Case Report: *Limnatis nilotica* infestation in a Kid From Iran

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**Abstract:** Leech due to its invasive nature sticking to the mucosa of humans and animals and attempted to blood feeding. A six-month male Kid with respiratory distress and mouth bleeding symptoms after drinking contaminated water was examined by a veterinarian in Dehloran city of Ilam province of Iran in April 2014. Kid owner stated that the animal is infested by leeches orally. After examining the animal’s mouth, a leech with 1.8 cm length was seen in kid’s lower gum and changes were observed in animal physiology. Tachycardia, tachypnea, mucosal pale of Gum and eyelids, eye tears and fear was seen. After attempting to remove leech from the oral cavity, according to visual characteristics Limnatis nilotica was diagnosed. Anemia is the most common complication of leech infestation that it is causing economic losses of to farmers. Despite, health promotion, leeches infestation occur in different animals. Therefore, education and awareness increasing of traditional herders about contaminated water and natural springs are necessary and preventive measures should be taken.

**Key words:** Kid · Leech infestation · Iran

**INTRODUCTION**

There are a number of parasitic infections that affect lives of millions of people in the tropical countries such as Africa, Asia and Latin America. These infections are causes major public health disorders and problems leading to morbidity and sometimes mortality of the casualty [1]. Parasitic infection are causing diarrhea, Iron deficiency anemia, children growth retardation, weight loss, decreased concentration, abdominal pain, digestive problems, reduced performance, anger and aggression [2-5]. High prevalence of parasitic diseases is closely linked to environmental conditions and inadequate health systems[6-8]. Parasitic diseases are considered as major health problems and barriers to the development of the social economy in most countries, especially developing countries. Parasitic disease with its wide-spread imposes a significant burden to human society because of poverty, malnutrition, illiteracy, overpopulation, lack of health facilities [9].

Leeches are parasites with different species which divided in two group’s: Freshwater leeches and Landleeches.

Land Leeches includes *Haemadipsa zeylanica, Haemadips papicta* and *Haemadipsa sylvestris* and aquatic Leeches contain *Theromyzon tessulatum, Dinobdella ferox, Myzobdella africana, Limnatis paluda* and *Limnatis nilotica* [10-12].

The most important aquatic leeches that can infect human and animals is *Limnatis nilotica* with dark green color, orange line at the anterior and posterior sides of the body about 1 cm length [13-16].

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DISCUSSION

Exposure to the contaminated water is Common cause of infestation to aquatic leeches such as Limnatisnilotica. Reports indicate that first record of sheep infestation with Limnatisnilotica was from the West of Iran in the mouth and pharynx [17]. Mehrzadihas reported simultaneous infestation of cattle, dogs, donkeys and sheep in Iran [18].

A report from South West region of Iran showed oral infection with Limnatisnilotica in a native herd dog. Leech infestation symptoms were Anemia with a hematocrit of 34%, hemoglobin decreasing, localized infection with fibrinolytic degradation, respiratory distress and fear [19].

Leech infestation was reported in single toes animals from Iran. Oral cavities infestation of a donkey reported from West of Iran. Tachycardia was an important sign of infestation[20].

Reports of large and small ruminant’s infestation with leeches have been published. Such as a report of a pregnant native cattle mouth infestation with Limnatisnilotica from Ilam (West province of Iran) with symptoms such as Respiratory distress, Anorexia, Anxiety and hematological changes [21]. The infestation of lambs and kids oral cavities with leeches was reported from the west of Iran which became infested following the consumption of contaminated water [22].

Leech infestation of birds also has been reported. Bahmani and coworkers reported infestation of the oral cavity and beak of an indigenous chicken with Limnatisnilotica[23]. Cases of respiratory tract infestations such as camels occurred in Iraq’s with Limnatisnilotica[24]. Limnatisniloticaleech is an internal aquatic leech that sticks to the mucous membranes of human and animal body such as the pharynx, nasal cavity, nasopharynx and esophagus [25,26].

This report and previous reports [17-24] indicate that the springs water and contaminated waters with leeches are the main sources for internal hirudiniasis. Oral cavity and its mucosa are the most contaminated places by leeches. Leeches has a strong chemical receiver which help to enter to oral cavity when the animal attempting to drink water that is hooked into oral cavity and cause anemia, weakness and economic losses of livestock.

The use of herbal remedies and medicinal herbs to treat disease (such as parasitic disease) is an appropriate solution [27-44]. Anemia is the most common complication of leech infestation[19,21]. Despite, health promotion, leeches infestation occur in different animals. Therefore, education and awareness increasing of traditional herders about contaminated water and natural springs are necessary and preventive measures should be taken. A prudent approach to prevention of animal’s infestation with leeches is use of water in containers and ensuring the health and non-pollution of used water.

REFERENCES


