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Editorial

Visceral Larva Migrans of Liver: A Neglected Tropical Disease

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Visceral larva migrans (VLM), a clinical syndrome occurs with invasion of sensitive organs by larval stages of the nematodes *Toxocara canis* or *Toxocara cati*, the common roundworms of dogs and cats, respectively. Humans acquire the disease by ingestion of embryonated eggs from contaminated raw vegetables, contaminated water sources or via geophagia and also, by eating raw meat from intermediate or paratenic hosts (chicken, rabbit and lamb), that contain encapsulated larvae. The degree and type of clinical disease manifestations depend on the organs invaded by the migrating larvae, the degree of the larvae burden, and the strength of the host immune response [1].

The liver is the visceral organ most commonly affected in VLM. The larvae reach the liver parenchyma through the portal circulation. The pathologic effects are caused by mechanical injury to the tissues by the migrating larvae, the toxic products or the immunologic response to the parasite. Many pathological findings are observed along the migratory routes including track like necrosis and hemorrhages, microscopic abscess, diffuse eosinophilic infiltration and the larvae persisting in the liver cause granulomatous reactions [2].

The clinical disease typically manifests as hepatitis, abdominal pain, fever, hepatomegaly and splenomegaly. Laboratory findings include hypergamma-globulinaemia and leucocytosis with marked eosinophilia. On computed tomography, hepatic lesions are typically ill-defined, low attenuating nodules that have sometimes been confused with metastatic cancer [3]. Granulomas can be visualized using ultrasound. The routine diagnosis is based on immunological tests and the method of choice is the enzyme-linked immunosorbent assay (ELISA) using the excretory- secretory antigens of infective larvae of *T. canis* [4,5]. The choice drug available for VLM treatment is albendazole. It was observed that albendazole reduced *Toxocara* larval burden in the liver by inducing degenerative changes in the tegument and intestinal cells and decreased energy production required for the survival of *Toxocara* larvae [6].

Better awareness among physicians, pediatricians, would be the first step to defeat this neglected disease.

Bibliography

1. El-Sayed NM and Ramadan ME. "Toxocariasis in children: an update on clinical manifestations, diagnosis and treatment". *Journal of the Pediatric Infectious Diseases* 12.4 (2017): 222-227.

2. El-Sayed NM and Ramadan ME. "Hepatoprotective activity of *Thymus vulgaris* extract against *Toxoplasma gondii* infection". *Asian Pacific Journal of Tropical Disease* 7.5 (2017): 280-285.

3. Park S., *et al*. "Toxocariasis masquerading as liver and lung metastatic nodules in patents with gastrointestinal cancer: clinicopathologic study of five cases". *Digestive Diseases and Sciences* 57.1 (2012): 155-160.

4. Jin Y., *et al*. "Serodiagnosis of toxocariasis by ELISA using crude antigen of *Toxocara canis* larvae". *Korean Journal of Parasitology* 51.4 (2013): 433-439.

5. El-Sayed NM and Ismail KA. "Relationship between *Toxocara canis* infection and schizophrenia". *Rawal Medical Journal* 37.2 (2012): 155-161.

6. Barrera MG., *et al*. "In vivo evaluation of albendazole microspheres for the treatment of *Toxocara canis* larva migrans". *European Journal of Pharmaceutics and Biopharmaceutics* 75.3 (2010): 451-454.

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