

The existence of *Dracunculus medinensis* (Linnaeus, 1758) in Turkana, Kenya

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Summary

Dracontiasis has been previously reported in southern Sudan, northern Uganda and north-west Eritrea but this is the first report of autochthonous cases in Turkana, Kenya. Five Turkana tribesmen, three females from the same family, one young boy and an adult male were being treated for guinea-worm at the dispensary in Lokichogio, northern Turkana District. The three women had recently returned from southern Sudan, where the disease is endemic, but the two male tribesmen had only lived in and around the Lokichogio region.

The methods used in obtaining water from water-holes dug in dry river beds provide an ideal situation for *Dracunculus* transmission amongst the tribesmen; this parasite may therefore become a problem in this remote impoverished area.

Guinea-worm disease (dracontiasis) is common in many countries in western and central equatorial Africa; its existence has been reported in southern Sudan (SIMMONS *et al.*, 1951) and northern Uganda (BRADLEY, 1968), and an outbreak of the disease occurred in north-west Eritrea in 1969 (TEN EYCK, 1971). However no autochthonous cases have been previously reported from Kenya, which shares international boundaries with these countries.

During a two-week stay in Lokichogio, a town in north-western Turkana District, Kenya (Fig. 1), five Turkana tribesmen were being treated for dracontiasis at the dispensary. Three of the patients were females from the same family, one had the worm located in the abdomen and the others in the lower limbs. Both the males, one eight-year-old boy and the other, an adult, had single worms in the feet (Fig. 2, inset).

The Turkana are nomadic pastoralists who inhabit the remote inhospitable semi-desert north-west corner of Kenya. This is an area where trading and cattle raiding are constant activities across the largely nebulous international borders. It is therefore an area which is very vulnerable to the import of disease from the neighbouring countries. The infected women had recently returned from living in southern Sudan, where the disease is endemic (SIMMONS *et al.*, 1951). However, the two males denied that they had been to the Sudan and said that they had always lived in or around the Lokichogio region, moving between this township and Nanam another small village further south in Turkana District, a well known pasture route travelled by many Turkana families. Lokichogio is situated between the Mogila and Songot mountain ranges, an area where there are numerous permanent water supplies which exist as natural fresh water springs emerging from the foothills of the mountains forming small swampy ponds. Similar springs are found only occasionally throughout the rest of Turkana. Most of the Turkana people obtain their water from water-holes which they excavate at frequent intervals along dry river beds (Fig. 2). This practice is also found near the springs as the water from them tends to have a strong sulphurous taste. Other water sources available to the Turkana are the relatively recently installed boreholes located near many townships and, during the short infrequent rains, rock-pools may be used. The water-holes could provide an ideal environment for *Dracunculus* transmission and it is surprising that this disease has not been reported from this region before.

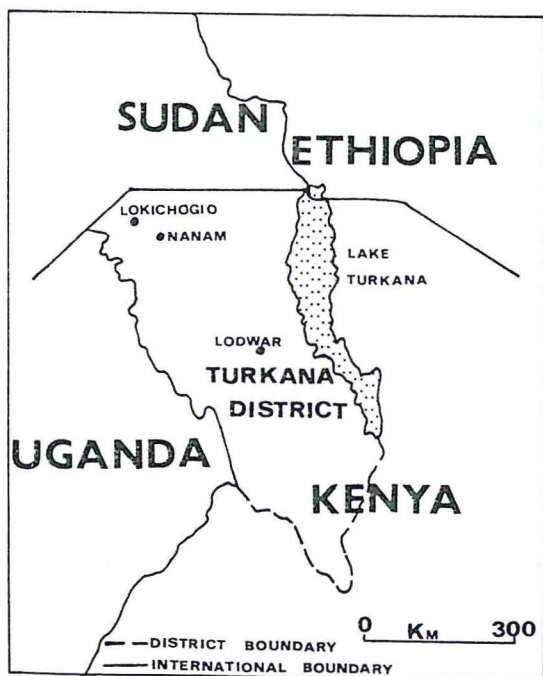


Fig. 1. Map of northern Kenya showing the location of Turkana District.



Fig. 2. Turkana collecting water from a water-hole near Lokichogio. Inset: *Dracunculus medinensis* in the foot of an adult Turkana tribesman.

Since the adult worm now exists amongst the tribesmen and they are nomads, it may only be a matter of time before the disease spreads throughout the District. Although dracunculiasis is theoretically one of the easiest parasitic diseases to prevent (MULLER, 1979) it would, in view of the inaccessibility of the region and the life style of the tribe, be difficult to control the disease if it became established in this impoverished area.

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