

## LETTER TO THE EDITOR

# Human Exposure Incidence, Rate of Diagnosed Rabid Animals in Clinical Laboratory, and Effect of COVID-19 Outbreak

Pathum Sookaromdee<sup>1</sup> and Viroj Wiwanitkit<sup>2</sup>

<sup>1</sup> Private Academic Consultant, Bangkok, Thailand

<sup>2</sup> Honorary Professor, Dr. DY Patil University, Pune, India

(Clin. Lab. 2021;67:xx-xx. DOI: 10.7754/Clin.Lab.2021.210342)

### Correspondence:

Pathum Sookaromdee  
Private Academic Consultant  
Bangkok  
Thailand  
Email: pathumsook@gmail.com

### KEY WORDS

rabies, animal, COVID-19

### LETTER TO THE EDITOR

Dear editor, rabies is an important virus infection. The disease occurs in mammals and humans. The infection is transmitted by animal bite. The disease is still present in many tropical countries [1]. The control of rabid animals by vaccination of animal is a standard practice. The post exposure vaccination is necessary for any patient exposed to risk animal [2]. At present, rabies eradication is still not successful and there are many challenges for management. In the present COVID-19 crisis, the effect of disease control is possible. Here, the authors share the local data (GPS location: 14.84283 7018089953, 103.7332248895045) from rabies endemic area cases exposed to risk animals and the rate of diagnosed rabid animals in clinical laboratory. The setting is located in Indochina where rabies is common and there has been continuous human death due to rabies for many years. In this area, when a patient is exposed to a risk animal, the diagnosis of rabies in the animal is done in the clinical laboratory. The autopsy of risk animal is done and the direct fluorescent antibody (DFA) test is used as standard diagnostic test for diagnosis of rabies. All laboratory tests are performed in a reference laboratory with ISO/IEC 17025: 2005 accreditation. The three-year data are shown in Table 1. In this setting, COVID-19 has occurred since early 2020 and lockdown is a local disease control public health policy. Locally, there is a trend of decreasing incidence of exposure to risk animal and rate of diagnosed rabid animals. The COVID-19 outbreak and lockdown did not result in a

Letter to the Editor accepted April 5, 2021

**Table 1. Incidence of cases exposed to risk animals and rate of diagnosed rabid animals in clinical laboratory.**

Year	Incidence of human cases exposed to risk animals		Rate of diagnosed rabid animals in clinical laboratory (%)
	all	death	
2018	29,365	1	39.47%
2019	22,192	1	25.17%
2020	19,406	0	10.90%

changing trend of rabies in this area. There is no increasing trend of rabies relating to COVID-19. This observation is discordant to a recent hypothesis proposed by Raynor et al. [3].

#### **Declaration of Interest:**

None.

#### **References:**

1. Zhu S, Guo C. Rabies Control and Treatment: From Prophylaxis to Strategies with Curative Potential. *Viruses* 2016 Oct 28;8(11): 279 (PMID: 27801824).
2. Rupprecht CE, Abela-Ridder B, Abila R, et al. Towards rabies elimination in the Asia-Pacific region: From theory to practice. *Biologicals* 2020 Mar;64:83-95 (PMID: 32089431).
3. Raynor B, Díaz EW, Shinnick J, et al. The impact of the COVID-19 pandemic on rabies reemergence in Latin America: the case of Arequipa, Peru. *medRxiv* 2020 Aug 13:2020.08.06.20169581 (PMID: 32817966).