

# The Origins of Smallpox in Central Africa

## PART I

BY

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Smallpox was not known in biblical times and was not described by the Greeks or Romans. During the time of the first flowering of Arab culture after the rise of Islam, Arab physicians described the disease, and it is thought that smallpox found its way to Europe in consequence of the wars between Christendom and Islam in the early Middle Ages. In theory, therefore, both the Persians who occupied the East African coast during the eleventh century, and their successors, the Arabs and Portuguese, could have brought smallpox to Central Africa from the Middle East or from Portugal. The descriptions of the earliest explorers of the Central African hinterland and of historians of Southern Africa clearly imply, however, that smallpox in Central Africa is of a much more recent vintage, and the time of the arrival of smallpox in Central Africa can be placed in the eighteenth or nineteenth century.

It is likely that smallpox reached Central Africa by an upward extension from South Africa in the eighteenth and nineteenth centuries, and also from the incursions of the slave traders from the East African coast during the same period.

In the seventeenth century the Dutch had colonised the Cape of Good Hope and Cape Town was a staging post for their vessels returning from the East. In 1713 one such ship docked at Cape Town. Some of the passengers had had smallpox on the voyage but had recovered. The laundry of these people was sent ashore and it was from this laundry that came the first epidemic of smallpox in Southern Africa. The loss of life among the Europeans was considerable, but it was among the Hottentots that the epidemic was most seriously felt. Whole kraals of natives were swept away, and the Hottentot race was practically destroyed. Other epidemics followed, in 1755 and 1767, but were not so severe as the first one had been.

According to Theal (1909) the Bantu were saved from the same fate that had overtaken the Hottentots because the Dutch taught them the principles of vaccination. "Then came the

discovery that smallpox could be prevented by vaccination, and the Bantu were spared from the fate that had overtaken the Hottentots. The Europeans . . . taught the Bantu tribes how to ward off the danger from it."

It is more likely that the Dutch taught the Bantu the practice of variolation rather than of vaccination, for not only was the former practice in use in Europe during the eighteenth century, but it would have been technically easier for them to perform.

Migratory movements and expeditions of war of the Bantu tribes probably carried the disease slowly into the hinterland of Africa. Such a process is likely to have been a slow one, because there was little miscegenation among the tribes other than the carrying off of women and young men after battle, and because of two great natural river boundaries, the Limpopo and Zambesi rivers.

In 1822 the Rev. J. Campbell published an account of his travels in the interior of Southern Africa, and spoke of smallpox among the "Mashow" tribe, presumably the Mashona of what is now Rhodesia. "When the smallpox comes among them they select the person who seems to have the most favourable kind, and from him take the matter to inoculate other people. The disease is thereby rendered more lenient." Thus, if the assumption that smallpox spread up slowly from South Africa is a correct one, then the disease had already crossed the Limpopo river and established itself among the Mashona people between the Limpopo and Zambesi rivers by the beginning of the nineteenth century.

During the nineteenth century, splinter groups of the Zulu and Bechuana crossed the Zambesi river and established themselves to the north. These movements may have resulted in a further northward spread of smallpox.

With the first entry by Europeans into what is now Zambia and which used to be called Northern Rhodesia, smallpox was noted among the people, for a Dr. Hofmeyer in 1900 commented on the practice of variolation in the Fort Jameson region (Gelfand, 1961).

The practice of variolation was also found to be in use when the pioneers first arrived in Rhodesia. The report of the Medical Director of the British South Africa Police for 1903 states "The Native Commissioner reports that the natives go in for an extensive system of vac-

ination from the smallpox vesicles, and this in spite of a mortality of quite 3 per cent."

Thus in both the territories which were formerly called Northern and Southern Rhodesia smallpox was established and was endemic at the time of the penetration of the Pioneer Column and other Europeans at the beginning of the present century. It is assumed that for Rhodesia and for the southern part, if not the whole, of what is now Zambia, the disease had spread up slowly from the south.

In East Africa, however, smallpox made its entry to the continent through a different portal. In the late eighteenth century and throughout the nineteenth century the Arabs who were settled along the East African coast travelled into the interior to buy slaves and ivory for selling at the East African coast ports and the slave markets of Zanzibar and Madagascar. The major slave route was from Ujiji on Lake Tanganyika to Bagamoyo, which lies on the coast of Tanganyika opposite Zanzibar. A more northerly route through Kenya was eschewed by the Arabs because of the warlike propensities of the Masai tribe. To the south there were other slave routes linking Lake Nyasa and the Central African plain with the coast and the slave markets of Madagascar. Early accounts of what is now the Northern Province of Zambia give vivid descriptions of the de-population of the region and of its desolation by the slave traders.

Burton (1860), one of the earliest explorers of East Africa, noted smallpox along the Ujiji-Bagamoyo slave route, and suffered considerable inconvenience because some of his own porters were afflicted with the disease. He also commented on the practice of variolation: "The Arabs have partially introduced the practice of inoculation, anciently known in South Africa. The pus is introduced into an incision in the forehead between the eyebrows. The people have no remedy for smallpox. They trust entirely to the *vis mediatrix*. There is a milder form of the malady called Shurna, resembling the chickenpox of Europe."

Johnson (1903) noted smallpox among the inhabitants of Uganda, and writes "According to the traditions of the natives, smallpox and syphilis entered Uganda at about the same time, and came originally from Unyoro. Unyoro received these plagues from the first Nubian slave and ivory caravans which were the pioneers of Egyptian rule in the forties of the last century. Syphilis and smallpox were also brought by the

Zanzibar trading caravans from Unyamwezi not many years later." (The oral traditions of the Buganda people were generally reliable, since, although they were illiterate they had an hereditary Court Historian at the Court of the Kabaka, or King, whose special function was to pass on information of this kind).

From these descriptions it appears that in East Africa and probably the northern half of Zambia smallpox was originally introduced by the Arab slaving caravans in the eighteenth and nineteenth centuries, whereas South Africa and Rhodesia are more likely to have been introduced to the disease during the same period by an upward infiltration from the Cape Province. In neither region is the disease likely to have been established for more than 150 years.

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*To be continued.*

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