

# The Use of Aciclovir in the Management of Paediatric Encephalitis - a Multi-Centre Audit



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## Background and Aims

Encephalitis is a rare but serious childhood condition with potentially devastating morbidity. Early treatment of encephalitis is crucial to improving outcome. As encephalitis presents with non-specific symptoms common to the paediatric population identifying cases early continues to be challenging.

There are multiple published reviews on the management of paediatric encephalitis, but the impact of these on everyday clinical practice is unclear.

We aimed to investigate if children in our region with suspected encephalitis were managed in accordance with the national guideline<sup>(1)</sup>.

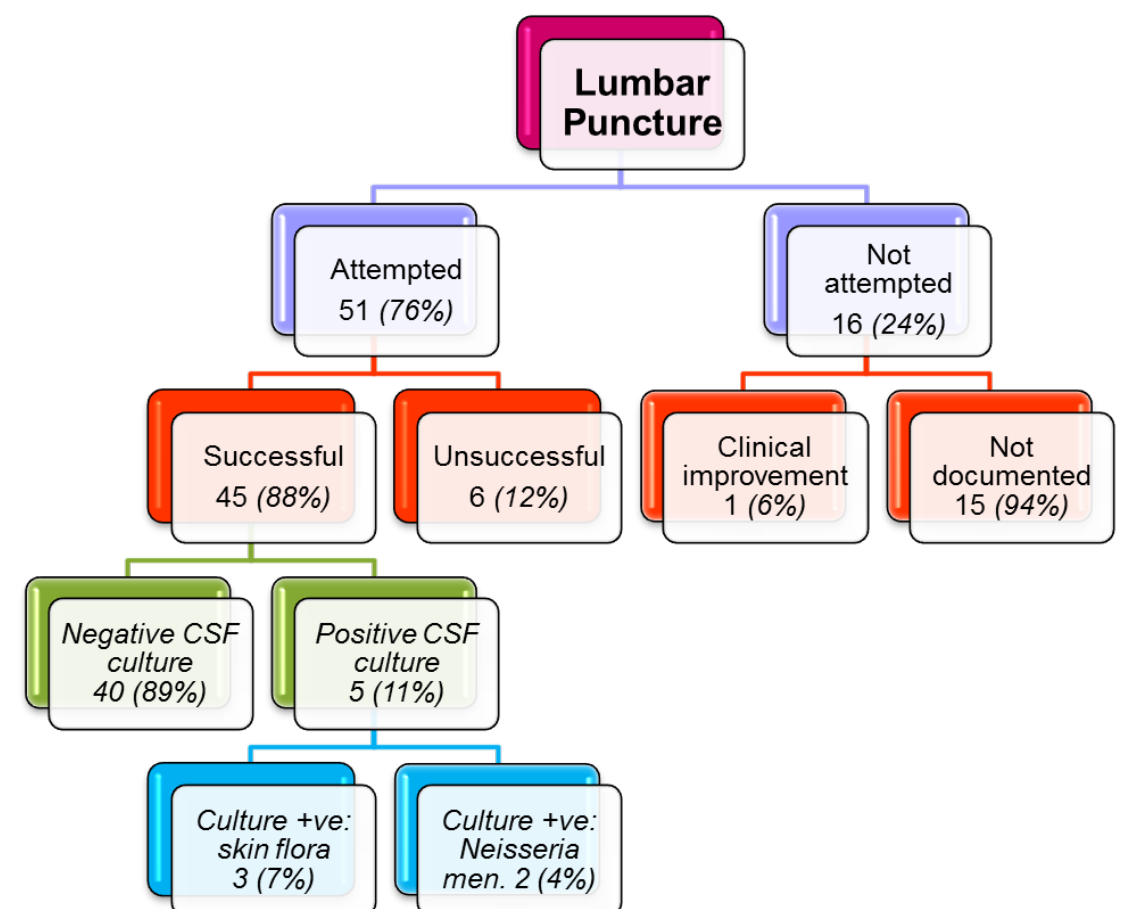
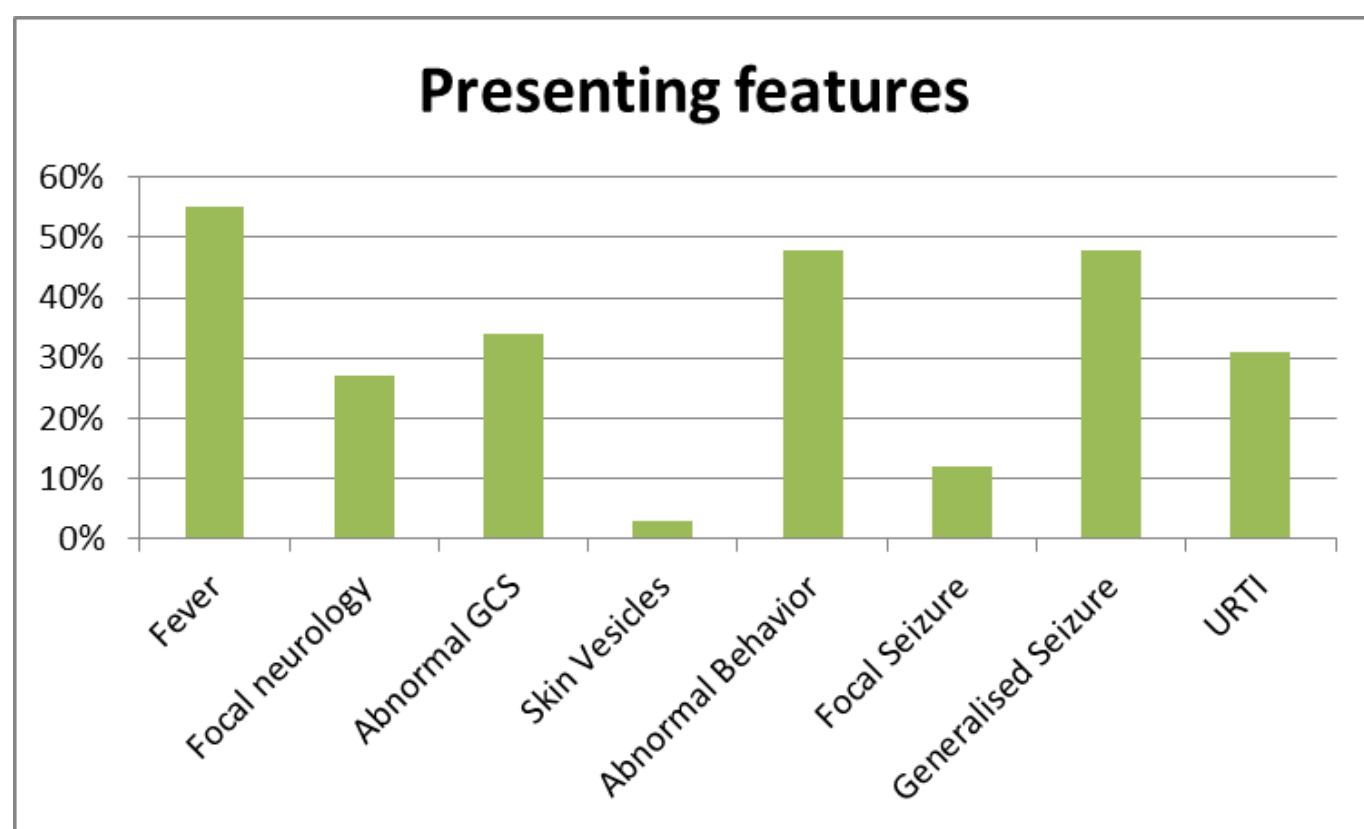
## Method

Data was collected prospectively over a six month period from patient records of children (aged 0-17 years) commenced on intravenous Aciclovir for suspected encephalitis at six UK District General Hospitals in the West Midlands. Variables evaluated included presenting symptoms, investigations undertaken and length of treatment.



## Results

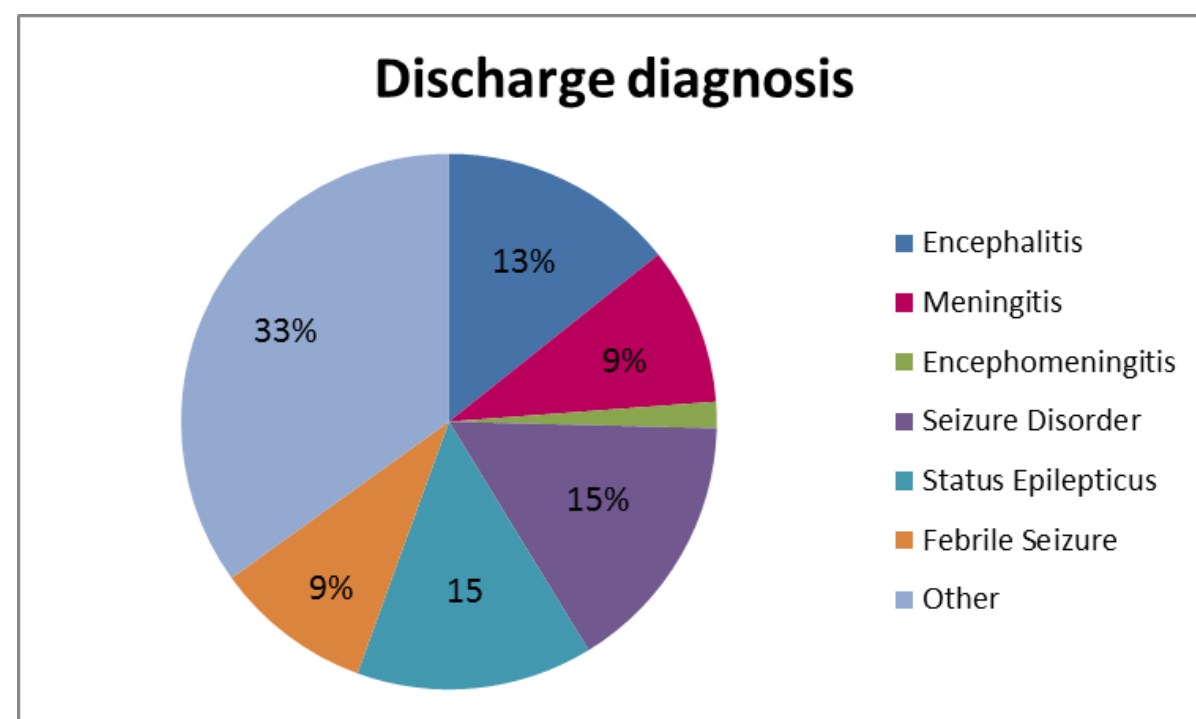
67 children met the inclusion criteria. The most common presenting features were fever (55%), generalised seizures (48%) and abnormal behaviour (48%). The average time from admission to commencing Aciclovir was 4.9 hours with 74% of patients receiving Aciclovir within 6 hours of admission. Average total duration of intravenous Aciclovir was 3.2 days.



## Results

Lumbar puncture was attempted in 76% of cases, of which 88% were successful. 2 CSF cultures were positive for Neisseria Meningitidis and one CSF was PCR positive for Enterovirus. Nine children (13%) had a discharge diagnosis of encephalitis. Seizures were a common discharge diagnosis; 37% of children were diagnosed with either status epilepticus, a seizure disorder or febrile convulsions.

National guidelines recommend that all children treated for suspected encephalitis should have an HIV test; none of our children had one conducted.



## Conclusion

Our study highlights the difficulty of diagnosing encephalitis in children and identifies wide regional variation in its management and poor adherence to national guidance.

(1) The Encephalitis Society: Management of Suspected Viral Encephalitis in Children. Professional Guidelines. Association of British Neurologists and British Paediatric Allergy, Immunology and Infectious Diseases Group National Guidelines. 2012.