

Presumed Ocular *Toxocara Cati* Infection in Port Harcourt

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Background: A 39 year old Nigerian male discovered that the vision in his right eye was poor after he heard a prep-talk on ocular self-examination given by an eye care provider while awaiting consultation for another ailment at a general outpatient clinic in Port Harcourt. On a subsequent visit to the eye clinic there was no history of ocular trauma or any episode of redness, pain or sudden blurring of vision in that eye. He grew up in a monogamous setting with five siblings and several cats since his father loved cats. Ocular examination revealed a visual acuity of 6/5 in the LE and 6/60 in the RE which did not improve with a pin-hole. Fundoscopy showed the appearance of discrete granulomas in the right fundus as demonstrated in the fundus photographs (Figure1) Full blood count, chest and skull X-rays were normal but an abdominal scan revealed a fatty liver. There were no facilities for serological testing (Elisa).

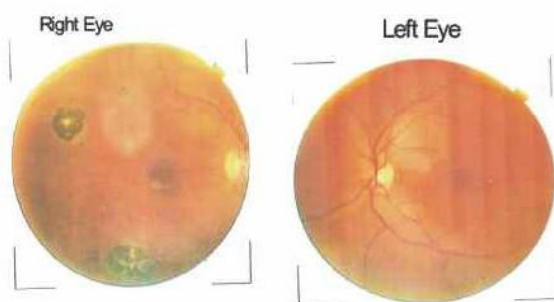


Fig. 1: Fundus photographs showing toxocara cysts in the right eye

Discussion: Toxocariasis is a classical example of an infection transmitted from animals to humans (zoonosis). It is caused by the parasitic roundworms commonly found in the intestine of dogs and cats^{1,2} Humans become infected by

ingesting embryonated eggs in soil or food or encysted larvae from cows, sheep or chickens.³ Its one of the neglected infections of poverty. Ajayi et al performed Eliza testing on the sera of 104 children and adults and discovered a seropositive rate of 30.4 % in adults and 29.6% in children.⁴ Cats are not commonly accepted as pets in Nigeria and there are no reports in literature of any studies done on a population of cats. Ugbomoiko⁵ discovered from a community-based study of 396 dogs, an overall prevalence of ectoparasites of 60.4% and 68.4% of intestinal helminths. There was very limited knowledge of zoonosis in this study and the diseases were not considered a major health problem by pet owners. Also treatment with anti-parasitic drugs was found to be more frequent in urban areas. In our report, the patient had no knowledge of zoonosis even though they grew up living with several cats as pets. The accidental discovery of poor vision in the right eye also brings to the fore the lack of awareness of eye health. To the best of our knowledge there is no report of infections transmitted from cats as pets in Nigeria. Based on the information presented in this discuss we presume this to be a *Toxocara catii* infection even though there were no serological tests done. In the ocular form outcome is variable but unioocular vision loss is not uncommon. In the visceral form, outcome is usually good but marked organ damage and even death can occur in extreme cases.

Conclusion: Prevention of infection to humans is by actively involving veterinarians and pet owners. Pets should be placed on a deworming programme and their faeces should be picked up and buried. Regular medical check-up including ocular examination should be encouraged.

References:

1. Ahu SJ, Ryoo SK, Woo SJ. Ocular toxocariasis: Clinical features, diagnosis, treatment and prevention. *Asia Pac Allergy*. 2014 Jul 4(3): 134-141.
2. Moreira GM, Telno PD, Mendocia M, Moreia AN, et al. Human toxocariasis: Current advances in diagnosis, treatment and interventions. *Trends parasitol*. 2014 Sept 30 (9): 450-464.

Abstracts

3. Akeredolu AB, Sowemimo OA. Prevalence, intensity and associated risk factors for *Torocara canis* infection in Nigerian dogs. *Journal of parasitology and vector biology*. 2014 Aug 6(8): 111-116
4. Ajayi OO, Duhlinska DD, Agwale SM, Njoku M. Frequency of human toxocariasis in Jos, Plateau State, Nigeria. *Mem Inst. Oswaldo Cruz, Rio de Janeiro*. 2000 March/April 95(2): 147-149.
5. Ugbomoiko US, Ariza L, Heukelbach J. Parasites of importance for human health in Nigerian dogs; High prevalence and limited knowledge of pet owners. *BMC Vet Res* 2008 Dec 4:49.