

A Drop of Virus From a Monkey Kills a Researcher in 6 Weeks

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Elizabeth R. Griffin, a 22-year-old primate researcher, was careful to follow the precautions intended to shield her from the diseased animals she handled. She always wore gloves and a mask, and she was usually separated from the primates by a mesh cage.

Death found its way past her defenses, literally in the blink of an eye.

Six weeks ago, Miss Griffin, who planned to be a doctor, was helping to move a caged rhesus monkey infected with the herpes B virus at the Yerkes Regional Primate Research Center here, when the animal flung a tiny drop of fluid -- perhaps urine or feces -- at her face.

It struck her in the eye. On Wednesday, paralyzed and weakened, she died of complications from herpes B, which is common in primates but rare and deadly, 70 percent of the time, in humans.

The consequences of that animal-to-human contact, and the almost freakish way it caused Miss Griffin's death, seem lifted from Hollywood. Unlike the movies, however, there is no public health risk here, researchers said, just a single misfortune.

Only 40 cases of primate-to-human transmission of the virus have been reported since 1933, when the first case of human exposure was seen. Almost all were the result of bites and scratches.

Miss Griffin, from Kingsport, Ga., probably never thought she was at risk.

"This was an extraordinarily low-risk activity by any measure we have," said Dr. Thomas Gordon, associate director for scientific programs at the Yerkes center, which is an arm of Emory University's medical school. The center conducts research in AIDS, neuroscience, gene therapy and other areas, and is a frequent target of animal rights protesters.

On the day she was infected, Miss Griffin was dressed as usual, wearing a mask, gloves and lab coat. The monkey's cage was covered by a fine wire mesh to protect her and others from the animal's teeth and claws.

Health regulations require researchers to wear goggles or safety glasses when there is a risk of contact with an animal's fluids, as when an animal is removed from its cage. But that was not required in this case because Miss Griffin was holding the cage at arm's length, officials said.

"During this transfer, as she tried to look into the cage to check the status of the monkey, something came out," Dr. Gordon said. "Because it was so minor an event, it was not even viewed by the individual as serious."

Two weeks after she felt the tiny drop hit her eye, he said, Miss Griffin developed a headache and eye infection. Miss Griffin, who graduated this year with a degree in biology from Agnes Scott College, was admitted to Emory University Hospital, and at first responded well to antiviral medication. She even went home. But about 10 days ago, her legs became weak and she went back to the hospital.

By that time, the disease had ravaged her. Herpes B, which has few clear treatment guidelines because there have been so few cases, causes encephalomyelitis, an inflammation of the brain and spinal cord, which leads to paralysis.

Miss Griffin, breathing with the aid of a respirator, was unable to move, Dr. Gordon said, but was alert until just before her death from bacterial infections and respiratory distress syndrome.