

**IMPORTANCE OF ANIMAL FASCIOLIASIS IN
PUBLIC HEALTH IN COASTAL REGIONS OF THE
MAZANDRAN SEA, IRAN**

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Human fascioliasis is a problem in north of Iran, specifically in Gilan province. In this region more than 10,000 human cases have been reported and about 6 million people are at risk. Gilan, Mazandran and Golestan, are the three provinces along the Caspian Sea coasts which have Mediterranean-like climate. The annual precipitation and humidity are higher than any other parts of Iran. These environmental conditions are more suitable for human and animal parasites, especially *Fasciola* spp. To determine the prevalence of fascioliasis in these provinces during 2006-2007, fecal samples of horses from Golestan (n=65) and Gilan (n=78), sheep from Gilan (n=640), Mazandaran (n=410) and Golestan (n=200) as well as cattle from Gilan (n=600), Mazandaran (n=215) and Golestan (n=160) were taken directly from the rectum. The floatation method was performed for determination of egg per gram of feces (EPG). Our findings revealed the presence of *Fasciola* spp. samples eggs in 9.53%, 7.8% and 2.5% of sheep and 32.5%, 12.1% and 3.1% of cattle in Gilan, Mazandran and Golestan, respectively. Horses of Golestan were free of this parasite, while 50% of those of Gilan were infected with *Fasciola* spp. Meanwhile there were a relationship between climatic conditions and animal fascioliasis in the provinces under study. Among different meteorological factors, rainfall seems to be a strong factor. Cattle were the most infected animals particularly those from Gilan.

Keywords: Fascioliasis, Public health, Mazandran Sea, Iran.

ECTOPIC FASCIOLIASIS OR PERITONEAL MALIGNANCY TUMORS? (CASE REPORT)

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Ectopic fascioliasis usually caused by juvenile *Fasciola* Spp., but in recent years a few cases of tissue-embedded ova have been reported from different areas. A 79 years old Iranian man resident in Ardabil province, complained with abdominal pain, nausea and intestinal obstruction symptoms referred to Fatemi hospital. The patient was operated with impression of intestinal obstruction. In laparotomy multiple intestinal masses with peritoneal seeding resembling of a malignant lesion were seen. Moreover local intestinal necrosis and multiple lymphadenopathy were noticed. After appendectomy and peritoneal mass biopsy with numerous intraperitoneal adenopathy, paraffin embedded blocks were prepared from each tissues. A blood sample was taken from the patient five month later for serological diagnosis. Histopathological examination of sections showed fibrofatty stroma with dense mixed inflammatory cell infiltration and fibrosis in peritoneal masses. The inflammatory cells were include lymphoplasma cells and abundant eosinophils. Large numbers of ova of *Fasciola* spp. were also noted with typical circumscribed granulomas (circumoval granulomas). A few circumscribed granulomas were also noted on the serosa of appendix and perinodal soft tissues. IHA test for detecting anti *Fasciola hepatica* antibodies was positive five months after surgery with a titer of 1/128. Due to multiple clinical manifestation of extra-hepatic fascioliasis, its differential diagnosis from intraperitoneal tumors should be considered.

Keywords: Ectopic fascioliasis, peritoneal tumor, Ardabil.