

DISCHARGES ARE DIAGNOSED

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Correct diagnosis of a malignant tumor may be given only if during the operation a piece of tissue is taken from the patient for investigation by histological and histochemical methods. However, these methods require great expense, time and labor. Since 1967 work has been going on in the surgery department of the Kuban Medical Institute on the utilization of "high often frequency" photography for the diagnosis of precancerous states and cancerous tumors of the stomach. Together with S. T. Kirlian and V. Kh. Kirlian, a procedure has been developed for obtaining "high often frequency" photographs of sections of some tissues taken from patients that are being operated on. In order to compare the results obtained by the Kirlian method with other methods, we carried out simultaneous histological and histochemical investigations of these same sections. The results of the investigations convinced us of the fact that a clearly defined difference exists between "high often frequency" images of normal and cancerous tissue.

The principle advantage of the new method compared with well-known methods is its expeditious nature. Moreover, because of the cancerous tissue can be photographed immediately after the operation and therefore does not have to time to change significantly, it is possible to study the physico-chemical properties of this tissue under the conditions close to the conditions in the living organism. According to the characteristics of the channel of the high often frequency discharge, their geometry and energetic for a deviation from the norm, one may evaluate not only the extent of the tumor process but also the dynamics of the malignant growth. And this is of very

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great significance in precise diagnosis and consequently in the therapy of cancer.

Second Article of X and Y in the unidentified journal

A HIGH OFTEN FREQUENCY PHOTOPROBE  
(No Author Listed)

The principle distinguishing feature of photographing in a field of high often frequency current is the absence of any optical devices. There is also no need in illuminating the object during the photographing process. Therefore, it is very convenient to use the Kirlian method to obtain photographs of surfaces to photograph by means of a conventional camera. Engineer V. I. Mikhalevskii and Candidate of Medical Sciences K. N. Mikhalevskaya proposed a special elastic electrode with a light-sensitive layer deposited on its surface. This simple device may be inserted into any cavity in a contracted state. If it is then filled with a current-conducting liquid (water) and connected for a short time to a high often frequency oscillator, it follows that one can obtain a latent image of the entire inner profile of the cavity on the light-sensitive layer. The electrode after having been removed from the water and retracted from the cavity, is again filled with the same quantity of liquid, developed and fixed. The "three-dimensional" photograph that is obtained provides a possibility of detailed evaluation of the "electrical state" of any spot on the investigated surface.

Existing methods for photographing cavities by means of microminiature multiobjective cameras and special lightguides are very complicated and do not stand up in any way to a comparison with the simple and cheap method of photographing by means of the elastic electrode in a field of high often frequency current. The new method can find application in various fields of medicine

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and engineering where it is required to obtain photographs of the synthesis of the objects that are inaccessible to infection.

[ARTICLE Z ON THE LAST RUSSIAN PAGE ON THE UNIDENTIFIED JOURNAL]

#### BIOENERGETICS AND KIRLIAN PHOTOGRAPHY

An original healing method--biostimulation with a beam from a low often powered laser--has been developed at the Kazakh State University by Doctor of Biological Sciences V. M. Inyushin and his associates. Hypertension, bronchial asthma and other illness that are difficult to treat can be treated successfully by this method.

For a rapid evaluation of the physiological state of patients under laser biostimulation, natives of Alma-Ata have developed a special installation whose principle of operation is based on the "Kirlian effect."

The bioenergetic processes in the entire organism when it is acted on by various physical factors are evaluated quantitatively on the grass.

A new express method for evaluating the physiological state of a person was used not only in medicine but also in biology.

What are the interesting facts that biologists have been able to discover? It turned out that the intensity of the luminescence is maximal in young plant leaf and minimal in old ones. And at the instant a leaf is torn off an abrupt flare of luminescence followed by a rapid attenuation is observed. However, if a plant is placed in a constant magnetic field, then the luminescence intensity decreases, while the duration of the attenuation increases by a factor of two-three. Under these conditions the effect of the reduction of luminescence as a result of the reaction of a magnetic field is preserved for a long time even in the case when a magnet no longer acts on the living tissue.

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The expressed evaluation of the bioenergetic state of living organism is not the only advantage which attract biologists and physiologists to the "Kirlian effect." The new phenomenon which have been discovered still await their explanation.

In assembling these articles materials from the following books have been used:

"Problems of Bioenergetics," Alma-Ata, 1969, Laurie K. Spee

p. 26-28.

"Biostimulation by a Laser Beam, and Bioplasma," V. M. Inyushin, et al.,

Alma-Ata, 1975.

And also articles from the journals "Nauk Zhizn'" ("Science and Life") No. 8,

1974.

"Technik-Molodezhi" ("Engineering for Young People," No. 10, 1974).

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