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LETTER TO THE EDITOR

The dangerous turn of “brain eating amoeba” in Sindh, Pakistan


KEYWORDS

Primary amoeba encephalitis;
Sindh;
Deaths;
Public health

Dear Editor,

Ever since the first reported case in 2005 [1], “brain eating amoeba” of primary amoebic encephalitis (PAM) has become a regular and growing public health issue each year in Pakistan. The hot and arid climates of the southern parts of Pakistan favor the growth of the causative organism *Naegleria fowleri* (NF), with the majority of cases reported in the metropolis city of Karachi alone.

This year, the first reported case came to light on 27th May, coinciding with the start of the summer season [2]. Despite only a total of seven reported cases to date this year, which is less than the worst outbreak of 2011, there were still major and dangerous concerns [2]. The first case reported from the city of Hyderabad signifies the spread of NF into the interior parts of the southern-located Sindh province, in contrast to previous years’ usual confinement in the city of Karachi alone [3]. The lack of infrastructure and the misdiagnosis as meningitis makes it quite plausible that positive cases of PAM may have been neglected in within Sindh province this year [3]. Even the patient from Hyderabad was only diagnosed once he came to Karachi, which is alarming for Sindh province, as a possible silent endemic rises throughout the province.

Swimming is the single major risk factor for the transmission of NF throughout the world, yet none of the cases reported this year had any prior swimming history [3]. As per government reports, chlorination levels in more than 40 percent of Karachi’s water were found to be unsatisfactory,

increasing the level of threat of PAM in every household [3]. Two deaths were reported from the same locality with water chlorination levels far below acceptable levels. In the interior parts of Sindh province, the situation is far worse, with almost no chlorination. There is so much poverty and lack of management that on July 13, PAM claimed the life of a nine-month-old girl, its youngest victim since 2012 [4].

While the Karachi Board and Water Supply continue to assure people a supply chlorinated water, individuals have started to buy chlorine tablets [5]. Massive countermeasures are still needed to curtail this rising and dangerous situation, especially in the interior Sindh region. Proper awareness through immense media and personal campaigning among both doctors and the general public is needed to prevent an endemic in Sindh province. Prevention is the best cure and weapon to deal with this silent tide of PAM.

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Competing interests

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Ethical approval

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