

Journal of Food Quality and Hazards Control 4 (2017) 36

Editorial

Is Ligula intestinalis Really a Probable Threat for Public Health?

E. Ahmadiara

Department of Parasitology, Faculty of Veterinary Medicine, University of Tehran, Tehran, Iran (E-mail: ahmadiarae@ut.ac.ir)

Ligulosis is occurred by a pseudophyllidean cestoda and cosmopolitan fish tapeworm named *Ligula intestinalis*. The parasite is a permanent pathogen for native as well as wild fish as intermediate host in which the parasite usually develops to a plerocercoid. If the piscivorous birds as final hosts ingest the infected fish, the parasites are located in their intestines (Ahmadiara, 2013).

Despite high prevalence of ligulosis that has been reported in different water resources (lake, river, etc.) of Iran from variant fish host (Ahmadi Ara et al., 2013; Bozorgnia et al., 2016; Rahmati-Holasoo et al., 2011), there is still no convenient control programs by health organizations. Therefore, it assumed to be too necessary to find an appropriate solution to control this widespread freshwater resource parasite.

If *L. intestinalis* is really a food-borne parasite or not is not exactly clear. Anyway, since there are few reports of human ligulosis infection (Eslami, 2006), more attempts by researchers should be remarked to evaluate its pathogenicity in human and probable role of fish and freshwater resources in transmission of the parasite to human. To this purpose, animal and experimental trial studies are recommended.

References

- Ahmadiara E. (2013). Morphological and molecular study of Diphyllobothriidae family in *Abramis brama* and *Alburnoides bipunctatus* fishes. PhD thesis, University of Tehran, Tehran, Iran (Register No.: 539).
- Ahmadi Ara E., Hosseini S.H., Jalousian F., Ebrahimzadeh Mousavi H.A., Sakhaiifar S., Gerami Sadeghian A. (2013). The study of the plerocercoid of Diphyllobothriidae (cestoda, pseudophyllidea) in two cyprinid hosts, *Abramis brama* and *Alburnoides bipunctatus* from North and Northwest of Iran. *Iranian Journal of Veterinary Medicine*. 7: 103-109.
- Bozorgnia A., Omidzahir S.H., Hoseini S.M., Darzi S.H. (2016). Occurrence and histopathological effect of *Ligula intestinalis* on Sea bream (*Abramis brama Orientalis*). *Iranian Journal of Aquatic Animal Health*. 2: 34-43.
- Eslami A. (2006). Veterinary helminthology: cestoda. Volume 2. University of Tehran Press, Tehran.
- Rahmati-Holasoo H., Hajimohammadi B., Ahmadiara E., Ebrahimzadeh Mousavi H., Rostami-bashman M., Shokrpoor S., Ghorbanalipour A. (2011). A study of infestation of *Alburnoides bipunctatus* with *Ligula intestinalis* in Latian reservoir Dam Lake, Tehran province, Iran: a histopathological study. *Human and Veterinary Medicine*. 3: 18-24.