SOJTHWESTERN NEWS

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UT SOUTHWESTERN PARTICIPATES IN JUVENILE DIABETES CLINICAL TRIAL

DALLAS -- May 27, 1994 -- Diabetes researchers at The University of Texas Southwestern Medical Center at Dallas will participate in the first large-scale clinical trial to investigate the possibility of preventing insulin-dependent

diabetes mellitus (IDDM) in those at risk for the disease.

UT Southwestern is one of the many diabetes centers in the country recruiting relatives of people with IDDM, also known as Type I or juvenile-onset diabetes. Volunteers are being screened for two specific antibodies thought to be associated with the eventual development of the disease, said Dr. Philip Raskin, professor of internal medicine and leader of the diabetes clinical research team at UT Southwestern. Raskin is director of the diabetes clinic at

It is thought that IDDM occurs when white blood cells vital to the body's defense against infectious diseases launch a self-directed, or autoimmune, attack on the insulin-producing beta cells in the pancreas. Insulin regulates how cells

use and store nutrients for energy.

Parkland Memorial Hospital.

Raskin said that preliminary studies in animals and small trials in humans have indicated that it may be possible to prevent IDDM by insulin immunizations. Earlier studies of the disease have suggested that the presence of the suspected antibodies in a person's blood indicates that he or she may develop diabetes within five years.

UT Southwestern researchers have been involved in research using volunteers in a family registry of unaffected brothers and sisters of IDDM

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patients for a numbers of years. Some of the children and young adults within the same family have developed diabetes while other siblings — although at risk — have not. The UT Southwestern DNA bank for diabetes research is the largest in the country and includes more than 500 families.

Dr. James Marks, associate professor of pediatrics and pediatric diabetes expert, and Marilyn Alford, clinical nurse specialist, have been working with Raskin on the 10-year study using DNA-bank genetic samples. They will continue now to investigate the use of insulin to prevent or mitigate the disease. Alford is director of the DNA bank.

Officials at the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) say that between 60,000 and 80,000 people nationwide need to be screened in order to recruit 830 volunteers.

Volunteers chosen for the study will be assigned to one of two trials according to their degree of risk, which will be determined by the level of antibodies in their blood. Those at the highest risk for IDDM will be assigned randomly to a control group or a group receiving daily insulin injections. Volunteers whose risk is lower will be assigned randomly to a control group or a group receiving oral insulin. The insulin-injection trial will begin immediately, and the oral-insulin trial will begin in 1995.

"Each year 11,000 new cases of IDDM are diagnosed in children and teenagers, making it the second-most common chronic disease after cancer in children in this country," Raskin said. "Over time diabetes can cause severe complications such as eye, kidney, nerve and heart disease."

Raskin and his associates were part of a previous 10-year nationwide research project on diabetes treatment. Researchers reported last summer that

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intensive diabetic treatment lessens the complications associated with diabetes. Patients in the intensive treatment group were either treated with an insulin pump or gave themselves multiple insulin injections based on the multiple measurements of their blood-sugar levels daily.

The Diabetes Prevention Trial-Type I is sponsored by NIDDK in cooperation with the National Institute of Child Health and Human Development, the National Institute for Allergy and Infectious Diseases, the Juvenile Diabetes Foundation and the American Diabetes Association.

For information in the Dallas-Fort Worth area, call (214) 640-6121.