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Case Report

Catatonia in a Patient with Down Syndrome: Report of a Case

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A-27-year-old Taiwanese woman with Down syndrome was admitted due to intermittent fever for one week. Pneumonia was impressed. After admission, empiric antibiotics were prescribed. However, shock developed, and the patient was transferred to ICU. Once the symptoms were brought under control, she was transferred to general ward. s, There it was discovered that, although apparently awake, she could not eat, talk or walk. No offending drug, seizure, or CVA was found, and a psychiatrist was consulted. Catatonia was suspected and Lorazepam was suggested. The patient experienced dramatic recovery able to eat, talk and walk almost immediately after Lorazepam administration. Clinicians should be aware of the causes of catatonia including general medical disorders, as it does not only occur in association with schizophrenia or major depressive disorder.

Key words: catatonia, Down syndrome

Introduction

Catatonia is a rare behavioral syndrome, marked by an inability to move normally. Catatonia can occur in patients with underlying psychiatric disorder or general medical disorder [1]. The symptoms and signs of catatonia include immobility, rigidity, mutism, posturing, excessive motor activity, stupor, negativism, staring and echolalia [2,3].

As for management of catatonia, physicians should avoid offending drugs, such as antipsychotics and otherdopamine blockers (eg antiemetic agents). After confirmation of the absence of offending drugs, prompt treatment with benzodiazepines should be given. Electroconvulsive therapy (ECT) may also be effective [4]. However, treatment of the underlying cause of catatonia is very important.

We describe a case of catatonia in a patient with Down syndrome. Catatonia resolved after the administration of benzodiazepines.

Case report

A-27-year-old Taiwanese woman with Down syndrome was admitted due to intermittent fever for one week. She had a history of refractory epilepsy, asthma and atopic dermatitis of more than 10 years. The seizures were mostly simple partial seizures treated with Levetiracetam (500 mg/d) and Clonazepam (0.25 mg/d) for more than 1 year.

She presented with fever of 38 degrees Celsius. Cough with whitish sputum was noted for one week. She went to a local clinic for help, but in vain. The cough worsened with bloody sputum noted. Chest tightness, shortness of breath and

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sore throat, along with poor appetite and vomiting after oral intake developed. The patient's mother suffered from cough and mild fever before the onset of patient's disease, and her father had similar symptoms after the onset of patient's disease. Her parents recovered. However she did not, and was brought to ER of medical center due to worsening symptoms.

Chest radiograph showed bilateral pneumonia patch especially over left lung. Laboratory data showed elevated C-reactive protein (10.8 mg/dl) and bandemia (band form: 10%). Low blood pressure was monitored in outpatient department (systolic blood pressure: 70mmHg). Under the impression of community acquired pneumonia with sepsis, she was admitted to ward for further evaluation and treatment.

After admission, empiric antibiotic, moxifloxacin 400mg/500ml 1bot once daily, was administered, with sputum culture and oxygen supply. However, shock developed, with oxygen saturation down to 79%. The patient was intubated and transferred to ICU. After two weeks, the symptoms improved and she was transferred to general ward. One day after transfer to general ward, she began to experience confusion. One week later, she could not eat, talk or walk. After initial evaluation of current medications, general physical and neurologic examinations, laboratory tests and chest radiograph, a neurologist was consulted due to progressive generalized weakness with mutism, urine incontinence, and stool incontinence. Neurologic examination and laboratory surveys of Na, K, Ca, Mg, Ammonia, TSH, free T4, cortisol and arterial blood gas were ordered. Brain Magnetic Resonance Imaging and electroencephalography were conducted. There were no abnormal findings. As offending drugs, antibiotic use, seizure and CVA were ruled out, a psychiatrist was consulted. After mental status examination, the psychiatrist suspected catatonia and suggested Lorazepam 2mg, 0.5 amp, IVP under close monitoring. The patient experienced dramatic recovery. Several minutes following Lorazepam use, she could eat, talk and walk. Oral benzodiazepines with Lorazepam (3mg/d) were administered. She had no similar symptoms and remained normal for the rest of the hospitalization period.

Discussion

In the present case, catatonia developed after pneumonia, and was dramatically resolved with benzodiazepines.

Catatonia is not a common disorder. The estimated incidence of catatonia among acutely ill psychiatric inpatients in the US is approximately 10 percent, but the estimated range is from 5 to 20 percent [5]. Its pathophysiology is still unknown. Catatonia can occur with underlying psychiatric illness or general medical disorder such as infectious, metabolic or neurologic disorder.

Clinical manifestations of catatonia include immobility, mutism, stupor, negativism, waxy flexibility, posturing, excessive and purposeless motor activity, staring and echophenomena[6], just as in our case.

It is of the utmost importance to treat the underlying cause as soon as catatonia is identified [7]. First-line treatment for catatonia is benzodiazepine or ECT[8]. The choice depends on the clinical urgency and availability of treatments. During the course of treatment, physicians should avoid antipsychotics and other dopamine blockers (eg, antiemetic agents), as these can worsen and even precipitate catatonia[9].

A previous report proposed that catatonia has a favorable prognosis after treatment [2]. Long-term prognosis is associated with the severity of underlying psychiatric or general medical disorder. In our case, benzodiazepine use was very effective in a catonic patient with underlying Down syndrome, pneumonia and septic shock. From this case, we recommend that clinicians be aware of the possible differential diagnosis of catatonia, including schizophrenia, major depressive disorder and general medical disorder.

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