References.
1. Szabo L, et al. Epilepsia. 2012 Mar;53(3):565-70.

HUMAN METAPNEUMOVIRUS AND STATUS EPILEPTICUS

Investigators at Cincinnati Children's Hospital, OH, report 2 toddlers, ages 15 and 18 months, with human metapneumovirus (hMPV) infection who presented in status epilepticus and later developed respiratory failure. Both patients recovered over 2 weeks with no sequelae. Infection with hMPV should be considered as a cause of seizures or encephalitis with respiratory symptoms in infants and children. (Webster DL, Gardner AH, Dye TJ, Chima RS. Status epilepticus: a possible association with human metapneumovirus infection. **Pediatrics** 2014 Mar;133(3):e747-50).

COMMENTARY. Neurological complications of human metapneumovirus infection are not mentioned in the 2012 edition of the AAP Redbook [1], and a review of seizures and hMPV in PubMed uncovers few reports. One earlier study reports an incidence of 6.3% of hMPV cases associated with seizures compared to 0.7% of patients infected with RSV (p=0.031). hMPV may be associated with a spectrum of CNS disease ranging from febrile seizure to status epilepticus and severe, fatal encephalitis [2].

References.
1. AAP. Human Metapneumovirus. In: Pickering LK, et al, eds. Red Book: 2012 Report of the Committee on Infectious Diseases. 29th ed. Elk Grove Village, IL: AAP; 2012:509-10.
2. Arnold JC, et al. Pediatr Infect Dis J. 2009 Dec;28(12):1057-60.

ENCEPHALITIDES

HERPES SIMPLEX AND NMDA ENCEPHALITIDES

Investigators at University of Texas Southwestern Medical Center, Dallas, TX, report 2 male patients, an infant and adult, with confirmed herpes simplex encephalitis (HSE) and anti-NMDA receptor antibody encephalitis. Testing for anti-NMDA receptor antibodies and autoimmune disorder is recommended in patients with persistent encephalopathy, regression after initial improvement, or persistent movement disorders. Neuronal infections such as HSV may trigger subsequent anti-NMDA receptor antibody formation. Concomitant treatment or testing for immune-mediated encephalitis is indicated when treating viral encephalitis. (DeSena A, Graves D, Warnack W, Greenberg BM. Herpes simplex encephalitis as a potential cause of anti-N-methyl-D-aspartate receptor antibody encephalitis report of 2 cases. **JAMA Neurology** 2014;71(3):344-6).

COMMENTARY. The association of herpes simplex and anti-NMDA receptor antibody encephalitides is reported in 5 prospectively diagnosed patients (2 female) with relapsing post-herpes simplex encephalitis [1]. In 3 further retrospectively studied patients with HSE and NMDAR antibodies the frequency of autoantibodies increased over time, suggesting that HSE triggers NMDAR antibodies and brain autoimmunity [1].