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NOTABLE NOTES

Tungiasis "The Greatest Curse That Has Ever Afflicted Africa"

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Because of air travel, diseases formerly restricted to tropical and subtropical areas may also now be observed in countries with temperate climates. Among these diseases, one often underrecognized by Western dermatologists is tungiasis, an infestation caused by penetration in the skin of the gravid female of the flea *Tunga penetrans*.^{1,2} This infestation occurs in poor communities in South America and Africa and sporadically affects travelers to endemic areas. Medical entomology claims that the South American continent was its original site.

The history of this insidious flea is characterized by curious anecdotes. The first reports date back to the pre-Incan period: artists of the Moringa and Chimu cultures depicted morphological features of *T penetrans* on ceramic jars. The first contact with Europeans was after the Christopher Columbus's sailors landed in Haiti. They fought against this parasite as well as against the natives until they were "slaughtered" by both. Soon, tungiasis became a very important problem for the colonizing European troops who had no previous experience with this flea. For instance, the Spanish military expedition in Colombia (1538), led by Gonzalo Ximenez de Quesada, was stopped for a long period in Sororoca, a town infested by *T penetrans*. These soldiers suffered so severely that the walking was very difficult.¹ Native women had compassion and showed the Spaniards how to remove the imbedded fleas. These ancient methods of extraction of the fleas from the skin are still used in some areas in South America and Africa.

The first scientific description of *T penetrans* and tungiasis was provided by Aleixo de Abreu in 1623.² *Tunga penetrans* is one of the few parasites that spread from the Western to the Eastern hemisphere. According to the tra-

dition, the British ship *Thomas Mitchell*, during its 1872-1873 voyage,^{1,2} brought the flea from Brazil to Angola in bags of sand used as ballast. *Tunga penetrans* spread rapidly along the African West Coasts and sub-Saharan regions following the trading caravans.¹ The small flea brought Africa to its knees. Indeed, towns and villages were so infested that inhabitants were often forced to leave them. Even though *T penetrans* did not cause death, it caused painful lesions on the feet that prevented walking. Therefore, people starved because they were unable to work in fields. Lionel Declé, at the end of the 19th century, wrote: "In this village there was not man or woman who was not covered with ulcers... my experience makes me look upon the jigger as the greatest curse that has ever afflicted Africa."^{3(p57)}

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