

MEDICINE

Blood Test for Cancer

It is based on a disturbance of albumin in the cancer patient's body which gives a peculiar clotting capacity to the blood serum.

► A GREAT "break" in the fight against cancer has come. Soon, not too many months hence you and the ones you love will be able to have periodic cancer detection blood tests. Doctors should be able to spot cancer in very early stages, just as the X-ray photograph picks up beginning tuberculosis and sugar in the urine warns that diabetes needs control.

The Huggins cancer detection method, just made known, gives promise of becoming a screening method to spot the early cancer cases.

Cancer has not been chemically cured, yet. The disarrangement of protein used in the Huggins cancer detection may be a very "hot" clue to cancer cause. But it is too early to be sure or even too cruelly hopeful.

The importance of the new prospect of cancer detection is:

Discover cancer early and something can be done about it, even now. X-ray and radium can be used to kill the wild, malignant cells that unchecked would bring sure death to the person. The surgeon's knife can extirpate cancerous growth. The figures show that nearly seven out of every 10 cancer cases can be cured, in the sense of living five years after the operation, if they are discovered early.

Your doctor can't give this test today or tomorrow. It will take months before it is perfected, completely verified and made available at hospitals and clinics of the nation. Be patient as you are alert to use medical knowledge now available. And don't get worried just because you are reading about cancer.

When the Huggins blood test for cancer is applied it probably will be something like this:

A few teaspoons of blood will be taken from a vein in your arm, a safe, not unpleasant procedure that is routine in doctors' offices today. (Millions have given their pints of blood to the Red Cross blood program, remember.)

Technicians will separate the fluid serum from the blood. They will heat it to a certain temperature, add a chemical called iodoacetic acid, and compare the rate at which the serum clots under this treatment with the clotting of normal blood under the same treatment. There is a numerical index for this which shows whether the blood comes from a cancer patient or from a person free from cancer.

The test is "not quite as good as the Wassermann test" for syphilis, according to

Dr. Charles Huggins, University of Chicago scientist who developed it.

The new test has been made on almost

ASTRONOMY

Meteors' Flight Recorded

► THE flight of meteors across the sky is being recorded in a number of ways by Canadian scientists.

"Shooting stars" are hunted visually by a team of trained amateurs and professionals. The images meteors make on the radar screen as they race by are recorded automatically on photographic film.

Near Ottawa each clear night during a well-known meteor shower an enthusiastic group of some half-dozen sky-watchers scan the heavens for "falling stars." Whenever the observers see a bit of light streak across the sky, they push a button to indicate on photographic film when the meteor was first visible. On the same film appears the meteor's radar echo.

By comprising the record of a meteor as

300 persons, divided equally between cancer patients, apparently healthy persons and patients with diseases other than cancer. The test proved positive for all cancer patients, negative for all normal persons and negative for all other patients except those with lung tuberculosis and massive acute infections. But your doctor will be able to rule out these conditions by other tests.

The test was negative in pregnancy and even on the blood of embryos of unborn

(Continued on page 260)

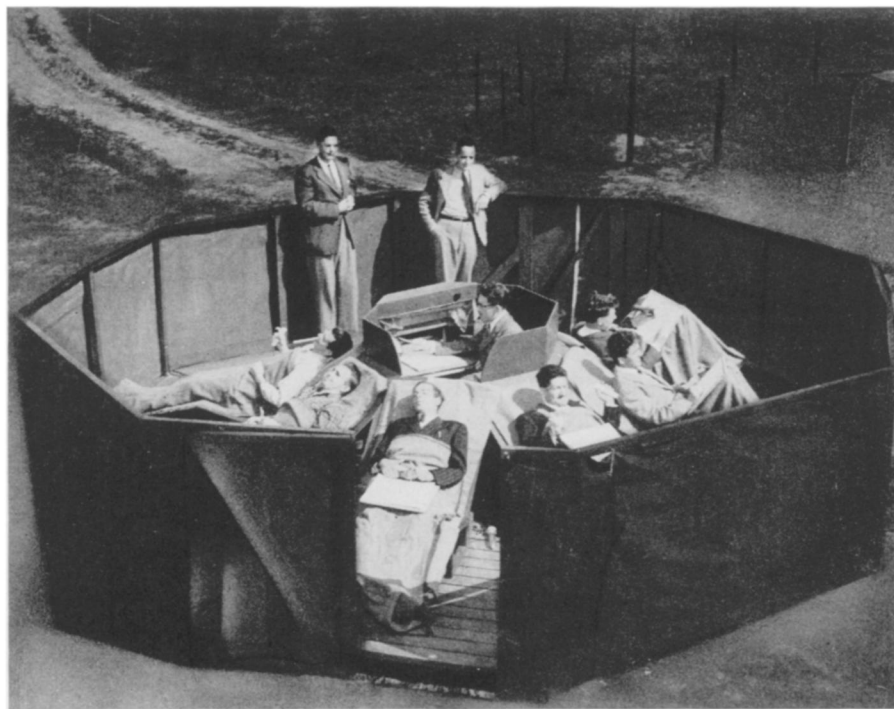
made by several methods, astronomers are learning whether they first appear by radar or visually, how their radar echo compares in length with the time they can actually be seen, and so on.

Most of the meteor echoes, these studies show, are produced in a fairly narrow region, about 10 miles thick, some 60 miles above the earth's surface.

Radar echoes tend to appear on the radar scope just as the meteor is disappearing from sight visually. At least this seems to be true for those of the Perseid meteor shower.

These radar sets are operated by the National Research Council and the program is in charge of Dr. D. W. R. McKinley. Dr. Peter M. Millman of the Dominion Observatory organizes the observations.

Science News Letter, April 23, 1949



SKY WATCHERS—About six miles south of Ottawa, Canada, amateur and professional astronomers "lie down on the job" of watching for meteors.