

Family Studies May Prevent, Cure Some Cancer Cases

OMAHA, Neb. (AP) — About 15 million Americans are cancer "time bombs" with an enormously high risk of developing cancer — or of passing their high-risk genes to their children, researchers say.

But doctors at the Creighton School of Medicine here say they have a way to defuse what they call "the Hiroshima among us" — compile a complete family history.

The doctors say proper interpretation of family histories can lead to early detection, control — possibly prevention of hereditary cancer.

"What's so important here is the patent simplicity in gathering family histories — it's just there," said Dr. Henry Lynch. "That's the beauty of this. It may be simpler than some of the most expensive and tedious diagnostic tests in medicine."

Lynch and Dr. William Albano are members of the Creighton research team which published its findings in *The Journal of the American Medical Association* last month.

Lynch and Albano said their research shows that between 10 percent and 20 percent of all varieties of cancer are transmitted from generation to generation. At the high end of the estimate is breast cancer, one of the deadliest forms.

"We think about 20 percent of all breast cancer is familial," Lynch said. "So given the fact that the American Cancer Society estimates that 107,000 U.S. women will develop breast cancer during 1979, we predict a little over 21,000 of those cases will be familial cases."

"This means these 21,000 women all have families that ought to be notified or made aware of this."

Albano described what usually happens in a family which passes the breast cancer gene from mother to daughter to granddaughter.

"Each generation, these daughters get born. While they're still teen-agers, they watch their mothers die of breast cancer. Then they get married, have their own families and die of breast cancer when they're 35."

"The key is not just identifying the patient with cancer but identifying their families," Albano said.

Lynch said a relatively young woman who'd had one cancerous breast removed came to him for counseling. When a family history was completed, Lynch saw a pattern of cancer.

"Because of the excess incidence of breast cancer in her family, I advised her to have prophylactic (preventative) removal of her other breast even though after extensive testing, we saw absolutely no evidence of cancer," Lynch said.

The woman sought opinions from four other doctors. "Two did not think there was sufficient evidence to proceed with preventative surgery," Lynch said, but the woman approved the second operation.

When the surgery was performed, an early tumor was discovered.

Lynch said breast cancer checks for relatives of women whose histories indicate patterns of cancer should differ from the rest of the population.

"More vigilance is indicated, more frequent examinations by physicians and more meticulous examinations," Lynch said.

Researchers are also looking beyond family histories, trying to identify chemicals in families with the cancer-carrying genes.

With those chemicals isolated, they say, persons destined to develop cancer can be identified through tests — even at birth — and seek preventative treatment.

But a big hurdle in establishing the family history as an important tool to detect or control family cancers is the doctors themselves.

"The philosophy that most doctors live with today (is) that cancer is an environmental disease," Lynch said. "But the situation has changed radically. There are now over 100 clearly defined hereditary cancer and pre-cancer diseases."

"We're dealing with a cancer risk that far exceeds that of cigarette smoking, asbestos exposure and other occupational risks such as with uranium miners."

"Because of the genetic predictability of specific target organs in the body for cancer, we're talking about being able to identify — at very early ages — those destined to develop cancer," Lynch said.

A patient "pedigree" is compiled by asking questions about ages of living parents, brothers, sisters, grandparents and children, the ages at death of any of them, and whether any had been diagnosed as having cancer.

If it appears a family cancer pattern is emerging, the pedigree is expanded to include aunts and uncles — even great-aunts and great-uncles.