

MEDICINE

Use Cancer Drugs Sooner

► THE LIVES of thousands of cancer patients could be saved or prolonged if drug treatment, not pain-killers, were begun earlier, Dr. Sidney Farber of Harvard Medical School told SCIENCE SERVICE.

Summing up the current status of cancer treatment and the prospects ahead, Dr. Farber said it is doubtful whether more than 10,000 of the 260,000 patients who will die of cancer this year will have the benefit of cancer chemotherapy.

Instead of waiting until a patient is about to die or has an advanced state of cancer, Dr. Farber believes treatment with drugs should begin possibly even when the primary tumor is surgically removed.

Dr. Farber, speaking at the second conference on Experimental Clinical Cancer Chemotherapy in Washington, D.C., said "sufficient information is now at hand to permit research groups, particularly, to create programs designed to see if cancer metastases (spreading) can be prevented by adding chemotherapy" when the first tumor is removed.

Too many doctors, he said, believe that

even when metastases have been demonstrated, it is best to wait until the patient "gets in trouble."

A team approach by the surgeon, the radiotherapist and the doctor who is an expert in chemotherapy would do much to increase the survival rate and total cure of those forms of cancer that are today affected by chemical agents, Dr. Farber said.

Cancer centers should be available in every large population center to help doctors care for their cancer patients, he said. Today there are 32 such centers in various parts of the country. One would be sufficient for the less-populated states, while cities like New York and Chicago would need several centers to provide information about the best modern treatment of cancer.

Three great directions of research are emerging that may eventually control cancer, Dr. Farber said. The largest is the search for drugs, the second is concerned with viruses and the third with immunology.

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Army Advised to Cut Fats

► THERE IS A LIMIT to the Army traveling on its stomach. Too many soldiers are getting heart attacks, probably from eating a high fat diet, the Association of Military Surgeons was told in Washington, D. C. Changing the military diet to cut fat intake was recommended as a possible solution.

Atherosclerosis, a hardening of the arteries, is the leading cause of death from disease among active personnel in the U. S. Army. Although the link with high fat diet has not been proved conclusively, the evidence is condemning.

Recent surveys at four Army training camps showed that the actual total intake of food was well above the minimum daily recommended allowance. Fat made up more than 40% of the calories, and nearly half was "saturated." Saturated fat includes butter, whole milk, cream and conventional margarines. Beef, pork, solid shortening and chocolate are also on the list.

The recommendation to cut fat intake was made by Col. Weldon J. Walker, chief of the department of medicine's cardiology service, Wadsworth General Hospital, Washington. He is also a cardiology consultant to the U. S. Army Surgeon General. Collaborating on research was Lt. Col. Jacques L. Sherman Jr., medical research branch chief, U. S. Army Medical Research and Development Command, also in Washington.

The change in diet, which would make certain that dietary fat "does not exceed 35% of the total caloric intake" and that a greater proportion should be polyunsaturated fat, "is feasible without impairing the palatability of the diet."

"The desirability of the recommended

change," Col. Walker said, "is supported by the best scientific information available at the present time."

Whether an Army diet of more fish, fowl, skim milk and certain margarines would actually result in longer lives awaits research.

It also would demand the cooperation of doting mothers and girl friends who add to the soldiers' quota of rich food by mail.

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Plastic Used for Burns

► MASS BURN casualties may in the future be treated temporarily with synthetic skin substitutes.

Synthetic skin is advantageous because great quantities, stored in sterile condition, can be applied as wound coverings, removed in stages and replaced later by successive skin grafts.

Dr. William M. Chardack of the Veterans Administration Hospital, Buffalo, N. Y., told the Association of Military Surgeons in Washington, D. C., that several children with more than 30% of their body covered with third-degree burns had been treated with good results using a plastic polymer.

Sheets of polyvinyl alcohol sponge as well as polyurethane foams of varying composition have been used. Studies of a number of spongy materials are planned to determine what is best.

The thickness of the synthetic skin sheet also needs further study before it can have widespread application.

Experience so far would indicate that a thin layer about one-seventh of an inch thick yields the best results, Dr. Chardack

said. Heavier coverings apparently permit body fluid to accumulate in the pores not yet permeated by solid tissue, and could cause infection.

Dr. Chardack and his co-workers had previously experimented with animals. They found that the uniform flat layer of healing tissue remaining after the synthetic material was removed made an excellent surface for grafting material.

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Monkeys Made Neurotic

► MONKEYS with induced neuroses are among the unique medical research efforts in the Soviet Union reported by Dr. Joe M. Blumberg, Colonel, U. S. Marine Corps, at the Association of Military Surgeons meeting in Washington, D. C.

The purpose of the Russian experiment is to study the effects of these induced neuroses on coronary disease and arteriosclerosis.

To produce an experimental neurosis requires a high order of emotional stress, Dr. Blumberg said. Soviet scientists achieve this stress by having two males compete for a single female in a single cage. The result: three highly neurotic primates.

Soviet medical research also uses many mice and rats as experimental animals in exploring treatments for irradiation sickness. About 40% of animals exposed to lethal doses of radiation survived by being treated with acetylcholine and adrenalin.

A large part of the Soviet research observed by Dr. Blumberg is directed at the control of cancer. His impression was that the Soviets generally have an active and progressive medical program that has advanced a great deal in the last 20 years, but Soviet medicine still lags behind that of the West.

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Pregnant Women Found Not Prone to Melanoma

► THE COMMON IDEA that pregnant women are more susceptible to a cancer generally originating in moles (melanoma) is not true.

In fact, Dr. Lauren P. White of the Children's Cancer Research Foundation, Boston, reported that women, in general, fare twice as well as men with the same illness.

When melanoma develops, the tumor usually begins in a brown or black mole, Dr. White said. But such a mole is not usually dangerous in itself, he explained. The average person will have many such pigmented moles that never become cancerous.

The darkening or freckling of the skin that may occur after exposure to ultraviolet rays is not usually harmful and neither is the pigmentation that sometimes accompanies pregnancy.

In fact, Dr. White believes, there is a natural human resistance to malignant growth in pigmented areas of the skin, although this resistance can be lost under certain circumstances.

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