

Media Center

8/22/05 - Pediatric Brain Tumor Survivors and Late Effects

Researchers Chronicle Lasting Effects of Treatment

By Maggie Fox, Health and Science Correspondent

WASHINGTON ([Reuters](#)) - Nearly a third of children who survive brain tumors need special education services later and many suffer from chronic discomfort such as headaches and nausea, U.S. researchers reported on Friday.

Children given radiation to cure their cancers fared worse than those who had only surgery, but chemotherapy did not seem to worsen their fates, they found.

The report, published in the *Journal of Clinical Oncology*, adds to research showing that, while childhood cancer is usually curable, its effects can linger for decades and even a lifetime.

"We've been very focused on curing brain cancer, which we now do in about 68 percent of the kids," said pediatric neurologist Dr. Paul Fisher of Stanford University School of Medicine in California and Lucile Packard Children's Hospital, who led the study. "Now we're asking, 'OK, but what are the kids like? We're curing them, but at what cost?'"

Fisher and colleagues surveyed 134 former patients returning to Packard Children's Hospital for routine follow-up visits.

They asked the children and their parents about whether they had problems with common activities such as running or bathing, if they worried about the future, whether they were teased or had trouble in school.

The patients had a median age of about 11 and for most it had been three years since they were diagnosed.

SYMPTOMS AFTER THERAPY

"Brain tumor patients tend to suffer a lot of cancer symptoms even after therapy," Fisher said.

"They often still have headaches, pain and nausea. Even though they may have a normal lifespan, their

symptoms don't get better. But most people think, 'OK, they're fine now. Everything should be back to normal.'"

Children who had more aggressive or larger tumors were more impaired, and the use of radiation seemed to worsen the later problems -- not surprising, as radiation must pass through healthy cells to reach a tumor.

The children know something is wrong.

"The longer it's been since their diagnosis, the more reluctant the kids are to talk about it," Fisher said in a statement. "They know they're not the same person they were before, and it's very upsetting for them."

Dr. Brannon Morris, who follows up with cancer patients treated at St. Jude Children's Research Hospital in Memphis, Tennessee, said doctors have been aware there were long-term effects and are working to develop less-toxic treatments.

"There is a tension every day of balancing treatment and then concern for late effects," Morris, who was not involved in the research, said in a telephone interview.

"Some brain tumors really do need radiation, but if you can minimize that dose by doing conformal radiation or targeted radiation, then presumably you are preventing many of the side effects," Morris added.

"I think the biggest thing is to have the parents just upfront inquire about the potential risks of treatment because there are many."

Fisher said the study will continue as the children age.

"Parents often come into the clinic and ask us, 'What's my child going to be like five and 10 years from now?'" he said. "Do the older children have a checkbook? Can they manage money? We don't know."

[Read the abstract of the Journal of Clinical Oncology report.](#)