

## **Abstract**

Melioidosis is caused by Gram negative bacillus, *Burkholderia pseudomallei*, usually found in soil. Human transmission occurs via damaged skin contact with soil or inhalation of contaminated water. Neuromelioidosis is a rare manifestation of the disease where only less than 5% of the reported cases fall into this category. Neuromelioidosis can present with cerebral, cerebellar and brain stem symptoms with predilection to the latter. Early diagnosis and prolonged course of antibiotics needed for favourable outcome.

## **Case presentation**

A 57 year old previously healthy manual worker presented with progressive right side upper limb, lower limb weakness with diplopia and vertigo preceded by malaise and vomiting. On examination he had right sided upper limb and lower limb weakness with right sided 6<sup>th</sup> and 7<sup>th</sup> cranial nerve palsies. After few hours of admission he started to desaturate and intubated and ventilated for 5 days. MRI brain showed CNS infection involving brainstem and proximal cervical cord suggestive of Neuromelioidosis. His serum antibody levels to Melioidosis showed a rising titre. He was treated with carbapenem for 8 weeks duration with excellent clinical and radiological improvement.

## **Conclusion**

Neuromelioidosis is an upcoming CNS infection with brain stem predilection is reported and need to be considered as differential diagnosis in a patient presenting with progressive symptoms of brain stem involvement. Neuroimaging and serology plays major role in diagnosis, but the gold standard for diagnosis is demonstrating bacilli in tissue culture which has its own limitations. Prolonged antibiotic treatment with neuro-rehabilitation plays a major role in positive recovery.

## **Key words**

Neuromelioidosis, Serum Melioidosis Antibody, Rhombencephalitis, Brain stem encephalitis.