Comparison of AVPU scale and the Glasgow Coma Scale score in assessing encephalitis in children

Pham Ngoc Toan, Nguyen Thi Huyen Sam, Truong Thi Mai Hong and Le Thanh Hai
National Hospital of Pediatrics, Vietnam

Background & Aim: Assessment of level of consciousness is critical in evaluation of encephalitis.

Methods: The two most commonly used tools for this purpose are AVPU and Glasgow Coma Scale (GCS) score. To compare the two scales, we have studied 95 pediatric patients with encephalitis during the period from 01/02/2014 to 31/08/2014.

Results: In correlating AVPU and GCS score at admission: A corresponds with GCS 14.04; V corresponds with GCS 12.25; P corresponds with GCS 9.22 and U corresponds with GCS 4.5. The likelihood of recovery without long term sequelae is 95.8% if scored A at admission, 84.4% if scored V (OR=0.46-39), 70.3% if scored P (P<0.01; OR=9.3-145.9), 0% if scored U (P<0.01). Factors contributing to mortality include: Seizure, respiratory failure and changes in muscular tone (P<0.001). Other factors that affect the outcome include GCS ≤10 or P-U/AVPU; presence of seizure, paralysis, respiratory failure; brain injury detected on CT/MRI and whether or not the cause of encephalitis was identified.

Conclusions: We can use two scales to prognosis for encephalitis in pediatric patients.

Biography
Pham Ngoc Toan works as a Senior Consultant in the Pediatric Emergency unit at the National Hospital of Pediatrics in Hanoi, Vietnam, where he has practiced medicine for six years since finishing medical training at Hanoi Medical University. Since graduating, he has shown himself to be a very hard-working, reliable and enthusiastic member of staff in ED. In the professional work he indicates his very good background knowledge and skill of clinical doctor in emergency field. He has been studying the PhD course at Hanoi Medical University for 4 years. He has published more than 15 papers in national journals and has presented some poster and oral presentations in the international conference.