Abstract

*Dirofilaria immitis* was known heartworm and adult worms live in the right ventricle of heart and pulmonary artery. *Dirofilaria immitis* definitive hosts is dogs, wolves and foxes and humans can be infected with the parasite Randomly and that is why this parasite is important in terms of public health. This parasite is prevalent in hot weather conditions and Sistan-Baluchistan province is also due to hot weather conditions are predisposed to the disease. The target of this study is check the prevalence of this parasite in dogs of Zabol. In addition, this study is the first study in this area in the Zabol province. In order to investigate of *Dirofilaria immitis* in Zabol, tested 60 dogs were randomly selected from rural and urban dogs. After clinical examination, was taken 5 ml of blood from the saphenous vein dogs and were performed modified Knott and the blood smire of thin and thick blood samples in vitro. In this study, it was revealed that from total of 60 blood samples in the microscopic examination with modified Knott test infected with the parasite *Dirofilaria immitis* was 3.8% and 1.7% infected with *Diptalonema reconditum*. Also shows 3.3% infected by *Dirofilaria immitis* with direct smear. The results showed that infection with *Dirofilaria immitis* in Zabol is low which can be caused by a living conditions of dog and timing of the review and the number of animals to be tested. The results showed that 6.6% of infections were in males dog and females were 1.7% contamination. Although differences in males is more than females infection, but the difference was not significant. The highest level of infection in dog aged 3 years and older (8.3%) were observed, but no significant difference was observed between age and the infection.

**Key words:** *Dirofilaria immitis*, Dog, Zabol
The Thesis Submitted for the Degree of masters
(In the field of Veterinary parasitology)

Title:

Investigate the prevalence of *Dirofilaria immitis* in dogs in the city of Zabol

**Supervisor:**
Dr. F. Shariati Sharifi

**Advisor:**
Dr. S. Salari

**By:**

M. Mohebby

Sep 2016