

## Dysphagia Associated with Cranial Neuropathy after DRESS Syndrome : A Case Report

Young Sam Kim<sup>1\*</sup>, Jin Gee Park<sup>1†</sup>, Kyeong Woo Lee<sup>1</sup>, Jong Hwa Lee<sup>1</sup>, Sang Beom Kim<sup>1</sup>

Dong-A University Hospital, Department of Rehabilitation Medicine<sup>1</sup>

Drug Rash with Eosinophilia and Systemic Symptoms (DRESS) syndrome is a severe adverse drug reaction. The clinical triad consists of fever, skin rash and internal organ involvement. To our knowledge, there has been no reported case of cranial neuropathy after DRESS syndrome. We would like to report a case of dysphagia associated with cranial neuropathy after DRESS syndrome. A 47-year-old man with complaints of fever, diarrhea and myalgia was admitted. The patient was diagnosed as pancreatitis by abdominal CT and applied antibiotics. He was treated by cefotaxime for 2 days, meropenem for 8 days, levofloxacin and metronidazole for 4 days in time order. At first 2 days after cefotaxime use, skin rash developed in the whole body. By discontinuing the antibiotics, skin rash showed improvements but fever persisted and pleural effusion developed. In serial laboratory studies, eosinophil count increased from 3.2% to 51.3% in 14 days which was suspicious for DRESS syndrome caused by antibiotics. When eosinophil was at the highest level, the patient complained of newly onset swallowing difficulty. Video fluoroscopic swallowing study (VFSS) was done and the Result showed severe dysphagia. Nasal penetration, residue in vallecular and pyriform sinus, coating of pharyngeal wall, subglottic aspiration after swallow and no epiglottis movement were found by VFSS (Fig. 1). Functional Dysphagia Scale (FDS) was 60, Penetration-Aspiration Scale (PAS) was 8. The patient started tubal feeding and swallowing therapy. To find out the reason for dysphagia brain MRI, laryngoscopy and endoscopy were done. There were no abnormal findings in brain and vocal cord. In endoscopy, there was no esophagitis which could cause dysphagia. In neurologic examination, motor, sensory and deep tendon reflexes were normal. Pathologic reflex was absent. But in cranial nerve examination, right soft palate sagging, slight facial palsy and decreased gag reflex were found. Thus, electrophysiologic studies were conducted. In blink reflex test, there were latency delay in bilateral facial and trigeminal nerve. In facial nerve conduction study, bilateral nasalis muscle amplitude were decreased. Finally the patient diagnosed as multiple cranial neuropathy caused by DRESS syndrome and started steroid therapy. Follow up VFSS was done every week interval. After 2 weeks of steroid therapy, VFSS showed improvement in epiglottis movement and decreased vallecular and pyriform sinus residue. Also, there were no subglottic aspiration (Fig. 2). FDS and PAS improved to 34 and 5 each. By the VFSS Result, the patient could start oral feeding by adjusting viscosity. This case report demonstrates a rare case of cranial neuropathy after DRESS syndrome. Corticosteroid can be considered as a treatment. As dysphagia can improve dramatically after the steroid use, serial VFSS is essential to evaluate swallowing function in patient with cranial neuropathy after DRESS syndrome.

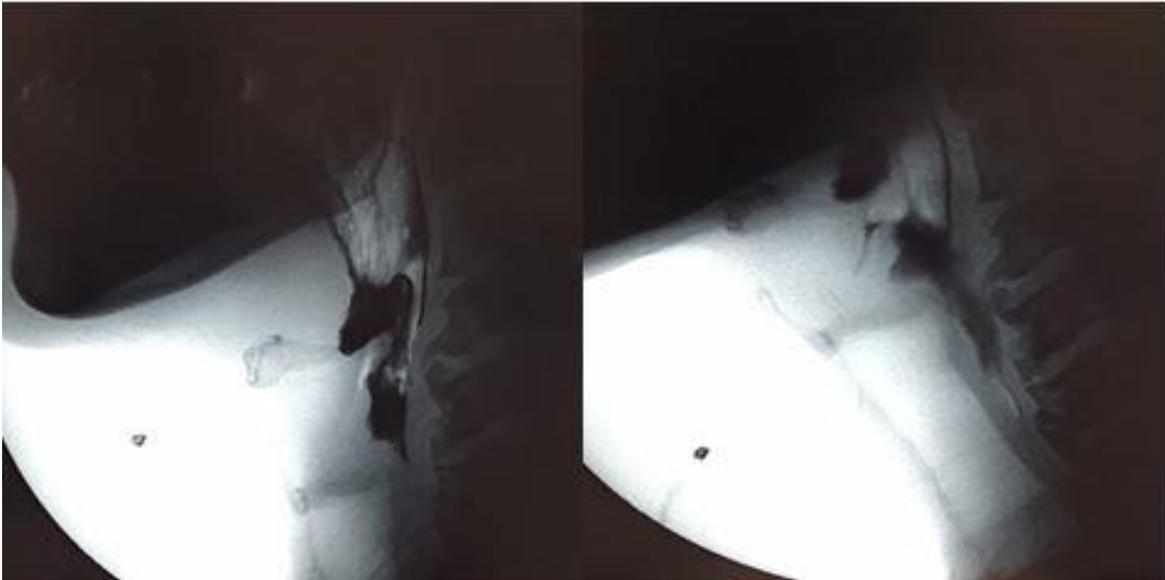


Fig. 1 Initial VFSS showed no epiglottis movement, nasal penetration, vallecular and pyriform sinus residue, coating of pharyngeal wall and subglottic aspiration.



Fig. 2 Follow up VFSS showed improvement in epiglottis movement and decreased vallecular and pyriform sinus residue and no subglottic aspiration.