Diphyllobothriasis caused by *Diphyllobothrium latum* in Southeast Asia: A new emerging fish-borne disease

Somsri Wiwanitkit1*, Viroj Wiwanitkit2,3,4,5
1Wiwanitkit House, Bangkhae, Bangkok, Thailand
2Hainan Medical University, Haikou, China
3Faculty of Medicine, University of Nis, Nis, Serbia
4Joseph Ayobabalola University, Ikeji Arakeji, Nigeria
5Dr. D.Y. Patil Medical University, Navi Mumbai, India

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**ABSTRACT**

Diphyllobothriasis caused by *Diphyllobothrium latum* is an important helminthiasis. It is seen in many non-tropical countries. Since it is a marine fish-borne zoonosis, it becomes an important issue in coastal medicine. However, in the few recent years, there are some reports on new emerging diphyllobothriasis caused by *D. latum* in tropical countries. In this specific short article, the authors review and present on the situation of diphyllobothriasis in Southeast Asia. Diphyllobothriasis presently becomes a new concern in tropical coastal medicine.

**1. Introduction**

Fish is an important food source of human beings. In the present day, it is the worldwide concern on zoonosis and the fish-borne zoonosis is also the case[1-12]. The zoonosis from sea fish is very interesting and limited mentioned. Here, the authors focus on a well-known zoonosis, diphyllobothriasis. Diphyllobothriasis caused by *Diphyllobothrium latum* (*D. latum*) is an important helminthiasis. It is also known as fish tapeworm infestation[13-15]. It is seen in many non-tropical countries. The infestation is related to the malabsorption. It can result in vitamin B12 deficiency and megaloblastic anemia can be the consequence[16]. Since it is a marine fish-borne zoonosis, it becomes an important issue in coastal medicine. However, in the few recent years, there are some reports on new emerging diphyllobothriasis caused by *D. latum* in tropical countries. In this specific short article, the authors review and present on the situation of diphyllobothriasis in Southeast Asia.

**2. Reports on diphyllobothriasis in Southeast Asia**

As note, there are many publications on diphyllobothriasis caused by *D. latum* in several areas around the world but few reports are from Southeast Asia. The information from coastal countries in Southeast Asia is hereby shown.

**2.1. Diphyllobothriasis caused by *D. latum* in Malaysia**

Diphyllobothriasis is also reported in Malaysia. There are some new reported cases. The first case report is by Rohela *et al.* in 2002[17]. Rohela noted that the patient was a 62 years old Chinese
male seen at the outpatient clinic with complaints of Watery stools and slight abdominal discomfort for 4 days[17]. The stool examination reviewed the parasite, gravid proglottids[17]. The risk history in this case is eating sashimi and the use of a single dose of praziquantel can result in a favorable therapeutic outcome[17]. Rohela et al. reported the second case in 2006[18]. In this case, the patient presented with a complaint of passing strands of white color flat worm in his stool that was finally confirmed as the D. latum[18]. The patient also had a history of raw fish intake[18]. The case was treated by a single dose of praziquantel[18].

2.2. Diphyllobothriasis caused by D. latum in Thailand

Diphyllobothriasis caused by D. latum has never been reported in Thailand. However, there are sporadic reports on similar problem, sparganosis.

2.3. Diphyllobothriasis caused by D. latum in Singapore, Indonesia, Brunei and Philippine

There is still no report of human disease in Singapore, Indonesia, Brunei and Philippine. This might be due to lack of study on these countries.

2.4. Diphyllobothriasis caused by D. latum in Myanmar, Cambodia and Vietnam

There is still no report of human disease in Myanmar, Cambodia and Vietnam. This might be due to lack of study on these countries.

3. Conclusion

Based on the review, diphyllobothriasis caused by D. latum already exists in Southeast Asia. The human infections have already seen but there is still no report on the contamination in marine fish in Southeast Asia. Diphyllobothriasis caused by D. latum presently becomes a new concern in tropical coastal medicine.

Conflict of interest statement

We declare that we have no conflict of interest.

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