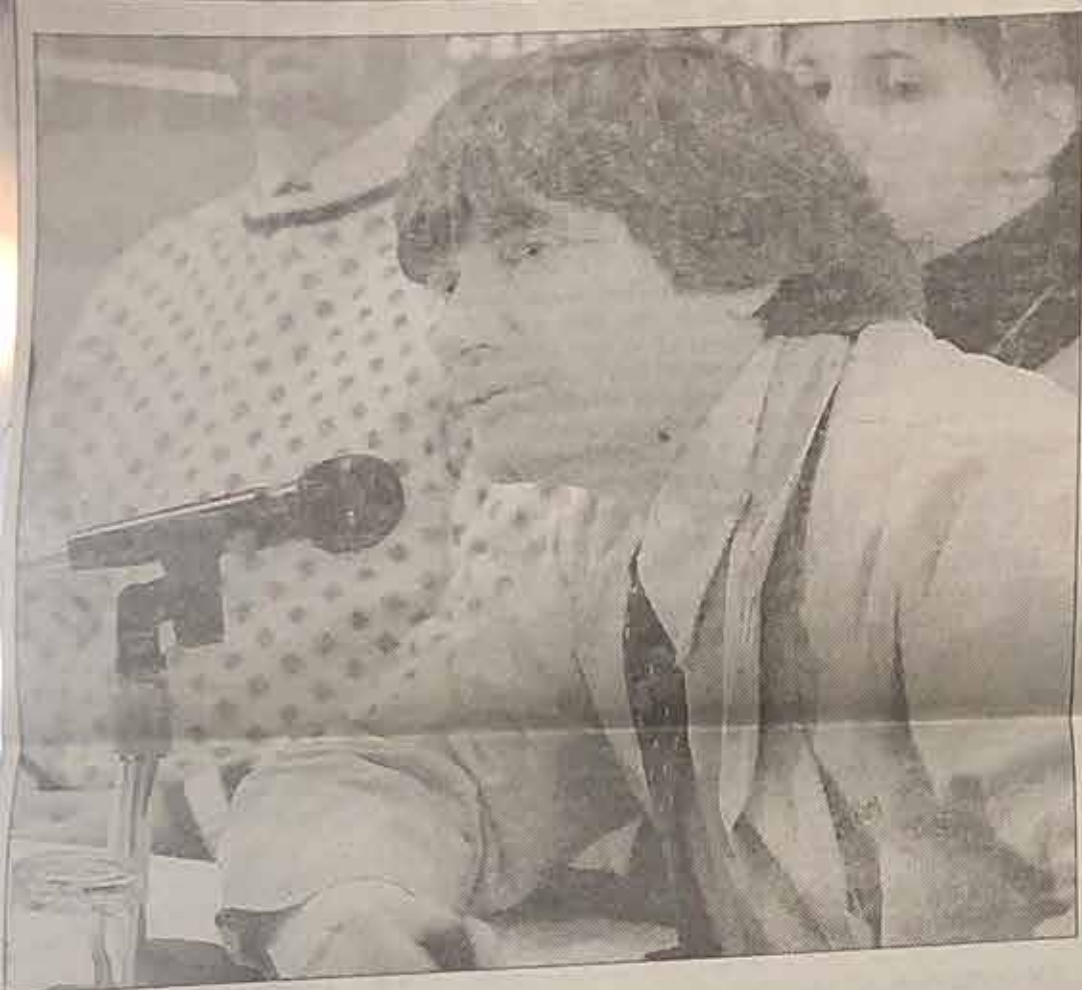


NEWS



Dr. Richard Burt, director of Northwestern's bone marrow transplant program, described Kurt Borchers' leukemia therapy as "technically difficult and labor intensive."

Cancer therapy gets its first test

Used on Illinois man's leukemia

BY JIM RITTER
HEALTH REPORTER

After fighting leukemia for 3½ years, Kurt Borchers was running out of options.

Extensive chemotherapy and a grueling bone marrow transplant failed to stop the cancer. So this month, Borchers became the first leukemia patient in the country to undergo an experimental therapy involving an infusion of genetically altered cancer-fighting cells.

Doctors won't know for at least a year whether the therapy succeeds. But they're optimistic.

"I feel fine," Borchers said at a news conference Monday at Northwestern Memorial Hospital.

Borchers, a 36-year-old father of three from Downstate Morris, was diagnosed with leukemia in June, 1994. The leukemia went into remission after an initial round of chemotherapy, but the cancer returned in 1995.

Borchers then underwent high-dose chemotherapy, which killed his bone marrow as well as the cancer cells. The marrow, which produces most blood cells, was replenished by a bone marrow

transplant from his brother, Kevin.

But the leukemia returned again in 1996, prompting several cycles of chemotherapy, remissions and relapses.

Borchers and his doctors ruled out a second bone marrow transplant because he might not survive it. Instead, they gave Borchers an infusion of a type of white blood cells, called lymphocytes, donated by Kevin.

The lymphocytes are expected to kill the leukemia cells. But there's a risk they also will attack Borchers' healthy tissue. This could cause severe diarrhea, appetite loss, liver failure and death.

In a new procedure, scientists inserted a "suicide gene" into the lymphocytes before infusing them into Borchers on Jan. 5.

In coming months, doctors will watch Borchers for signs the lymphocytes are attacking healthy tissue. If that happens and the attacks are severe, doctors will activate the suicide gene with a drug called ganciclovir. Once activated, the suicide gene causes a lymphocyte cell to kill itself. The drug would not affect other cells.



JOHN H. WHITE/SUN-TIMES PHOTOS
Leukemia patient Kurt Borchers underwent experimental cancer therapy at Northwestern Memorial Hospital on Jan. 5.

If cancer-fighting lymphocytes commit suicide, there's a risk the leukemia could return. In that event, Borchers could receive a second infusion of lymphocytes, said Dr. Richard Burt, director of Northwestern's bone marrow transplant program:

Borchers is the first patient to participate in a planned three-year study of 40 patients at Northwestern and other centers.

The procedure is "technically difficult and labor intensive," Burt said. "We think it's a significant advance, but only time will tell."

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**-Dr. Richard Burt,
Northwestern Hospital**