

## Editorial

# Chimpanzees and journalists

The need for the article by Osterrieth [1] published in this number may not be obvious for those who have not followed the accusations made by a British journalist in a book published in 1999 [2]. The thesis of the book was that chimpanzee cells rather than macaque cells were used as substrate for an experimental type 1 oral polio vaccine developed by Hilary Koprowski, called CHAT, which was tested in the former Belgian Congo between 1957 and 1960. The book argued that the cells were contaminated with a chimpanzee SIV, and that ingestion of the SIVcpz led to the evolution of the virus and introduction of HIV-1 Group M into humans. A correlation between locations where CHAT was administered and early cases of possible AIDS was also proposed, though the supposed correlation was later heavily criticized [3–5].

Subsequently, two international conferences were held on the origin of HIV-1, one in London [6] and another in Rome [7]. The physical evidence presented was all against the OPV hypothesis. Material recovered or retained from early clinical trials in the Congo were examined by PCR in independent laboratories with negative results for SIV/HIV RNA and for chimpanzee cellular DNA. Positive results were obtained for macaque monkey cellular DNA [8–10]. Moreover, in the 1950 the same lots were fed to humans in Europe, without subsequent HIV infection [11]. Recovery of SIV strains from chimpanzees in Africa showed that the chimpanzees available to the research team in the late 1950, had they been infected with SIV, would have been infected by strains distant from HIV-1. SIV strains that are close relatives to HIV-1, by contrast, are found in West Africa (Gabon and the Cameroon), near the metropolis of Kinshasa where the first known HIV infection was identified [12]. In addition, evidence has emerged that lentiviruses are commonly transmitted from one species to the next [11,13], and molecular studies of viral evolution suggest a crossover of HIV-1 from chimpanzees in 1931 [14], and of HIV-2 from sooty mangabeys in 1940 [15], well before the vaccination campaigns.

In the ensuing years after the publication of the book, the author seems to have abandoned the idea that contamination occurred in Philadelphia, where the vaccine was produced, and now postulates wildcat production of CHAT in chimpanzee cells in what was then Stanleyville, by Dr. Paul Osterrieth, a Belgian virologist [1]. The only extant

written laboratory report from that time contradicts the asserted use of chimpanzee cells [3]. Virologists who visited the laboratory deny that the lab was equipped to produce vaccine, and Osterrieth's attempts at simian cell culture post-date the vaccination campaign in which HIV-1 transfer supposedly occurred [11,16].

Nevertheless, the journalist has obtained testimony from technicians and other persons without direct knowledge of Osterrieth's virological activities saying that OPV could have been produced in Stanleyville [17]. The distinction between diluting a stock sent from Philadelphia and making new vaccine would have escaped most of those observers. Those scientists with a technical background sufficient to make the distinction are unanimous in doubting that a vaccine could have been produced [14].

Fortunately, the person central to the story is still alive, and his article responds to the grave accusation that he hid local production of OPV [1]. Although the journalist in question will never abandon his ideas, they have not been confirmed, and it is unfortunate that they have hindered eradication of polio by OPV in Africa [18]. The hypothesis that HIV-1 was acquired by humans from chimpanzee blood in the act of butchering the animals remains the only one consistent with evidence.

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