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Acute opisthorchiasis: What about the clinical manifestation?

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ABSTRACT

Opisthorchiasis or liver fluke infestation is a common parasitic infestation in tropical countries. In chronic infection, the malignant transformation of hepatobiliary cell can be seen. Its high prevalence in Indochina is relating to the high incidence of cholangiocarcinoma in that area. Nevertheless, the acute clinical problem due to opisthorchiasis is also existed but little mentioned. In this short article, the authors review and discuss on the clinical manifestation of acute opisthorchiasis.

1. Introduction

Opisthorchiasis or liver fluke infestation is a common parasitic infestation in tropical countries. The main pathogen is *Opisthorchis viverrini*, a trematode. The infective metacercariae in fresh water fish becomes the important contaminant in poorly cooked fish dishes[1-2]. The human beings can get the infection due to intake of poorly cooked or raw fish. The infection usually occurs at hepatobiliary tract of the patients.

In chronic infection, the malignant transformation of hepatobiliary cell can be seen. Its high prevalence in Indochina is relating to the high incidence of cholangiocarcinoma in that area[1-2]. Nevertheless, the acute clinical problem due to opisthorchiasis is also existed but little mentioned. In this short article, the

authors review and discuss on the clinical manifestation of acute opisthorchiasis.

2. Acute opisthorchiasis

In acute opisthorchiasis, the clinical problem of the biliary tract can be seen. The cholecystocholangitis is possible but is usually self-limited[3]. In animal model study, Udomsuk *et al.* mentioned for the “the promising chemo-protective and antioxidant activities of andrographolide via suppression of the specific EROD and MROD

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reactions and lipid peroxidation against acute opisthorchiasis in the BNF-exposed hamsters [4].”

Focusing on the clinical presentation of acute opisthorchiasis, “acute abdominal pain in the right upper quadrant and signs of cholestasis” is the common in symptomatic case[5]. Sometimes, the clinical symptom is severe. The patient might have fever and “complications such as liver and bile duct abscesses and cholangitis” might be observed [6]. In case that the acute opisthorchiasis occurs in a case with underlying disease, a more serious clinical presentation can be expected. Navrotsky noted that “The patient with acute opisthorchiasis concurrent with hemolytic anemia was found to have a preponderance of clinical and laboratory manifestations of hepatocholangitis in the early stages of the disease and a prevalence of subfebrility with progressive eosinophilia in the presence of regressive symptoms[7].”

For treatment of acute opisthorchiasis, the praziquantel is effective[5]. Pakharukova *et al.* reported that “*In vitro*, the drug caused destruction and vacuolisation of the tegument of *Opisthorchis felineus* (*O. felineus*), contractions of the worm musculature, paralysis, and irreversible changes in morphology[8].”

2.3 Febrile eosinophilic syndrome with cholestasis and *O. felineus*

In addition to the common acute opisthorchiasis due to *Opisthorchis viverrini*, the opisthorchiasis can result from other pathogen such as *O. felineus*. In acute opisthorchiasis due to *O. felineus*, febrile eosinophilic syndrome with cholestasis is the common problem. Traverso *et al.* noted that “a large outbreak of *O. felineus* in Italy suggests that opisthorchiasis develops as a febrile eosinophilic syndrome with cholestasis rather than a hepatitis-like syndrome[9].” The famous situations of outbreaks were reported from Italy. Almost half of the infected cases are asymptomatic. Focusing on the symptoms of the symptomatic cases, mild fever, nausea, abdominal pain, and myalgias are observable and the eosinophilia is common[10].

3. Conclusion

Acute opisthorchiasis is an important problem due to liver fluke infection. It is little mentioned in the literature and might be forgotten in the endemic area. Without early recognition of the problem, the chronic infection is possible and it will final result in unwanted complication, cholangiocarcinoma.

Conflict of interest statement

The authors report no conflict of interest.

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