Loiasis: Case Report of Ocular Infection in Tripoli - Libya

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Introduction:
Loiasis is a helminthic infection caused by the filarial parasite *Loa loa*, also known as the “African eye worm”. It is a wire-thin, almost transparent parasite, typically with curved tail-end. The male is smaller than the female, but both have similar diameter (male up to 5.0 and female up to 7.0 cm in length, and both about 0.25 mm in mid-body width). *Loa loa* has a multi-variate pathology, ranging from a self-limiting infection to quite a severely morbid one, rarely leads to complications with poor prognosis. It is host-specific to man, except its one sibling which infects the higher primates of the rain-forest region of Central Africa.

The human-parasitizing strain is transmitted by large, stout, brightly coloured, intensely biting haematophagous flies, *Chrysops dimidiate* and *Chrysops Silecia* known as “deer flies” in the lands of their prevalence. These flies are confined to the tropical dense rain-forest canopies of Central Africa, East of Dahomi gap. Southern Sudan, Angola, Benin, Cameroon, Republic of Central Africa, Congo and Congo DR, Guinea (Equatorial), Gabon, Niger, Nigeria and Uganda.1,2,3 In Cameroon and the Congos, the incidence of *Loa loa* is reported as high 38%, almost next to that of malaria.4,5 In some countries, *Loa loa* is co-endemic with *Onchocerca volvulus* and *Mansonella perstans* where their respective vectors, black fly of the genus *Simulium* and midges of the genus *Culicoides*, respectively.2,6,7,8

Case Report:
A 20-year-old Cameroonean net café assistant, presented at Tripoli Medical Centre with a complaint swift motile presence of an object in his right eye. He could not specify the time he had this trouble, but indicated a period of about a month since he arrived at Tripoli. He stated not to have done any consultation in his country home due to non-availability of medical facilities. He often felt considerable pain, lacrimation not infrequently a mild mucous pericomeal secretion and dense blurring on waking up. A Routine macroscopic examination of the eye indicated a long thin almost transparent vermiform organism moving intermittently in the cornea. Instillation of a vermistatic solution partially retarded the activity of the worm, which was subsequently extricated alive through partial corneal cavity. The worm was identified as *Loa loa* male.

The worm: The parasite was identified as a male *Loa loa* (Fig.1). It was thin, filariform, almost transparent, 5.50 cm x 0.25 mm in size; with a typical curved tail-end. It was relaxed in 70% alcohol and preserved in formalin. The specimen is restored in the parasite collection (Nematoda: Filarioidea) of the department of Medical Parasitology, Faculty of Medicine Al-Fatah University, Tripoli under Catalogue No. PRL/12/2/02.

Conclusions and Recommendations:
Although the possibility of the incidence of loiasis in Libya is even beyond remotest thought due to the nonoccurrence of its vector, the incidence of this parasite in internet and immigrants cannot be ruled out, as indicated by the above mentioned case. Consequently, it may be a recommendation worthwhile to have the treatment and management facilities of such parasitic infections in Libya, which are highly endemic in neighboring countries. Moreover, vector of *L. loa* (*Chrysops*) is endemic in neighboring countries which may be imported in Libya through caravans types of movement, weather storms, and incidence of this parasite could be possible in the future.

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Fig. (1): Adult worm of loa loa male

References:


