Vaccine could not have been prepared in Stanleyville†

Paul M. Osterrieth

11 route d’Oster, 6997 Erezée, Belgium (paul.osterrieth@advcalcas.be)

In Stanleyville, at the time of vaccination campaigns, tissue cultures were primitive, experimental and used solely for diagnostic purposes. Production of vaccine was impossible to carry out. A few chimpanzee kidneys were minced and sent to Philadelphia as part of the hepatitis experiments of Dr Deinhardt. Vaccine was never handled in my laboratory and contamination with chimpanzee cells was not possible.

Keywords: vaccine; chimpanzee cells; hepatitis

One of the many hypotheses raised by Mr Hooper concerning the alleged contamination of oral polio vaccine by chimpanzee SIV is the idea that a pool of vaccine for human use was prepared in the Microbiology Unit of the Provincial Laboratory of Stanleyville. As I was in charge of that Unit, and one of the few people who had access to the laboratory, I can speak directly about what happened, or rather about what did not happen.

Before I came to the Stanleyville laboratory my experience had been in pathology and tropical medicine. However, as I was interested in microbiology, the director of the laboratory, Dr Ghislain Courtois, assigned me to do bacteriology. When I arrived in 1956, the laboratory itself was ill-equipped and lacked even a hood.

Later, Courtois wanted to develop a virology laboratory. However, before 1958, the only work I could do was to attempt virus isolation in mice, particularly yellow fever virus, other arboviruses and rabies virus. We did succeed in isolating some Coxsackie viruses in mice, but were unable to do cell culture. In order for me to learn virology and cell culture, Dr Courtois sent me on a study trip in September 1957 to the Communicable Disease Center (Montgomery, Alabama and Atlanta, Georgia) in Atlanta and to the Wistar Institute in Philadelphia.

I returned to Stanleyville in February 1958, and tried to reorganize the laboratory. I was able to have a hood made by hand in wood, although it lacked an air filter. Although Mr Hooper hypothesizes that it was at this time that I cultured cells from chimpanzee kidneys, in fact several months were required before I could attempt cell cultures using trypsinization. The only success I achieved was with baboon kidneys, but even there I succeeded only in making 200 tubes and ten bottles, which were used for diagnostic purposes.

The following year I obtained HeLa cells, which I was able to maintain, and which I used for enterovirus from stools.

So there was absolutely no possibility I could have made a pool of polio vaccine in Stanleyville. Aside from technical difficulties, it never would have occurred to me to risk human lives and my own reputation on material prepared under such primitive conditions, with unknown effects on the neurovirulence of the vaccine strains. I categorically deny that I ever did that.

It is true that six minced chimpanzee kidneys were sent to the Wistar Institute at the request of Fritz Deinhardt, who came to Stanleyville to experiment with hepatitis infection of chimpanzees. Although I do not remember exactly when that was done, no cultures were retained in Stanleyville. Moreover, the preparations of the kidneys made for the hepatitis experiments had no relevance to the polio vaccination. The polio vaccine sent from Philadelphia was never conditioned or handled in my laboratory, to which only I had the key, and there is no possibility that chimpanzee cells could have contaminated the vaccine that was produced elsewhere.

In closing, I note that the way the conversations Mr Hooper had with me are recounted in his book gives the entirely false impression that I had something to hide. In fact, I have nothing to hide, and am proud of the small part I played in the polio vaccination campaign. Moreover, I resent the insinuation in his book that my son died of HIV infection acquired through polio vaccine. The truth is that he died during a kidney graft operation undertaken because of acute renal disease.

†Additional contribution.