PREVALENCE OF CALF CRYPTOsporidiosis INFECTION IN KAZEROON SOUTHWESTERN IRAN

Ahad Olyaie

Department of Pathobiology, Faculty of Veterinary Medicine, Islamic Azad University, Kazeroon Branch, Kazeroon, Iran

Introduction: Cryptosporidium is a zoonotic protozoan pathogen of the Phylum Apicomplexa. Cryptosporidium does not utilize an insect vector and is capable of completing its life cycle within a single host, resulting in cyst stages which are excreted in faeces and are capable of transmission to a new host. A number of Cryptosporidium infect mammals. In humans, the main causes of disease are C. parvum and C. hominis (previously C. parvum genotype 1). C. canis, C. felis, C. meleagridis, and C. muris can also cause disease in humans. Cryptosporidiosis is typically an acute short-term infection but can become severe and non-resolving in children. In humans, it remains in the lower intestine and may remain for up to five weeks. The parasite is transmitted by environmentally hardy cysts (oocysts) that, once ingested, excyst in the small intestine and result in an infection of intestinal epithelial tissue. The various symptoms of cryptosporidiosis include, Frequent, watery, diarrhea, Nausea, Vomiting, Abdominal cramps, Low-grade fever, Debrillating cholera-like diarrhea (up to 20 liters/day), Severe abdominal cramps, Malaise, Weight loss and Anorexia.

Objective: Because Prevalence of Cryptosporidium Infection in calf in Kazeroon southwestern Iran, it was considered

Material and methods: Fecal samples, collected from 150 calf during March 2006 to Jun 2007 randomly selected from 10 regions in Kazeroon, Iran, were examined to investigate the prevalence of Cryptosporidium infection. Cryptosporidium oocysts were identified by using sheather’s concentration and the Ziehl-Neelsen modified staining technique

Results and discussion: We identified 18.0 % of the positive. sexes of cattle were infected with Cryptosporidium parasites, but prevalence were higher in diarrheic than in non-diarrheic calf. The study for age infection, 51.0% 1-15 daily, 31.0% 15-25 daily and 18.0% 25-45 daily were seen.

Conclusion: Cryptosporidium is a zoonotic disease, found in soil, food, water, or surfaces that have been contaminated with infected human or animal feces. Transmission occurs through animal-to-human or human-to-human contact. People may also be infected by consuming contaminated water or food, or by swimming in contaminated water (for example in lakes or rivers). Infection is frequently associated with foreign travel. The Health Protection Agency provides advice on controlling outbreaks of cryptosporidiosis.

Keywords: Cryptosporidium - calf - Kazeroon - Iran