MEDICINE

# Hormones Aid Cancer Ills

## Temporary improvement was noted in six patients with cancerous diseases after treatment with the scarce hormones, cortisone and ACTH.

➤ SIX patients with cancerous diseases, leukemia, Hodgkin's disease and lymphosarcoma, have gotten better, at least temporarily, thanks to treatment with the two new but scarce hormone chemicals, cortisone and ACTH. These are the hormones which have won wide acclaim for their beneficial effects in rheumatoid arthritis.

Two more patients with cancer itself, one in the breast and one in the prostate gland, have been given ACTH treatment and may have been helped by it, though there was no obvious response to the treatment.

These trials of cortisone and ACTH were reported by Drs. O. H. Pearson, L. P. Eliel, Rulon W. Rawson, Konrad Dobriner and C. P. Rhoads of the Sloan-Kettering Institute and Memorial Hospital, New York, at the meeting of the American Cancer Society in New York.

None of the patients was cured. None had a "complete clinical remission," the doctors reported, meaning that none was entirely well even for a temporary period. But two patients with lymphatic leukemia who had relapses when the hormone treatment was stopped improved again when given a second course of treatment.

The hormone chemicals were given four times a day for from 18 to 30 days. In the six patients with lymphomatous tumors, there was "a dramatic and progressive decrease in the size of enlarged lymph nodes of enlarged spleens" while they were getting ACTH or cortisone. Definite shrinkage of lymphoid masses was first apparent after three days of ACTH and six days of cortisone. Two of these six patients, one with lymphatic leukemia and one with lymphosarcoma, have shown no sign of regrowth of abnormal masses within a period of 10 weeks since the ACTH was stopped.

None of the patients was critically ill when the treatment was started. All of them noticed an increasing feeling of well-being during the first two weeks of the treatment, and an increase in appetite during the first week.

"In three patients hunger became a major complaint," the doctors reported.

All of the patients noticed muscular weakness after two weeks of the treatment and all developed edema, or dropsy, which rapidly disappeared after the treatment was stopped. One female patient developed a severe acne on her face, arms and trunk which persisted for several weeks after the ACTH treatment was stopped. She also had an increased growth of hair on her face, but no other signs of masculinizing effects.

The great scarcity of ACTH and cortisone, with no hope for any increase for perhaps years to come, was stressed by the physicians and by representatives of Armour and Company and Merck and Company which make ACTH and cortisone respectively.

Even if and when more of the chemicals are available, great care will be needed, the doctors pointed out, to avoid side effects which may include severe nervous disorders and the condition known as Cushing's syndrome. This is characterized by water retention and dropsy, a moon-like face, buffalo neck, marked increase in blood pressure, growth of beards on women and diabetes.

The reason for trying these two chemicals and hoping they might be effective in cancer and cancerous diseases is that previous studies have shown a relation between cancer and disturbance of the adrenal glands. Cortisone is a product of the adrenal glands and ACTH is a pituitary gland hormone which stimulates the adrenals to produce cortisone.

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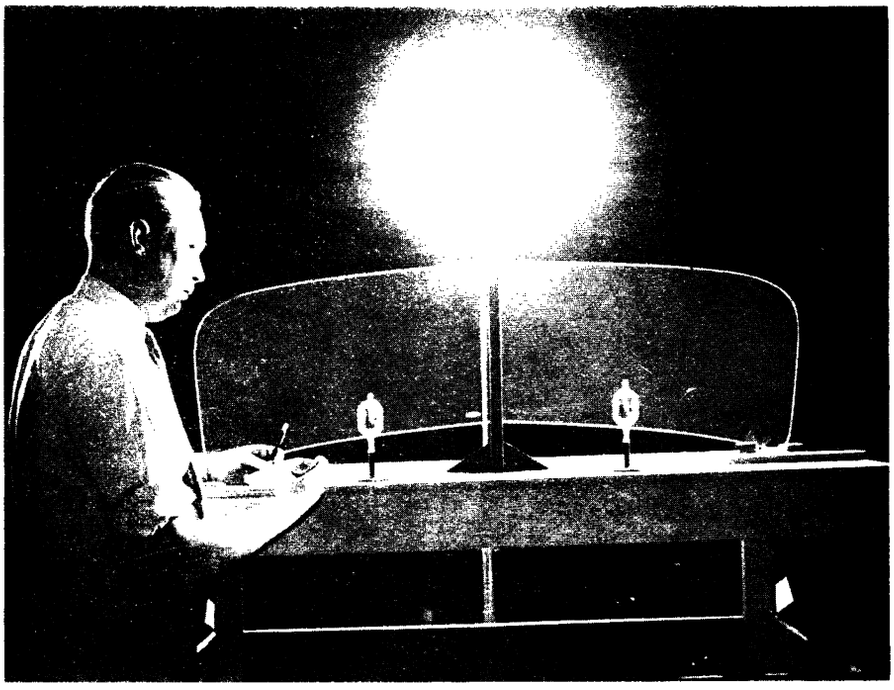

*GLASS CUTS GLARE AND HEAT—The comparative heat from an artificial sun coming through the new windshield glass on the left, is being measured and compared with that which comes through the ordinary safety plate glass on the right.*

ENGINEERING

## Glare and Heat Reduced By New Automobile Glass

➤ LESS glare and heat are promised with a new glass for automobile windshields and sidelights developed by Libbey-Owens-Ford Glass Company, Toledo, Ohio. It is a safety plate glass with a slight bluish-green tint derived from chemicals mixed with the raw materials in manufacture.

This new glass kills much of the glare that comes from bright sunshine in the daylight sky and thus reduces driver's eye fatigue, it was stated by G. P. MacNichol, Jr., of the company's staff. The ability of the glass to reduce the input of heat rays is a helpful contribution to comfort of driving on hot sunny days. Tests showed the glass reduced infra-red transmission by 15% or more. It also reduces upholstery fading by shutting out a large percentage of ultraviolet rays.

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As a rule, *moths* fly only at night and *butterflies* only in daytime.

*Extreme altitudes* are sometimes measured by the changing boiling point of a liquid with changes in pressure.

The *Virgin Islands,* with 133 square miles of area, cost the United States about 3.5 times the total paid for Alaska which has 586,400 square miles.