

Streptococcus Suis Meningitis in Thailand: A Summary of Case 101 Reports

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Letter to Editor

Dear Editor, bacterial infection is an important problem in medicine. The Streptococcal infection is a common problem in clinical practice and relating to the pyogenic infection. The *Streptococcus suis* infection is an important streptococcal bacterial infection that can induce neurological problem. This infection can be seen worldwide. The disease is classified as an important pig related disease. Focusing on the neurological involvement, noted that "Acute meningitis with early sensorineural hearing loss was the characteristic feature and the most common presentation of *S. suis* infection [1]." The pathogen is believed to be the second most common cause of adult streptococcal meningitis [2]. Pathophysiologically, the pathogen usually enters into the patient by respiratory or oral route causing infection [3] the pathogen can fight with the normal microflora and resist to the human defense mechanisms at the local mucosa. Ability to counteract mucosal barriers can further result in severe meningitis and sepsis in swine and in human hosts [3]. Goyette-Desjardins et al. noted that *S. suis* is an important pig pathogen and emerging zoonotic agent with a worldwide distribution [4]. The special concern is usually at the area with pig farming.

In Southeast Asia, there are many countries with the pig farming. In Thailand, pork is commonly intake by local people and there is many pig farming in the country. Here, the author summarizes the previous reports on *S. suis* meningitis in Thailand. The searching was performed on the international reference database, PubMed (www.pubmed.com) using the search terms, "Thailand" and "Streptococcus suis". The derived publications with full complete data were included for further in-depth analysis. According to the literature search, the complete data from 101 cases were summarized and analyzed [1,2,5,6]. Clinically, the *S. suis* meningitis can presents either acute or chronic course. This bacterial organism might be mistaken as *S. pneumoniae* or *S. viridans*. The confirmation of diagnosis usually results the standard microbiological examination. The main presentation in all cases is severe sensorineural hearing loss, the hearing loss usually occurs early during the course of meningitis. The main risk is the history of pork handling. The presumptive diagnosis of *S. suis* meningitis is usually based on the Gram stain of the CSF specimen. All excepted one pediatric case who was infected with *S. suis* Serotype 24 survived after standard antibiotic treatment [6]. The effective treatment is

intravenous penicillin or ampicillin with a mean duration of 1 month and there is usually no relapse among these patients. Nevertheless, the deafness is common and seen in all cases due to the cochlear and vestibular damage, which is believed to be due to the oto-toxin from pathogen. It can be hereby concluded that the *S. suis* meningitis in Thailand manifest the classical problem as seen in any other countries. Due to the importance of this bacterial neurological infectious disease, the local public health polies regarding pork safety is warranted. As noted by Meekhanon et al., "*S. suis* is certainly latent in asymptomatic pigs [7]." The implementation of the control problem is required. According to the recent study by Takeuchi et al., "effectiveness of the food safety campaign for controlling the *S. suis* infection" can be observed [8].

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