

Fish infected with trematode encysted metacercariae and its role in transmitting parasitic diseases to humans and domestic animals

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Abstract

Shortage in animal protein resources is a problem facing developing countries. Fish may be a good solution for this problem. But, fish may cause many serious diseases by carrying trematode encysted metacercariae. Fish-born zoonotic trematodes cause great public health problems worldwide. An estimate of 18- 40 million infected people with intestinal flukes was reported by the WHO. Meanwhile, there are unknown million infected. Consuming raw fish and crustaceans (sushi, sashimi, koi-pla etc..) in particular in the Far East, is becoming increasingly common in many countries. This increase in the consumption of raw sea food led to a rise in the incidence of zoonotic diseases. Fish infected with heterophyid encysted metacercariae, commonly consumed by local inhabitants, pose a serious zoonotic risk. Infection may cause, beside diseases (e.g.Heterophyiasis), loss of fish in lakes and rivers. Morbidity and serious damages to aquacultures. Microscopical examination of 452 fresh and brackish water fish, representing *Clarias gariepinus*, *Lebeo noliticus* and *Mugil cephalus* species, collected from low socioeconomic areas, allover one year, revealed the occurrence of trematode encysted metacercariae in their flesh. The infection rate differed according to the fish species, season and fish weight. The impact of infection on humans and animals is discussed as well as the prevention protocol for parasitic diseases associated with infected fish.

Biography:

Dr Faiza M El Assal is professor of invertebrate zoology and parasitology at the Zoology Department, Faculty of Science, Cairo University. She is interested in the conservation of the freshwater ecosystem and biological control of the snail vectors of parasitic diseases. She published more than 50 papers in international and national journals. She supervised more than 60 M Sc & Ph D theses and was reviewer for many theses. She planned and supervised projects on biological control of schistosomiasis snail vector.