A case of cefepime-induced encephalopathy

Cefepime is the 4th generation cephalosporin which has currently being widely used broad-spectrum antibiotics. The common adverse events of cefepime are headache, skin rash, nausea, diarrhea, vomiting and fever. However, encephalopathy caused by cefepime has been reported sporadically. We experienced a rare case of cefepime-induced encephalopathy A 75-year-old man who diagnosed chronic obstructive pulmonary disease in 30 years ago admitted with pneumonia. He was intubated and received mechanical ventilation. Cefepime was administered intravenously and his symptoms including fever, sputum, and dyspnea improved, however he became drowsy mentality 48 hours later. He was non-verbal and did not follow commands. He showed tremor and right facial paralysis. The laboratory tests, including chemistry battery, serum electrolytes, glucose, osmolality were normal. Brain magnetic resonance imaging showed chronic ischemic and atropic changes and an electroencephalography showed triphasic waves. The administration of cefepime was stopped, and his symptoms started to improve within 48 hours. The electroencephalography became normalized and he completely recovered after discontinuation of cefepime.

Keywords: cefepime; encephalopathy; electroencephalography

Acknowledgement: This research was supported by a grant from Ministry of Food and Drug Safety to operation of the regional pharmacovigilance center in 2013.

A case of serotonin syndrome caused by linezolid

Serotonin syndrome (SS) is a potentially life-threatening drug reaction characterized by mental status changes, increased neuromuscular tone, and autonomic instability. Linezolid, an oxazolidinone antibacterial agent, is widely used in general hospitals, however, which interacts some serotonin agonists and may cause SS. We report a case of SS caused by linezolid without the concomitant use of serotonin agonist. A 72-year-old patient was admitted for recurrent wound infection on his left ankle. He developed fever, skin rash and renal function deterioration, and blood eosinophil and liver enzymes increased after administration of vancomycin. Antibiotic therapy was changed to linezolid for methicillin-resistant Staphylococcus aureus. Four days later, he developed agitation, fever (38.6°C), hypertension (200/100 mm Hg) and tachycardia (130 beats/minute). There were no abnormal findings on laboratory and image tests including brain and chest computed tomography as causes for his symptoms. He had not taken any serotonin agonists including serotonin uptake inhibitor and monoamineoxidase-inhibiting antidepressants. The administration of linezolid was stopped. His symptoms improved within 24 hour, and had fully recovered within 2 days without additional treatment.

Keywords: Linezolid; serotonin syndrome

Acknowledgement: This research was supported by a grant from Ministry of Food and Drug Safety to operation of the regional pharmacovigilance center in 2013.