

are now established in the northernmost Italian Alps. Although no infected vectors were collected, the risk of infection transmission should be monitored. Insect adaptation to local ecology is evident and animal/human hosts are introducing the infections.

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Unexplained neurological illness in children, Malkangiri district, Odisha, India 2014

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Background: India has reported seasonal outbreaks of acute encephalitis syndrome (AES) among children leading to substantial morbidity and mortality. From 2008–2014, 44,097 cases and 5,728 deaths were reported due to AES in India. Japanese Encephalitis (JE) virus is one of the key aetiological agent for AES outbreaks in India. Malkangiri district of Odisha reported 9 deaths in 2009 and 38 deaths in 2012 among children due to AES. The current AES outbreak in November 2014 is unusual in terms of seasonality, geographical distribution and clinical manifestations in comparison to the epidemiological features of JE. We investigated to study the etiology and epidemiological characteristics of the outbreak.

Methods & Materials: Medical records of the cases admitted in District hospital were reviewed and line-list was prepared. The family members of deceased children (n=14) were interviewed. A case was defined as illness presenting with vomiting, altered sensorium and convulsions among children < 10 years of age in Malkangiri during November 2014. Serum/CSF (Cases = 4) and serum (Contacts = 44) samples were processed for JE IgM ELISA and RTPCR at RMRC laboratory. Entomological survey was conducted by VCRC field station, Koraput.

Results: The median age was 3 years (Range: 1.5 – 4.6 years) with female preponderance (60%). Overall attack rate was 4% with highest among 1–3 years age group (7%) and case fatality rate (CFR) was 93%. All cases had vomiting, altered sensorium without fever and 60% had convulsions. Blood and CSF specimens were negative to JEV, Chandipura virus (IgM & RTPCR) and also negative for WNV and Nipah antibody. Among 116 mosquitoes from six *Culex* species subjected to RTPCR for detection of JE virus, all were negative. In 2012, Malkangiri had reported 38 child deaths due to AES (CFR 40%) and 10/78 serum samples were positive for JE by IgM ELISA.

Conclusion: This is an outbreak of unexplained neurological illness as we could not establish the etiology. Further entomological survey and assessment of other risk factors including test for additional pathogen should be carried out to confirm the diagnosis.

Training of healthcare staff, early case detection with active surveillance, and symptomatic management will effectively control the disease outbreak.

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Prevalence of Methicillin-Resistant Staphylococcus Aureus (MRSA) nasal colonization among healthy AAU undergraduates

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Background: The colonization of different parts of body by *Staphylococcus aureus* has been incriminated in many disease conditions and has become a major problem in the control of both community and hospital associated infections. A healthy carrier can therefore serve as a pool for regular and consistent release of the organism to the community. This study was therefore carried out to assess the carrier status of MRSA among healthy undergraduate students of Adekunle Ajasin University, Nigeria.

Methods & Materials: A well structured questionnaire which captured participant's biodata and determined their suitability for the investigation was administered on each volunteer. Nasal swab samples for the culture and isolation of *S. aureus* were obtained from 350 apparently healthy students spread across the five faculties of the University. Samples were cultured on Manitol Salt Agar and MacConkey agar. Confirmed *S. aureus* isolates were screened for methicillin resistance using oxacillin disc. Susceptibility of all isolates was done on Mueller-Hinton agar using disc diffusion method.

Results: The volunteers were made up of 142 males and 198 females with mean age of 19.5 ± 2.1 . Ninety-eight samples (28%) were positive for *S. aureus* out of which 9(2.6%) were screened positive for MRSA. Other organisms isolated were *Klebsiella* sp, *Pseudomonas* sp and Coagulase –ve *Staphylococci*. The frequency of isolation of MRSA was higher (1.7%) among the female volunteers.

Conclusion: A prevalence rate of 2.6% MRSA observed in this study was high enough to generate concern, since they were all healthy carriers. Personal hygiene is therefore advocated among this studied group to curb its spread.

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