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# **Toxocara Canis Infection – A Rare Presentation**

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#### Abstract

Toxocariasis is an illness of human caused by larvae either Dog round worm (Toxocara canis) and Cat round worm (Toxocara cati). Herewith reporting a case of 30 years old male with complaints of fever with abscess in RT upper limb and lower limb. Blood serology ELISA for Toxocara canis- IgG showed positive result. Patient treated with antihelminthics for 21 days. Patient improved dramatically after starting treatment.

#### Keywords: Toxocara Canis Elisa-IgG

#### Introduction

Toxocariasis is a zoonotic helminthic infection is one of the causes of blindness and may provoke rheumatic, neurologic or asthmatic symptoms.

#### **Case Report**

30 years old male, professionally a farmer who was petting 3 dogs in his home came with complaints of fever associated with Right axillary and Right lower limb swelling for one day. On examination patient was dysphoeic with hypotension with Right axillary lymphadenopathy. Patient was initially diagnosed to have septic shock and treated with inotropes and antibiotics. Initial blood investigations showed total count of 8500 cells/cu mm. Ultra sound abdomen showed calcific foci in the liver, ultrasound thorax showed right axillary abscess and right lower limb abscess. After stabilization of patient, 10 ml of pus was drained and sent for culture sensitivity .On 4th day of admission patient started developing raised erythematous rashes over both upper limbs and face and treated with anti-histamines. Fundus evaluation was done, which was found to be normal. Blood serology ELISA for Toxocara canis IgG showed 15.50 NTU (9-11). Patient was treated with anti helminthics for 21 days. Patient clinical condition showed dramatic improvement after treatment.

#### Discussion

Toxocariasis is mainly a zoonotic infection, it may cause human disease that involves the liver, heart, lung, muscle, eyes and brain.(1) (2) Three syndromes of Toxocara infection are generally recognised. Covert Toxocariasis is one of the types commonly seen in children characterised by cough, difficulty in sleeping, abdominal pain, headache behaviour problem, hepatomegaly, lymphadenopathy.

Visceral larvae migrans is an another type caused due to migration of larvae through the internal organs of human and the resulting inflammatory reaction. Clinical features characterised by fatigue, anorexia, weight loss, pneumonia, fever, cough, bronchospasm, abdominal pain, head ache, rashes, seizures, hepatomegaly, lymphadenitis, chronic urticarial. Complications, it can leads to myocarditis or respiratory failure.

Ocular larva, another type caused by migration of larvae into the posterior segment of the eye tends to occur into the posterior segment of the eye tends to occur in older children and young adults, clinically characterised by decreased vision ,red eye, leukokoria. Granuloma and chorioretinitis can be observed in the retina, unilateral visual loss, retinal fibrosis, retino blastoma and retinal detachment occurs.

Toxocariasis should be strongly considered when the patient has eosinophilia characterised clinical symptoms and a positive finding on Toxocara serology test. Patients usually treated with antihelminthics and glucocorticoids may be employed to reduce inflammatory complications. Our patient 30 years old male came with characteristic clinical symptoms and positive ELISA for Toxocara canis IgG showed 15.50NTU (9-11)

#### Conclusion

Toxocariasis is generally a self-limited disease; the prognosis is good when adequately treated except in some patients with ocular or cerebral involvement. Proper hygiene practices, timely disposal of pet faeces and routine deworming of pets are strategies necessary to reduce infective complications in humans. (30 Prevalence of severe Toxocara infections in humans exists in 12/10000 new infection worldwide. Prevalence of this disease in North America is significant. (4)

#### Reference

- Ahn SJ, Ryoo NK, Woo SJ. Ocular toxocariasis: clinical features, diagnosis, treatment, and prevention. *Asia Pac Allergy*. 2014 Jul. 4(3):134-41. [Medline]. [Full Text].
- [2]. Moreira GM, Telmo PD, Mendonça M, Moreira AN, McBride AJ, Scaini CJ, et al. Human toxocariasis: current advances in diagnostics, treatment, and interventions. *Trends Parasitol*. 2014 Sep. 30(9):456-464. [Medline].
- [3]. Centers for Disease Control and Prevention. Ocular toxocariasis--United States, 2009-2010. *MMWR Morb Mortal Wkly Rep.* 2011 Jun 10. 60(22):734-6. [Medline].
- [4]. Lee RM, Moore LB, Bottazzi ME, Hotez PJ. Toxocariasis in north america: a systematic review. *PLoS Negl Trop Dis*. 2014 Aug. 8(8):e3116. [Medline].