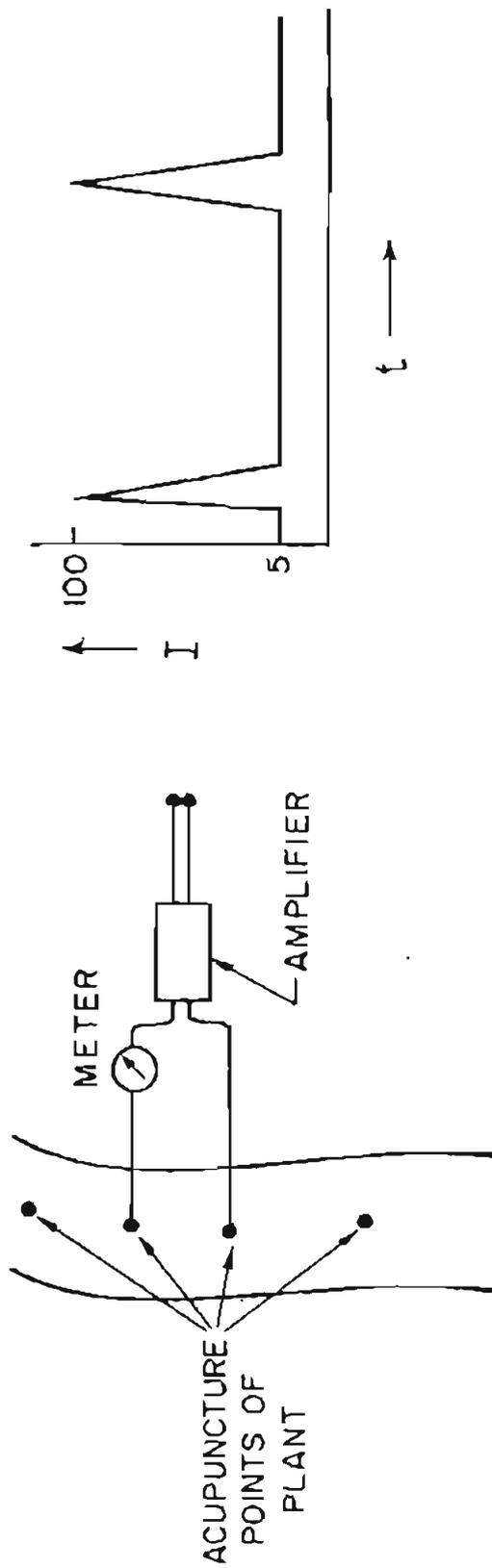


Figure 4

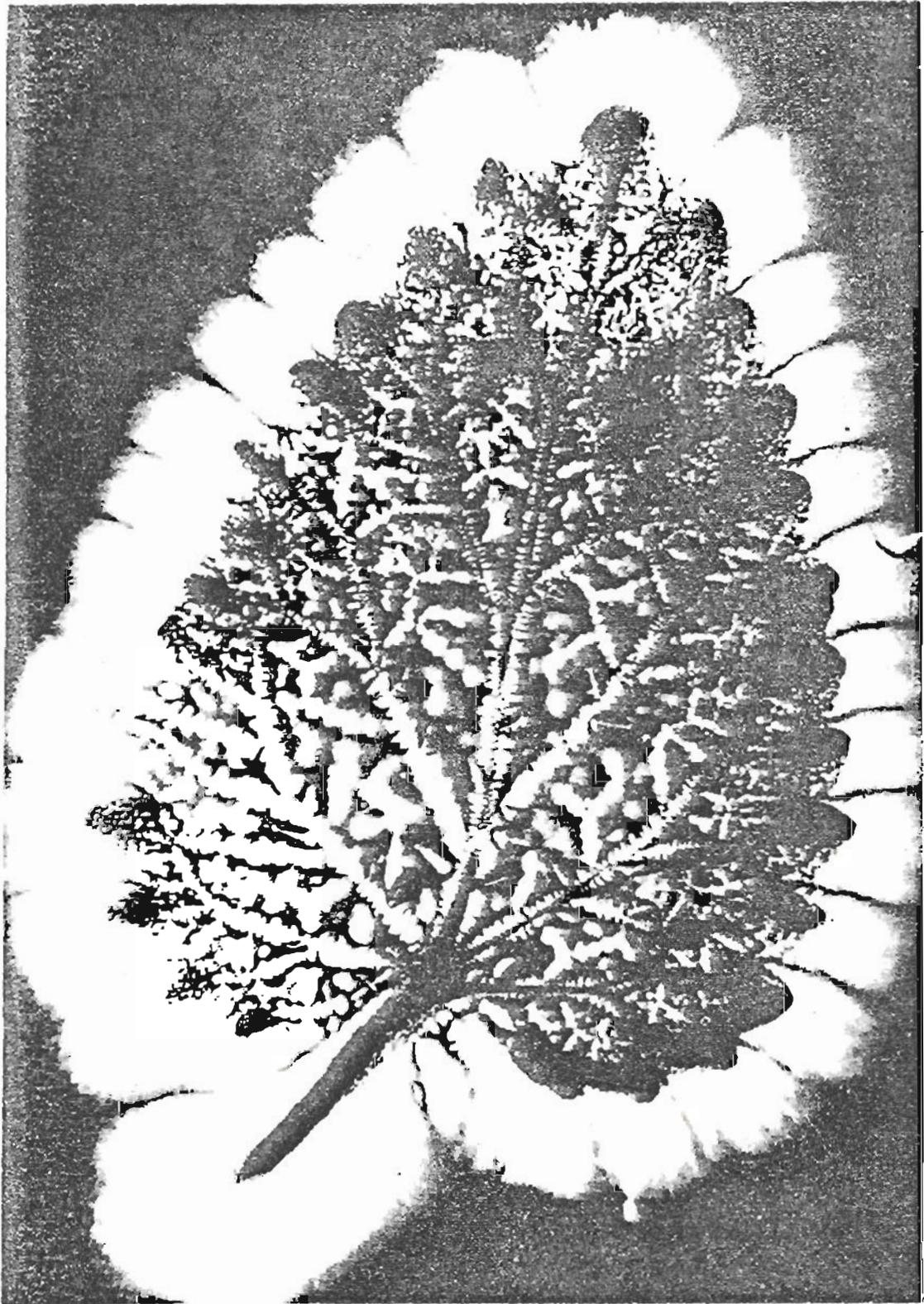


Figure 5

Figure 6

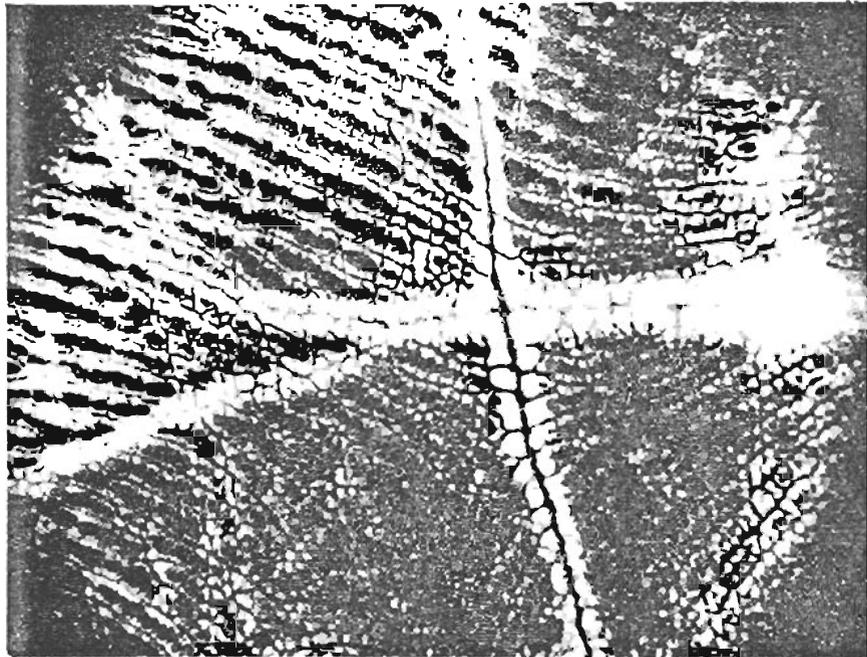


Figure 7



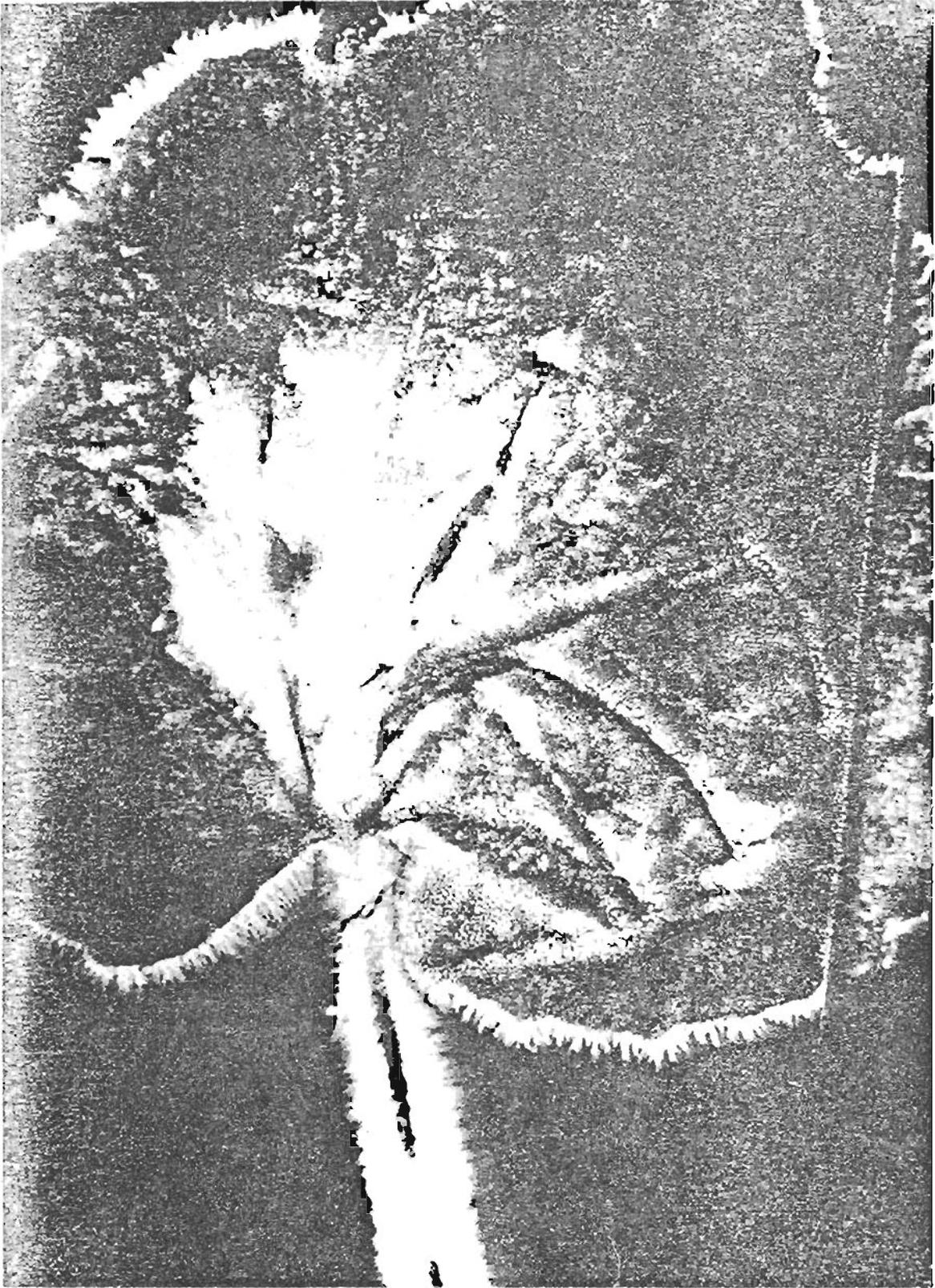
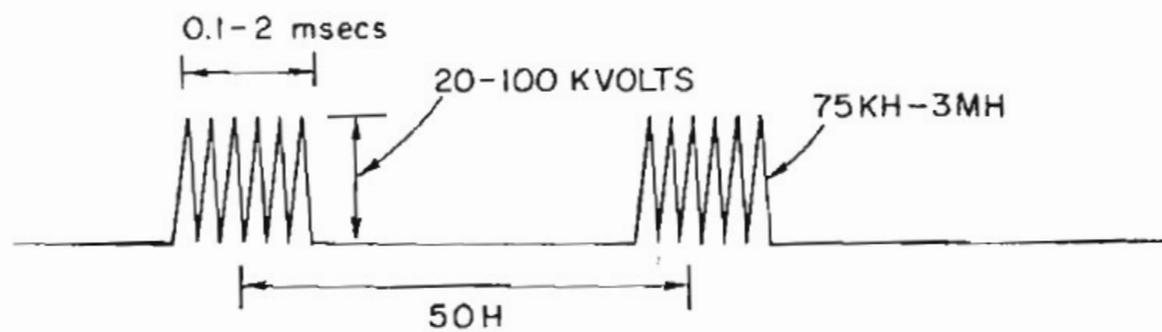


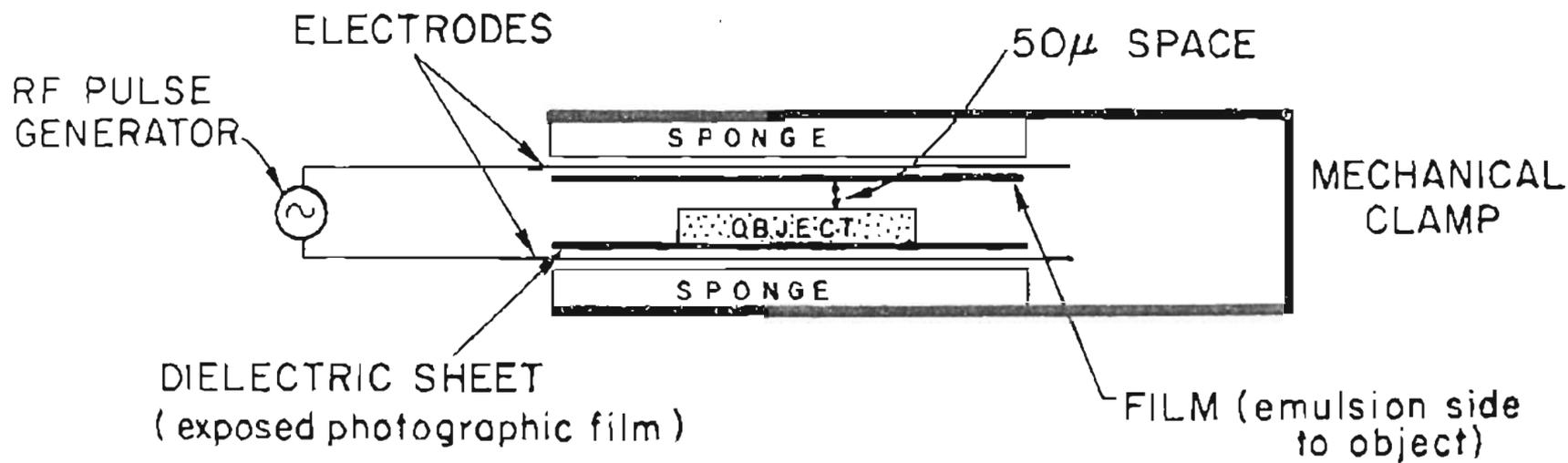
Figure 8

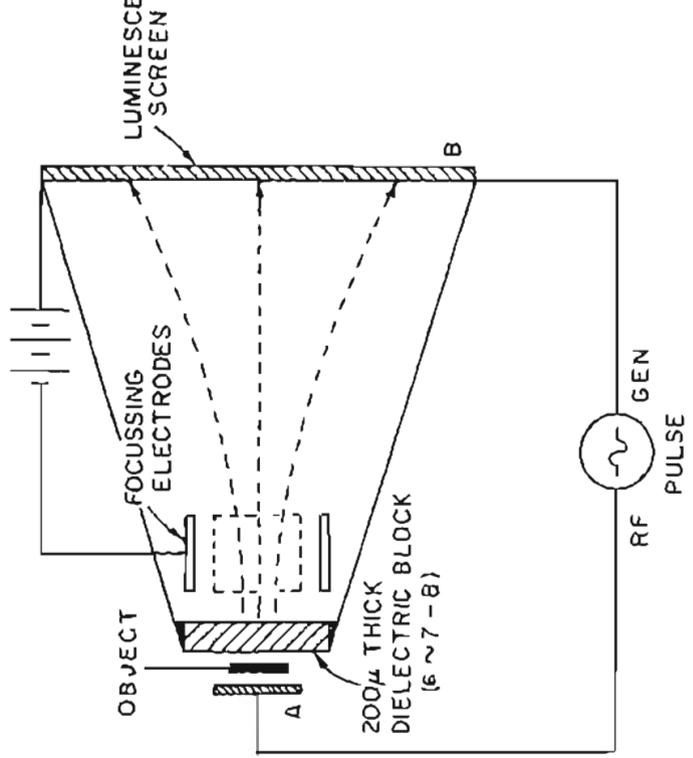


KIRLIAN POWER SUPPLY CHARACTERISTICS

Figure 9

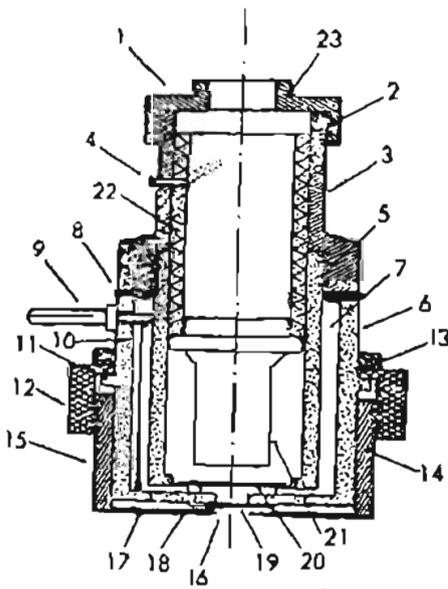
Figure 10





SCHMATIC KIRLIAN CRT

Figure 11



1. Transitional nut (to microscope cube)
2. Thread
3. Upper half of housing
4. Pin for focusing
5. Thread
6. Lower half of housing
7. Two orifices (ϕ 4mm) disposed one in front of the other
8. Rubber washer
9. Contact to power source
10. Metallic wire (for protection against circuit disruption because of water evaporation)
11. Thickening in form of a ring
12. Pressing nut, freely revolving
13. Collars
14. Thread
15. Traverse
16. Orifice ϕ 5mm
17. Bottom of the traverse
18. Glass with thickness 0.6-1.0mm
19. Glass with thickness 0.13-0.14mm
20. Chamber (cell), flooded by water through orifice 7
21. 8-12 times objective
22. Bushing which carries objective
23. Thread (in accordance with microscope tube thread)

Figure 12

EYE OR CAMERA

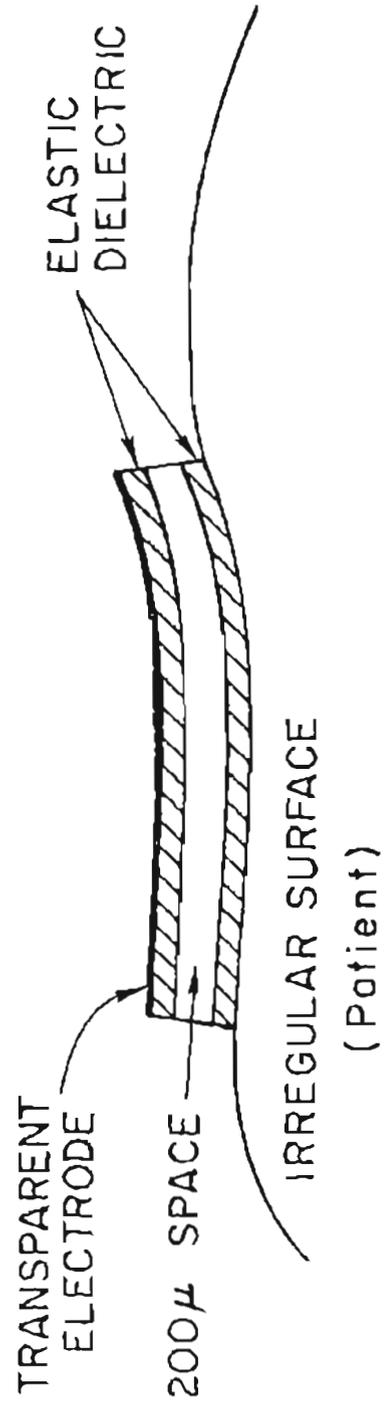


Figure 13



Figure 14

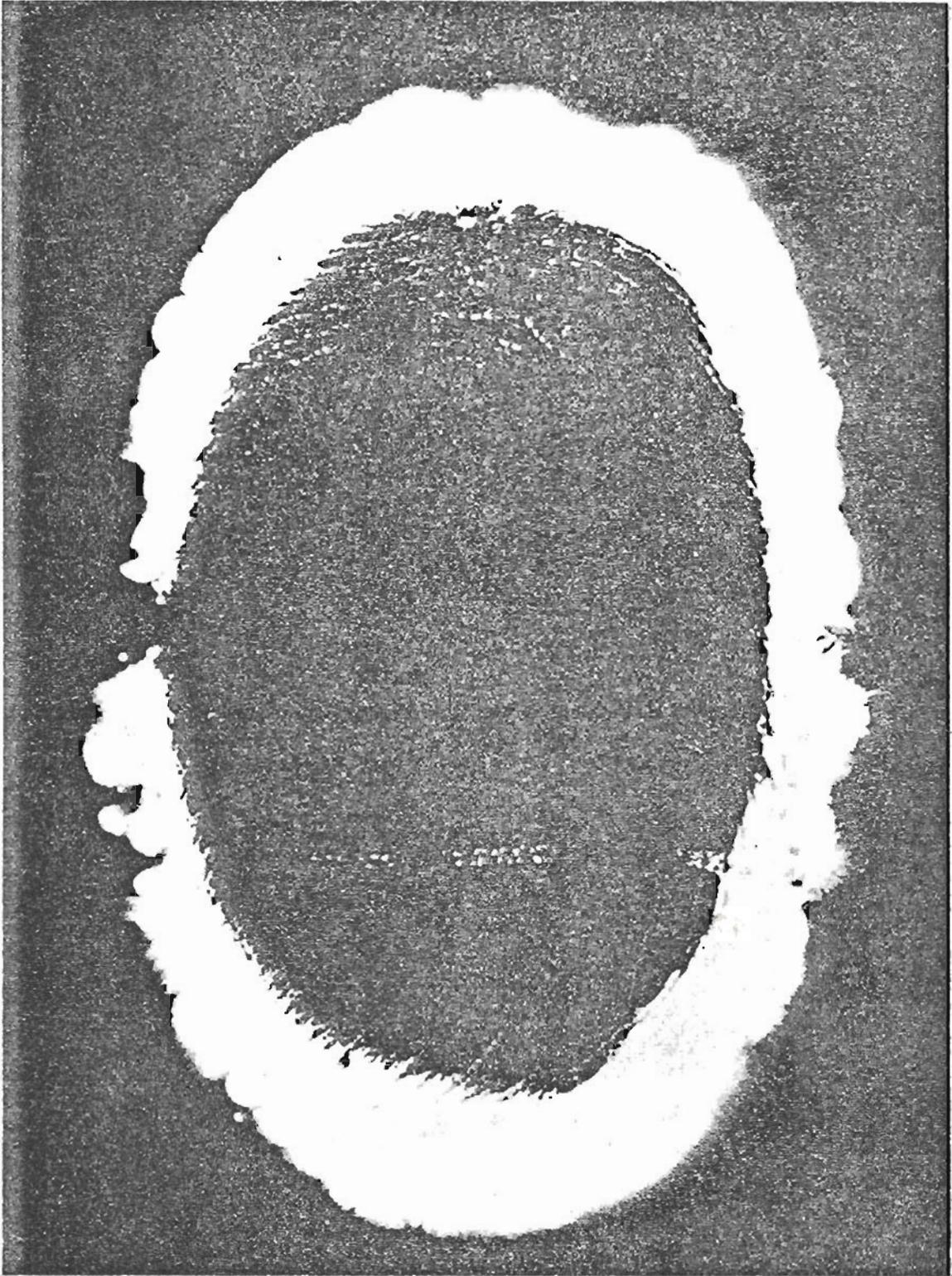


Figure 15

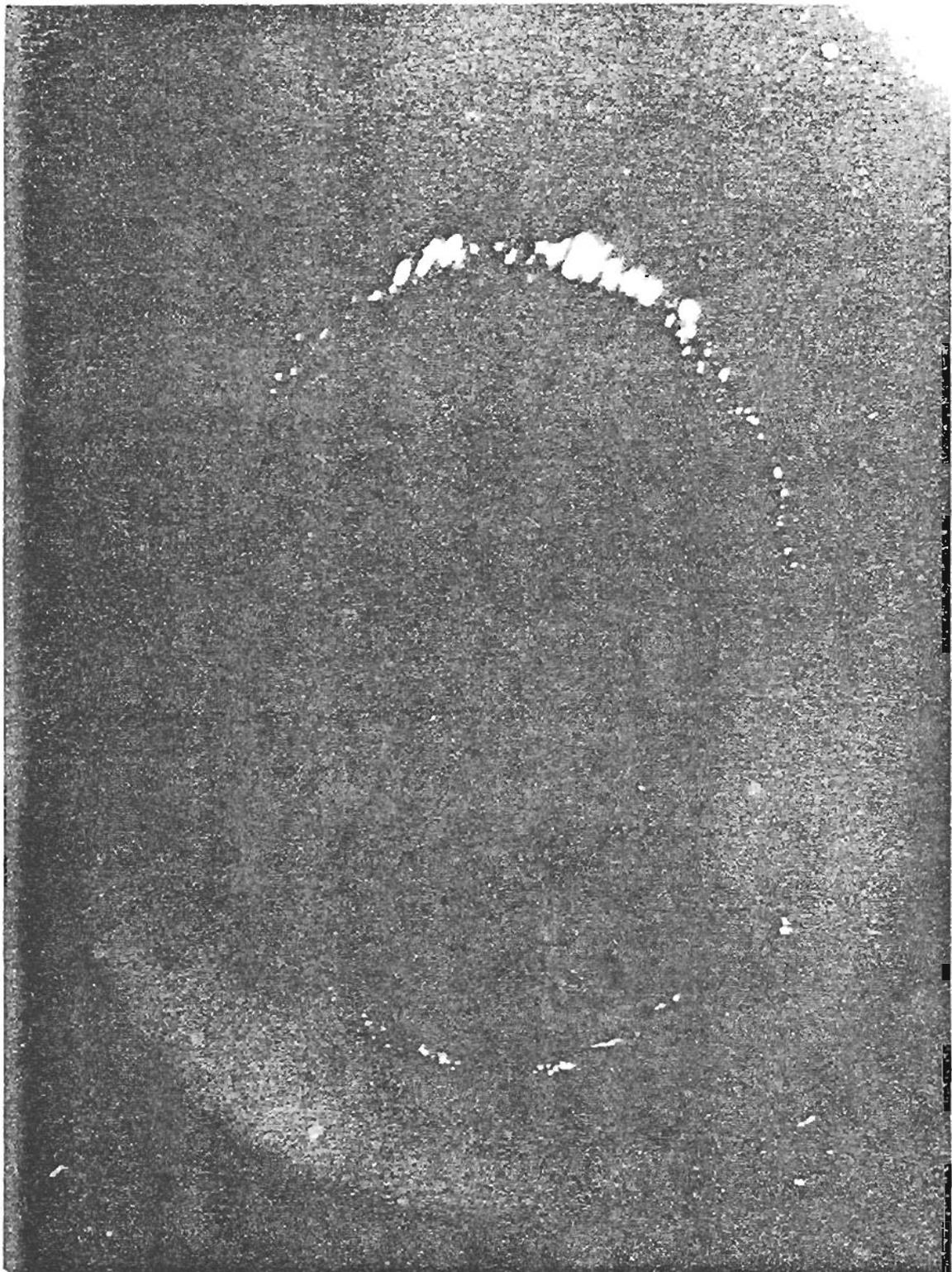


Figure 16

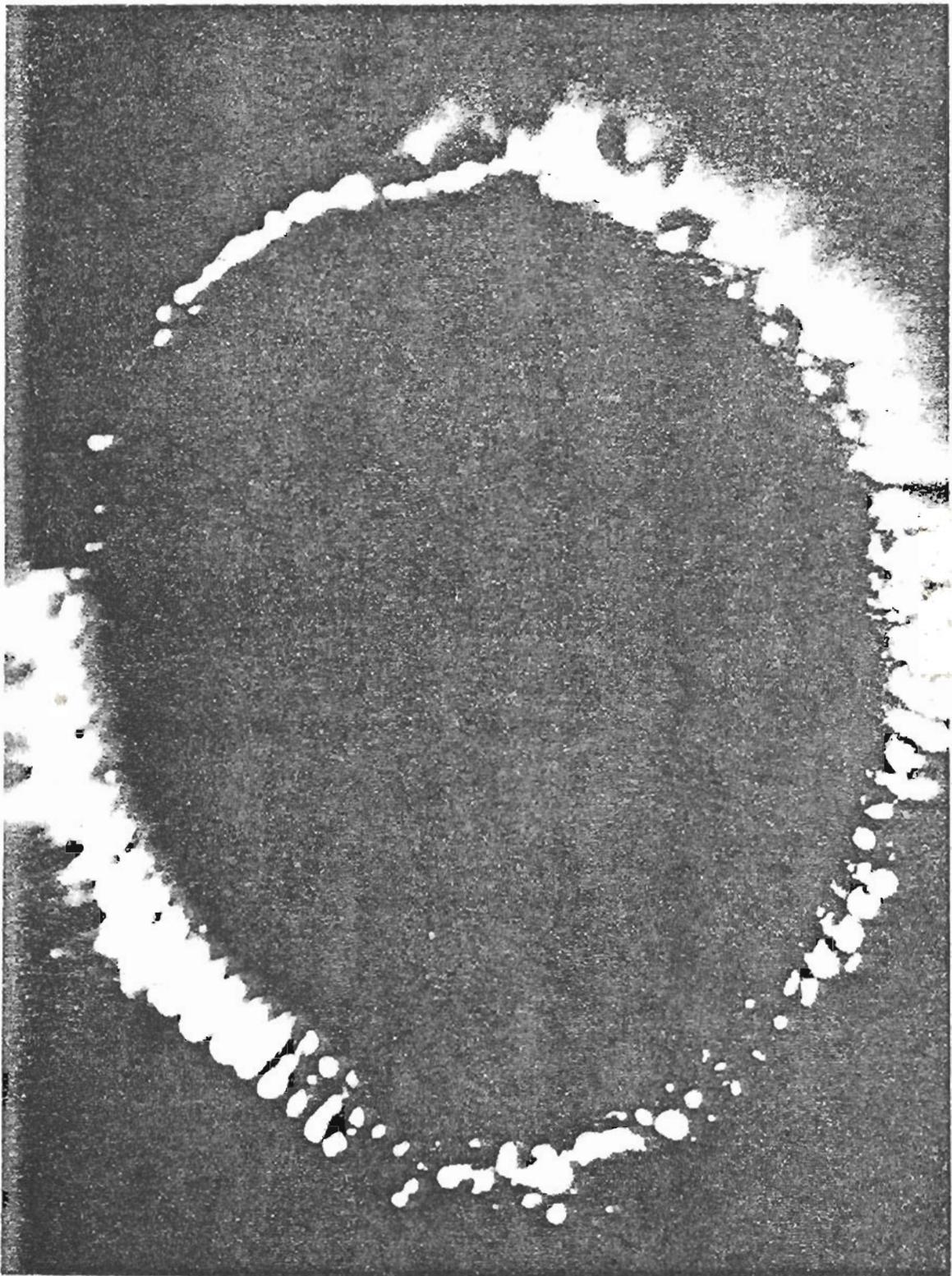


Figure 17

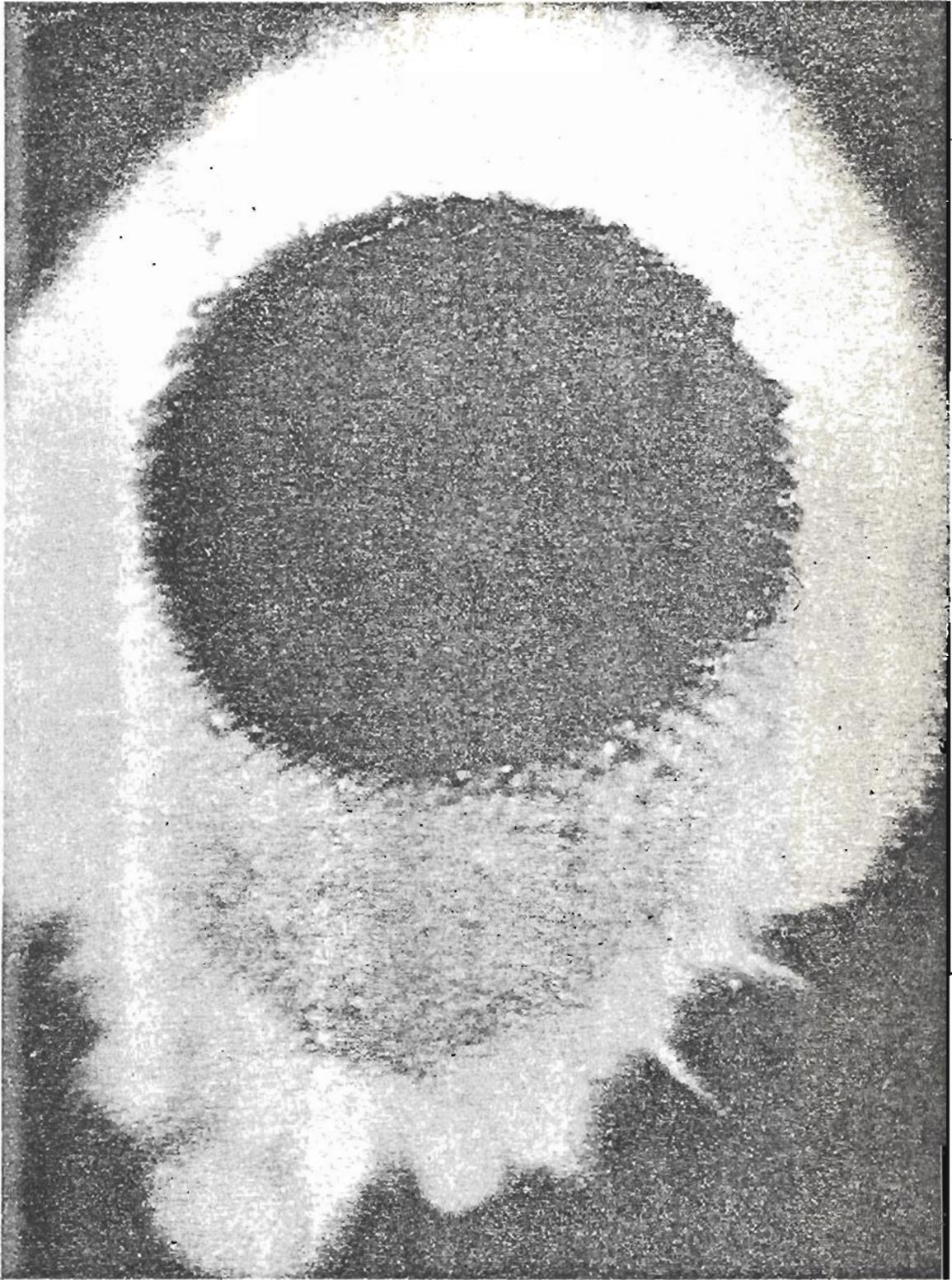


Figure 18

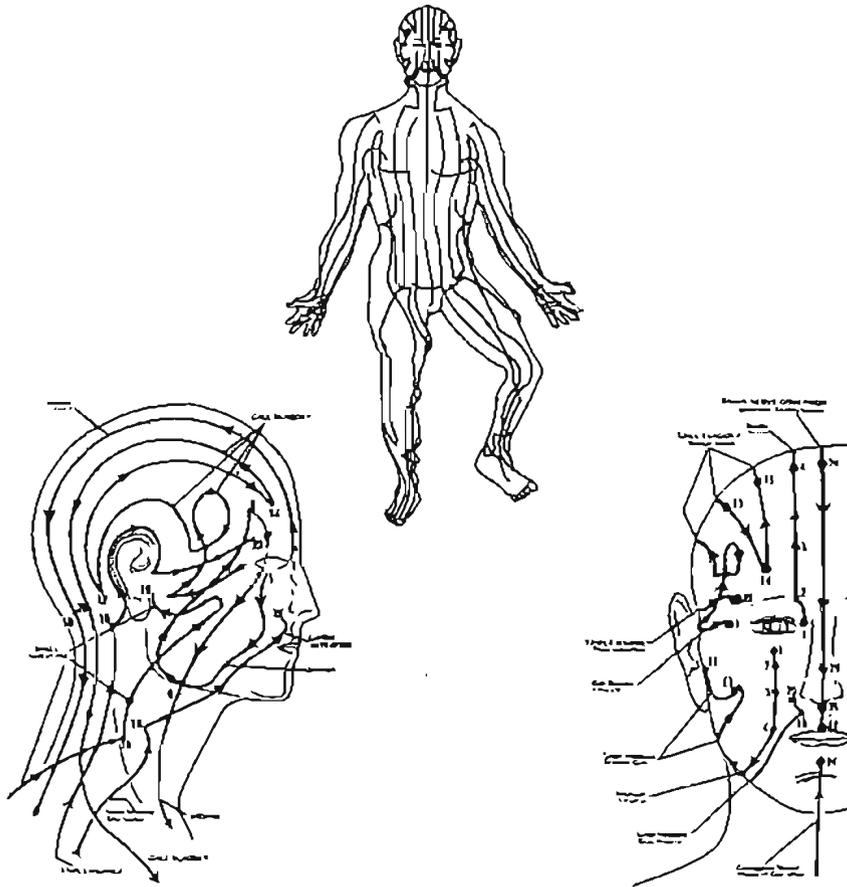
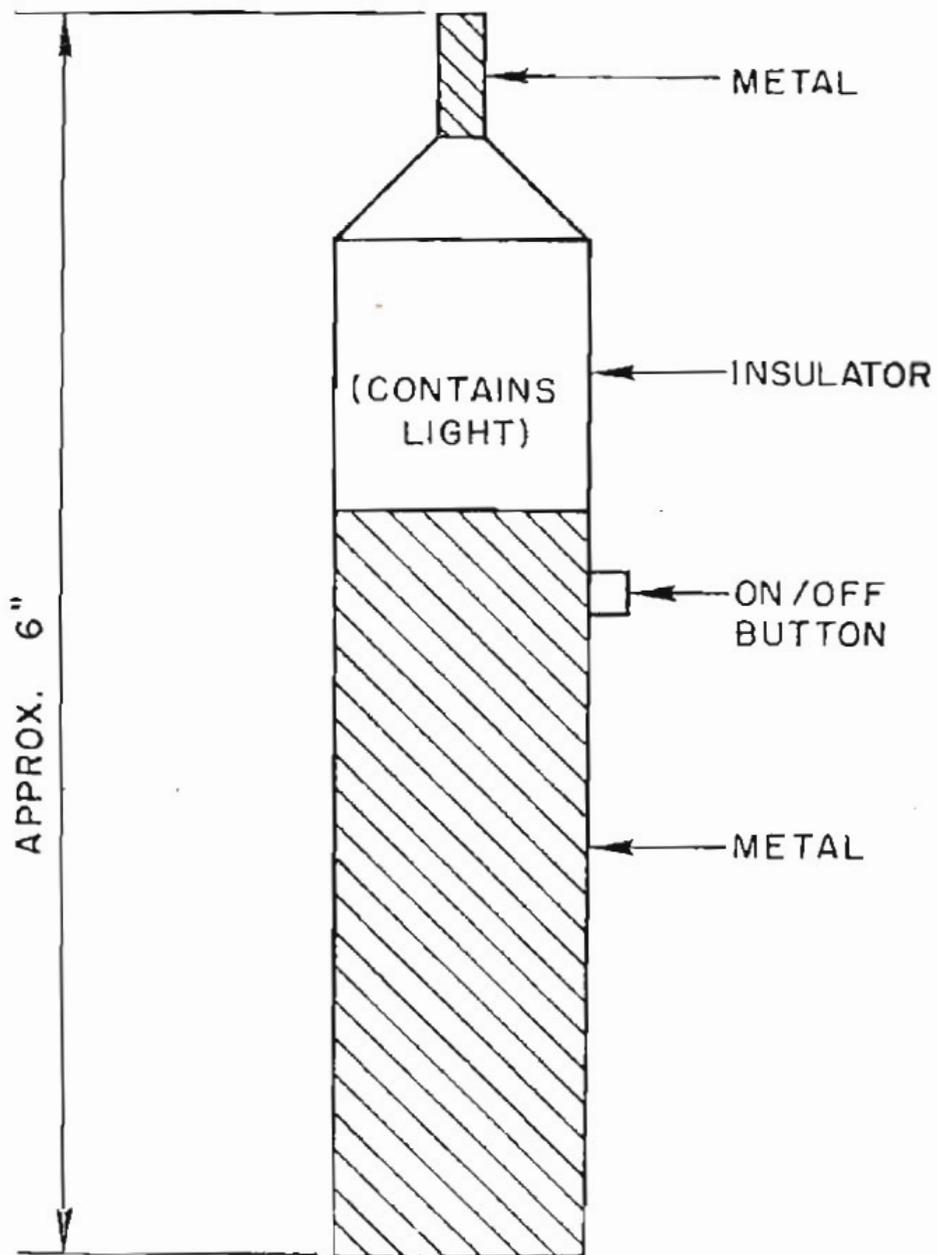
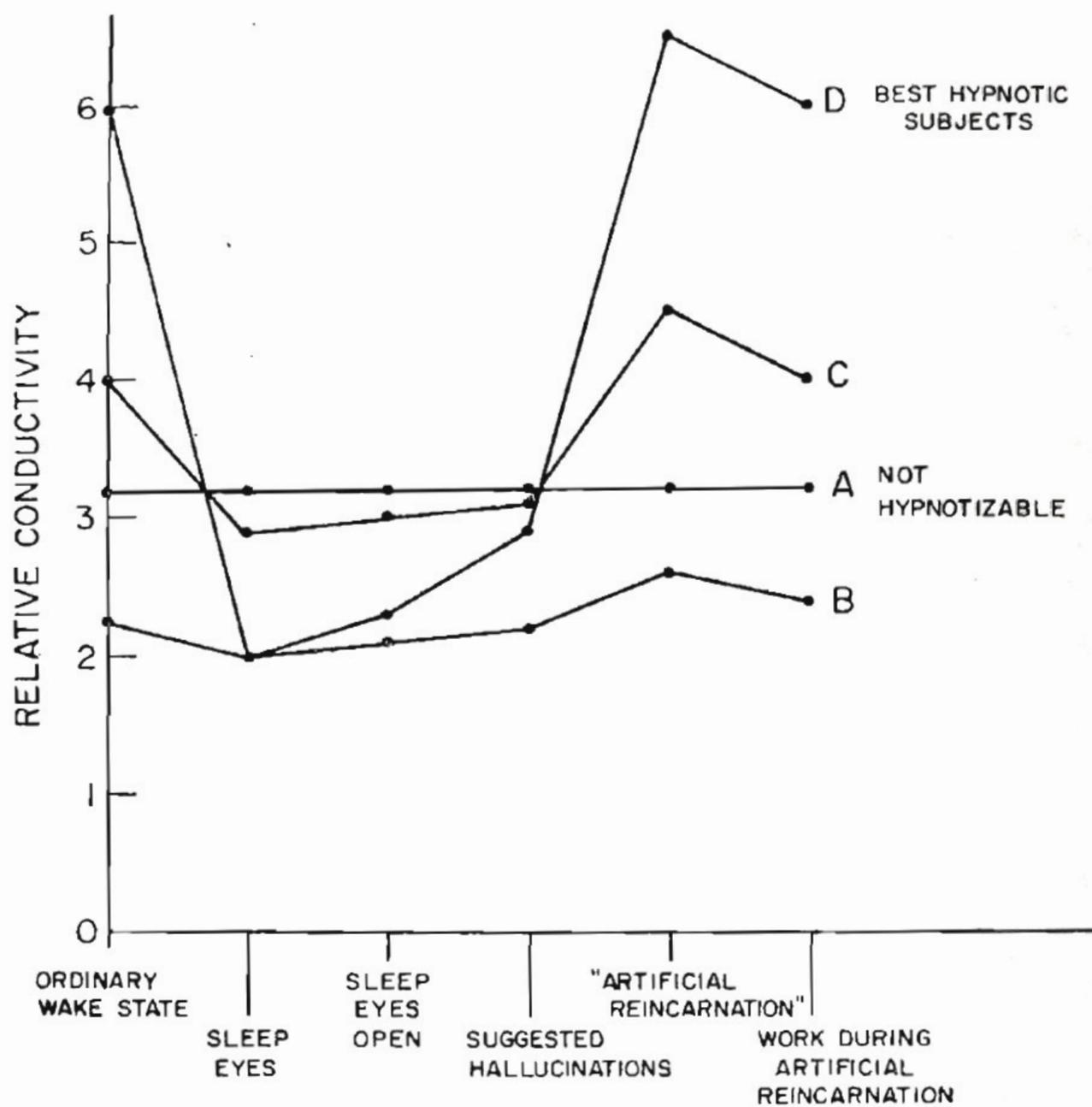


Figure 19



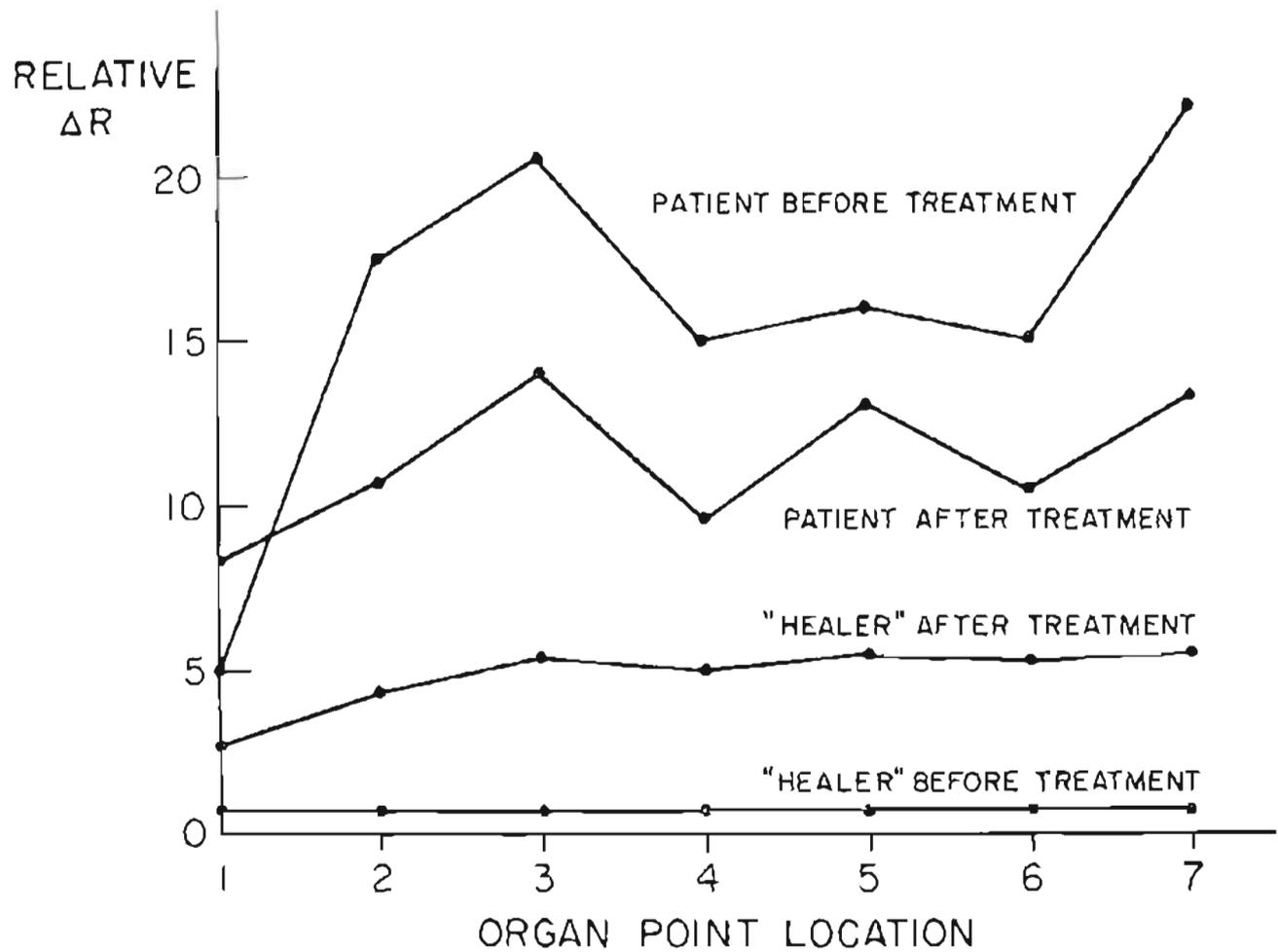
RUSSIAN "TOBISCOPE"
(1971)



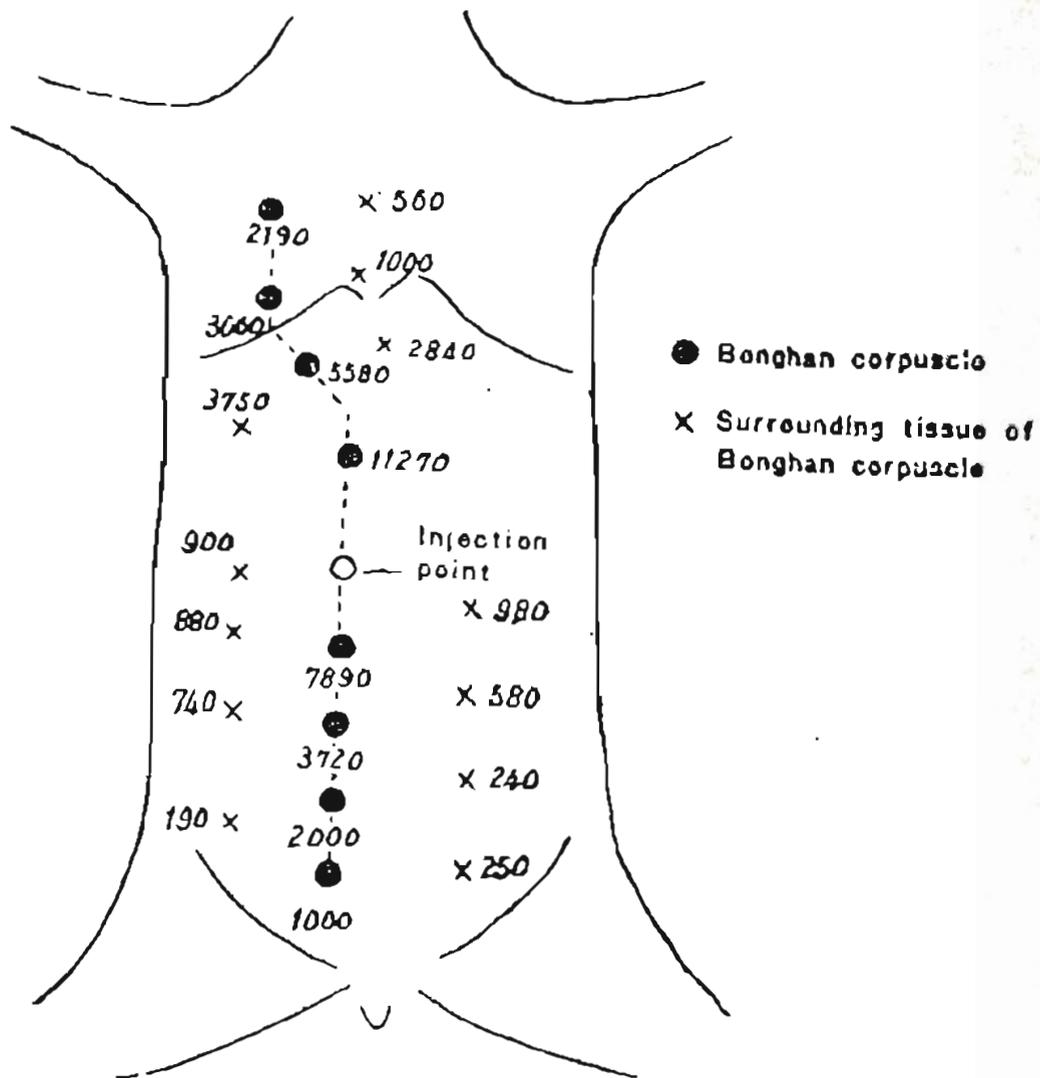
TOBISCOPIC INDICATIONS VS. HYPNOTIZATION

Figure 21

Figure 22

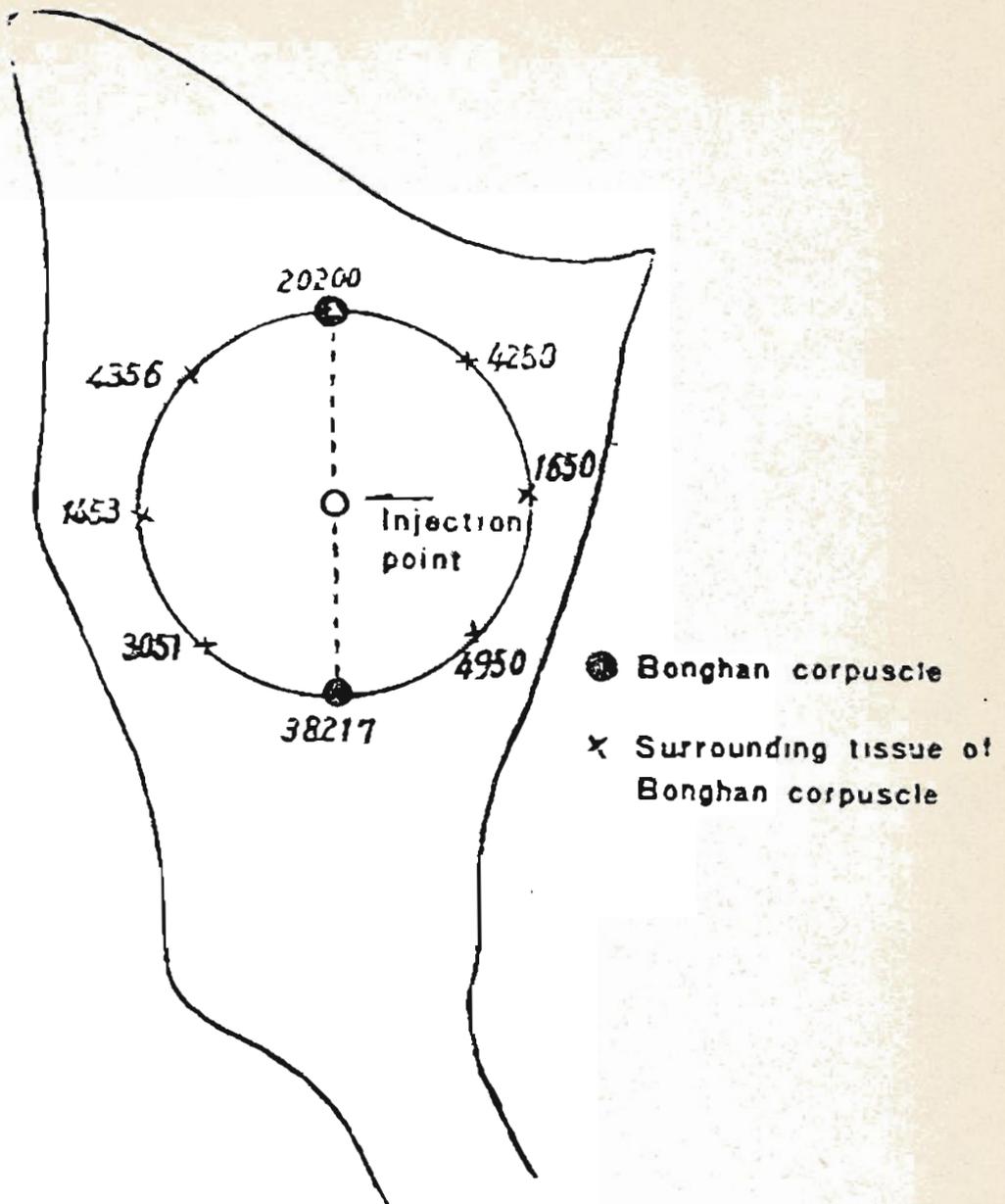


TOBISCOPIC SEMICONDUCTOR EFFECT OBSERVED
IN PARANORMAL "HEALING"



Distribution of P^{32} (100 μC) after its injection into the Bonghan corpuscle in the abdominal skin.

Figure 23



Radioactivity of the surrounding tissues after injection of P^{32} ($100 \mu\text{C}$) into a Bonghan corpuscle.

Figure 24