

## Ocular Loiasis: Still Existent in this Millennium - A Case Report

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**Background:** Loiasis is a neglected tropical, vector-borne parasitic disease due to a nematode *Loa loa* and transmitted to humans by deerfly, genus *Chrysops*.<sup>[1,2,3]</sup> Loiasis is endemic in the tropical rainforest belts of Central and West Africa including Nigeria.<sup>[1,2,3,4]</sup>

The emergence of loiasis as a disease of public health importance, is not only because of its endemicity but also of its impediment on the control of onchocerciasis and lymphatic filariasis in areas of co-endemicity.<sup>[1,5]</sup>

The clinical manifestations of loiasis characteristically include: localized angioedema found predominantly on the extremities (Calabar swelling), pruritus, and Subconjunctival migration of the adult *L. loa* worm. The subconjunctival and/or palpebral migration of the adult *L. loa* worm and angioedema of the eyelids typifies Ocular loiasis.<sup>[1,2,3,4,6]</sup>

Other reported ophthalmic manifestations are anterior chamber and presumed orbital involvement, respectively.<sup>[7-14]</sup>

We report a case of a 23-year-old Nigerian female, semi-urban dweller, recently diagnosed of ocular loiasis.

**Case Report:** A 23-year-old female bar attendant, resident for 4 years in Calabar South (a semi-urban area in Calabar), Cross River State, Nigeria. She presented to our eye clinic with a 1-day history of spontaneous onset of a sensation of a wiggly movement, redness, itching and discomfort in her left eye; which following a severe blunt trauma 13 years ago, had been a non-seeing eye. There was no history of fever, itchy skin, swelling or similar movement in any part of

her body. Prior to her residence in Calabar, she has been residing in Awka, Anambra State, South-eastern Nigeria for 18 years.

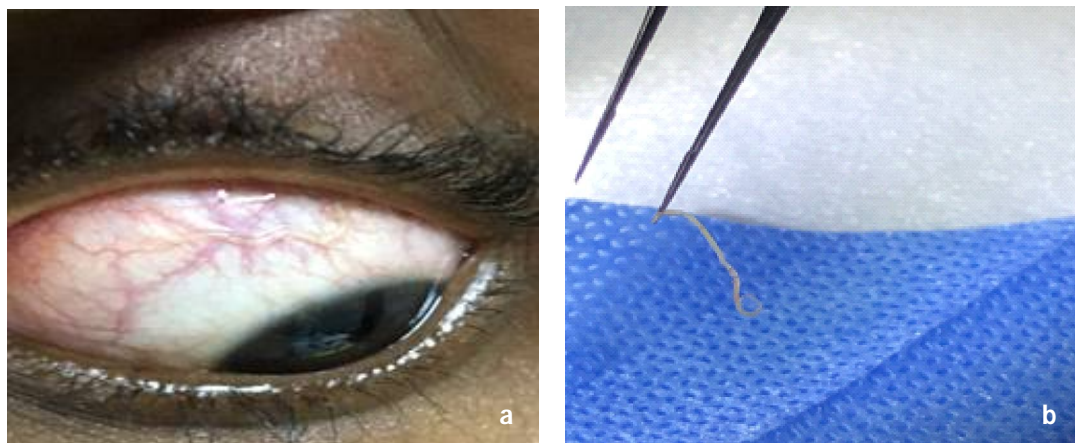
Examination of the left eye revealed a visual acuity of Counting fingers at 1m, approximately 30-degree exotropia, a translucent curvy/thread-like motile worm at superior bulbar subconjunctival space with associated diffuse conjunctival hyperaemia. Cornea showed punctate opacities in the inferior one-third with normal and quiet anterior chamber, patchy atrophy in the superior half of iris, oval mid-dilated poorly reactive pupil with grade 3 Relative afferent pupillary defect, clear crystalline lens, good red reflex, round generalized pale optic disc and mottled macula. Right eye examination revealed a visual acuity of 6/5, with essentially normal anterior and posterior segments. Intraocular pressure using pneumotonometer was 15.0mmHg and 15.7mmHg on the right and left eyes, respectively. A clinical diagnosis of left subconjunctival loiasis with traumatic optic atrophy was made.

Removal of worm was immediately done under topical anaesthesia with the aid of a magnifying loupe. Post removal, she was placed on ciprofloxacin eyedrops. The worm was immediately sent to the microbiology laboratory and was subsequently identified as adult *Loa loa*. Patient was referred to the Neglected Tropical Diseases office for systemic treatment.

**Conclusion:** Loiasis is not yet extinct, and the ocular manifestation as subconjunctival worm with ocular surface irritation remains a common mode of presentation. The extraction of the worm from the subconjunctival space still remains the easiest and accessible method for diagnosis, particularly in low resource settings. This case report seeks to, once more, alert clinicians, public health specialist and ophthalmologist about ocular loiasis.

### References

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**Figure 1a:** Superior bulbar subconjunctival translucent motile worm

**Figure 1b:** Live translucent worm after removal

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