

## **A child who visited the emergency room with stress-related nonpsychotic hallucinations**

While it has long been recognized that certain hallucinations accompanying a high fever or epilepsy or appearing as a side effect of medication are common in childhood, it is only recently becoming clear that hallucinations may also occur as a feature of common psychiatric disorder without the unfavorable prognosis of childhood psychosis. The case described below illustrates some of the characteristic features of nonpsychotic hallucinations in childhood.

### **1. Case report**

K, a 6-year old Japanese kindergarten girl, was living with her parents and a younger brother, who was hyperactive and received more than his share of the mother's attention. There was no family history of any psychiatric illness. K was born following a normal pregnancy and had shown no developmental difficulties.

One day, K suddenly got up around 3 a.m. and screamed, "I am very scared! Bugs are popping and sticking to my bottom! Bugs are crawling into my underwear!" She described the size and shape of the bugs and how sticky they were, K was so frightened that she could not sleep at all. The next day, while K and her mother were out shopping, K suddenly exclaimed that the bugs were present and got excited in the car. Her mother brought her to the emergency department at a general hospital. After supper, K again complained of seeing bugs and having strange tactile sensations, and got into a panic state. The parents brought her to the emergency room again. There she was given diazepam 2 mg and soon fell asleep.

The next day, K was brought to the psychiatric outpatient clinic according to the advice of emergency room doctors. At the initial interview, K looked anxious as she described the hallucinations. She showed age-appropriate language development and no sign of delusion or thought disturbances. K denied any depression, loss of appetite, or trouble sleeping. The neurological examination was normal. There were no signs of external injury suggesting physical abuse. No abnormalities were uncovered through a computer tomographic head scan, and electroencephalogram, or examination of her spinal fluid. Both K and her parents were reassured that her hallucinations did not mean that she had schizophrenia or another psychotic condition. Then, her parents described the stressful life event that had recently taken place in her life. About three weeks before, her grandfather had died of renal failure. K attended his funeral. In accordance with Japanese tradition, the dead body was burned, after which

a family member collected part of the bones with special chopsticks and put them into a small container to be placed into the tomb. When her mother identified the scattered and broken bones saying as her grandfather's, K was so shocked that she screamed, complained of nausea, and vomited. K left the funeral area and piled up stones, one by one, in order to calm herself. Since that time, she has not discussed the event within the family.

Three days after the first visit, K's parents asked to have her admitted into the pediatric ward because her continued hallucinations were making them nervous and anxious. Her mother stayed at the hospital with her all day, leaving her brother behind in the house. As the days went by, the hallucinations gradually disappeared. During squiggle play, K drew an airplane, stating that she would like to visit her grandfather's house to place his bones in his tomb. She added that it was terrible to see her grandfather's scattered and broken bones and that her mother failed to protect her because she was too busy taking care of her hyperactive younger brother. After about ten days in the hospital, her fear and hallucinations and her parents' anxiety completely disappeared. At a two-year follow-up after her first visit, K was functioning well both at school and home.

## **2. Discussion**

Throughout the clinical course, K showed visual and tactile hallucinations lasting almost two weeks, associated with severe anxiety and phobic behavior. These symptoms appeared after the psychologically distressing event of seeing her grandfather's burned and scattered bones.

It has recently become clear that hallucinations occur as a feature of common psychiatric disorders without the unfavorable prognosis of childhood psychosis. Schreier and Libow [1] described acute phobic hallucinations as "non-psychotic hallucinations." It has been reported that such hallucinations occur in children with ADHD, Tourette's disorder [2], and separation anxiety disorder [3]. In addition to these cases, our case shows the possibility that strong fear and anxiety caused by acute traumatic stress leads to transient hallucinations in children.

Acute Stress Disorder (ASD) is a recently developed diagnosis in DSM-IV that describes post-traumatic stress reactions occurring in the first month following a trauma. However, up to the present, DSM-IV does not include hallucinations as a part of ASD, although the criteria of PTSD do include hallucinations. It is supposed that the developmental stages might influence children's acute reaction to trauma and that

symptoms in children might be different from those in adults.

It is suggested that clinicians need to keep in mind the possibility of benign childhood hallucinations as a reaction to acute stress. In such cases, children appear to appreciate and benefit from the reassurance that having hallucinations does not mean that they are crazy [4]. Admission to the hospital might be effective to the extent that it provides patients and parents with a psychologically secure environment as shown in our case.

Our case describes a possible relationship between acute traumatic stress and benign hallucinations in childhood. We hope that this case may bring further benefit to emergency management and everyday psychiatric practice at a general hospital.

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