

## Childhood Schizophrenia with Auditory Hallucination as the Chief Symptom

Michio YAMADA, Kenshi KOBASHI,  
Tamio OTA, Takeshi KUBO  
and Tatsuro SASAKI

*Department of Neuropsychiatry, Yamaguchi  
University School of Medicine, Ube*

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### INTRODUCTION

Hallucination is rarely observed in childhood psychoses (Eisenberg)<sup>1)</sup>. The number of childhood schizophrenics is small, and in these, hallucination does not form the nucleus of the symptoms but is rather taken as a secondary symptom. That hallucination does not appear is said to be one of the characteristics of infantile autism, one of the main symptoms of schizophrenic disease that develops before childhood (Kanner)<sup>2)</sup>.

We have encountered four patients with a specific type of schizophrenia which had hallucination as its chief symptom and which developed in childhood, the details of which are reported here.

### REPORT OF CASES

Case 1: Girl, 12 years old at the first psychiatric examination.

Hereditary history: A great-grandfather on the mother's side committed suicide at age 60, and a brother of the maternal grandfather killed himself at age 40; both were due to mental disorder, but the details are unknown.

Growth history: The eldest daughter of five siblings. There was nothing abnormal in her physical and mental development at birth or in her infancy.

Past history: At age 3 she was diagnosed with infantile asthma and received medical treatment.

Present illness: She has been slow in action and tactless ever since infancy. Shy and retiring in her ways, she has few friends, but there is something unyielding about her. At age 8, she started trouble by stealing an examination paper from the locker of her teacher. In class, she was able to understand the substance of her lessons fully. However,

she occasionally began showing such bizarre behavior as drawing a picture of flowers and submitting it at the time of a test on arithmetics. In her diary, she wrote, "St. Mary has spoiled me." There also was a statement reading, "I especially enjoy talking with Cupid," which may be taken as a symptom of auditory hallucination. Changes in her mood became conspicuous, that is, she would talk to her mother constantly and care for her younger brothers well one day and would cry or laugh aloud meaninglessly on another. Occasionally, she would refuse to go to school or would go to school by taxi. At that time, however, she caused no trouble with her classmates in the classroom and her teachers did not notice any abnormality about her either. In April at nine years of age, she started saying, "I hear the voices of my friends. They order me to do various things," and began shaking her head and giving a cough in a stereotyped manner. Some examples of her auditory hallucinations are: St. Mary said, "Your father and mother are not real. You are not what you truly are." God said, "You must not eat. If you eat, food for all mankind will run out"; consequently, she would refuse to take food. However, there was no period during which any particularly abnormal behavior continued, so although her grades dropped slightly, her family did not take the matter too seriously. However, at age 12, she tried to cut her neck with a knife saying, "A voice told me to kill myself." And there were occasions where she became restless and tried to telephone the police. For these reasons she was admitted to the Department of Neuropsychiatry, Yamaguchi University at once.

After admission, she would sometimes take a snack at midnight hearing her classmate say, "Eat even if your stomach is full," or would refuse to take foods on hearing a voice that said, "If you eat, you will die." Hearing a voice say, "You were a bright girl before, but how come you have such a dull head now?" she would read a textbook in the ward. When she was concerned about her being short in stature (136.3cm in height), she said she could hear a TV actor say, "Let's get married. Take off your dress. If you make love, you will grow taller, and she then would strip naked. When she was worrying about not having menarche, she thought she heard a physician in charge say, "Female hormone is short. Eat stool, because it contains female hormone." When she answered in her head, "I can't eat such a filthy thing," there came a reply, "All you get will be dysentery. Dysentery is a good disease." At first, auditory hallucination was accompanied by anxiety and excitement. But the anxiety and excited condition disappeared gradually, and she rapidly became indifferent to her auditory hallucinations.

Three months later she was discharged and started attending school.

At present, two years hence there still persists active hallucination. Saying, "I hear these voices perhaps because I'm possessed by a spirit," she is taking a nonchalant attitude toward her auditory hallucinations.

Case 2: Male, 13 years of age at the first psychiatric examination.

Hereditary history: Not contributory.

Past history: None.

Growth history: He has one younger sister. Both physical and mental growth in infancy were normal.

Present illness: He is reticent but has a strong sense of responsibility and good academic standing, so he gets along well with his classmates. His father is a serious-minded teacher, while his mother is full of vanity and interferes with him excessively. Consequently, he has often been antagonistic towards his mother since his infancy.

At age 9, he started complaining that even at home he could hear one of his teachers say, "You are a bizarre child." During arithmetic tests, he would sometimes get confused, saying he heard the voice of his teacher saying, "Your answer is wrong." He ceased to clean his teeth, saying he heard a voice, "It's better for dental health not to clean the teeth." He began to hate bathing, because he heard, "If we take a bath, fats of the body flow out and death results." With other auditory hallucinations, he at times would feel uneasy, get scared or stand up during a meal, or go out into the garden at midnight, saying "I wonder if that isn't my teacher knocking at the front door." However, he attended school regularly and ranked high in his class. He came to believe that, "Since there is a man with a supernatural ability like Uri Geller, it is nothing unusual that I can hear various things through telepathy," and regained composure at least outwardly. When he was playing soccer at age 13, he heard voices such as: "Don't kick the ball now, or you'll have a misfortune"; "Your mother died from a traffic accident"; "A universal crisis has come. It's all your fault." He became restless and was hospitalized.

After admission, he heard voices saying: "Don't take medicine. If you take it, your family will suffer a misfortune"; "Don't eat. If you eat, you'll become a devil"; thus he would often reject medicine and food. Lying in bed all day, he would converse with his auditory hallucinations most of the time. From the first month after admission, he would try to touch other patients or strangle his own neck on "orders of the voice." While studying in the ward, he cried loudly, complaining that the voice interfered with him or that another self read aloud the textbook one line ahead of him. When his parents and younger sister came to see him, he

sometimes felt as if they were strangers and would not speak a word during their visit. "Gemachtes Erlebnis" and blocking of thought were observed in his remarks: "The physician in charge manipulates me and restricts my freedom, action or interferes with my thinking." When the auditory hallucinations were especially strong, he looked scared and would keep close to a nurse, saying, "I'm scared because the atmosphere around me seems to have changed."

However, after four months his behavior was influenced by auditory hallucinations less often, and being much calmer, he was discharged home. At present, he attends a junior high school and ranks high in his class but the auditory hallucinations still persist.

Case 3: Female, 13 years of age at the first psychiatric examination.

Hereditary history: Not contributory.

Past history: None.

Growth history: Physical and mental growth at birth and in infancy were good. The youngest of three siblings, she is active, methodical, considerate, cheerful, has a strong sense of responsibility, and is trusted by her classmates. Her academic standing is above average.

Present illness: From around summer at age 11, she began talking to herself. As to this behavior she replied to her family, "A spirit entered into my portrait and talks to me. So, I answer." She was lethargic most of that summer because she heard the voice of a classmate saying, "You had better not do homework during summer vacation." She said that this auditory hallucination seemed to be coming from a speaker and was given in a clear voice. After summer vacation, she attended school as usual, but with a scared look she would say to her mother, "Even my good friend speaks ill of me. I cannot trust human beings any more." Although she said, "When I open a textbook, types in there give voices and I can hear them," or, "God tells me what the textbook says is a lie," She would do her lessons, and her school achievement did not drop particularly. While running a race in an athletic meet held at the end of September that year, she stopped suddenly midway. The reason was that she heard one of her teachers say, "Don't run. If you run, you'll have a misfortune." She would at times incline her ear as if to listen to something during a meal, or go into bed with her ears plugged, but she came to talk less about the contents of her auditory hallucinations. At age 13, she suddenly began to sing a song aloud during a test, because she heard a voice commanding her to sing. She was hospitalized immediately after this episode.

After admission she soon made friends with the patients who shared

the room with her, and placed her trust in the physician in charge. She said, "The voices of men and women whom I don't know give orders to me or speak ill of me. When I heard the voices for the first time, I was very surprised, uneasy, and frightened. When I told my family and friends about it, nobody would believe it, and I myself thought it was something impossible. Maybe I can hear it because my sixth sense is well developed." And she told them, "It's probably because I have a special microphone in my head that the voice can be heard only by me." The auditory hallucinations consisted of critical ones by her classmates, such as, "Your behavior is masculine", "You are so unkind that nobody likes you", and imperative ones such as "Eat!" and "Sit down!", or the desultory chat of neighbors. Following administration of psychotropic drugs, auditory hallucination decreased in volume from the clear voice of a speaker to a whisper, and the contents also became fragmentary. There was nothing unnatural about her behavior, nor were there any abnormalities in volition or emotional aspects. Therefore, she was discharged home one month later.

After discharge, she started attending school again. But complaining that whatever she thought of turned into the voice, which made it impossible to study, she was readmitted three months after her discharge. After readmission, she complained of visual hallucinations. She said, "I see the face of a classmate in the windowpane of the ward." She had these visual hallucinations together with auditory hallucinations like those she experienced during her first stay in the hospital. Furthermore, she showed the attending physician sexual speech and behavior, for example, "I want you to kiss me," and, "I want you to marry me." Two months later, she was discharged home because all symptoms besides the auditory hallucination disappeared.

At present, she is attending a senior high school. Her academic standing is average.

Case 4: A female clerk, aged 12 at her psychiatric examination.

Hereditary history: Her elder sister had schizophrenia and committed suicide at age 23. A cousin on her mother's side is now being treated in a hospital for schizophrenia.

Past history: She had congenital dislocation of the hip at age 2. At age 11, she underwent Starr-Edward-Discoid Valve surgery for mitral valvular disease, and has since been taking blood anticoagulants and digitalis.

Present illness: She is considerate and cheerful but somewhat self-centered. Her heart surgery was successful and she is doing well. In

spring at age 12, however, she was prone to sleeplessness. At that time she started refusing foods, saying that she could hear a voice say: "Don't eat because the food is poisoned." She would drink only cola, saying, "I can hear a man saying that drinking cola is a good way to neutralize poison." She explained, "It's because I am a person with a supernatural ability that the voice can be heard only by me." Sometimes she would phone the attending physician or her classmates for no reason because an imperative auditory hallucination ordered her to make a call; as a result she was hospitalized.

Immediately after admission, she exhibited a violently vacillating mood. She cried, "I can hear all the inmates of the hospital speaking ill of me through the wall." She would sing a song aloud at midnight because a TV star told her "you better be a singer," from a TV set with the switch off. Sometimes she looked into a mirror and made comic faces, because an announcer asked her, "How about your being an actress?" from a radio with switch off. With the administration of psychotropic drugs, her auditory hallucinations rapidly turned to meaningless sounds, for instance, the cry of a baby or the mewing of a cat, and at the same time she regained composure and was discharged home two months later. Auditory hallucinations still persisted, but in spite of this, she graduated from junior and high schools with an average record and entered a university.

At age 20, she started to hear the voice of God that said, "You are Eve and your boyfriend is Adam. And your ancestor is Christ"; then she would strip herself to the skin. Consequently, she was readmitted. Immediately after readmission she said she heard God say, "Urine contains nutrients. If you drink it, you are assured of longevity." She also heard: "If you drink tubed toothpaste, your lungs will become clean," and, "You are a fool because you don't obey the order of God. Kill yourself"; then she would plead her attending physician to kill her. As the hallucinations fluctuated, she would sometimes cry, "I'm scared, I'm scared," or would talk to the hallucinations with a grin. Psychiatric symptoms, except for auditory hallucination, subsided six months later. She was discharged and returned to the university. After graduation from the university, she was employed by an accounting office. In the meantime, auditory hallucinations persisted, mild as they were.

At the age of 26, she suddenly refused to eat and was prone to sleeplessness. At home she would use abusive language to her father and talk rapidly and illogically. On a certain night that winter, she left home without any purpose and became lost. At 3 a.m., her family found her sitting in front of the tomb of her elder sister who had committed sui-

cide. They brought her back to the hospital. She said: "A physicist says that the earth was blown up into 7 parts. I can talk with that voice"; "A voice of the heaven orders me to do this and that"; "God says I have changed and I should die." She would try to become stark naked upon medical examination as told by the voice, or would mutter to herself, "I'm talking with God." She was absent-minded most of the time, saying, "Whenever I think about anything, it turns into a voice."

She was in the hospital for three months, was discharged, and is presently recuperating at home. Disorders in the aspects of emotion or volition are hardly observed and there is not the least sign of personality devastation.

EEG findings were within the normal range and neurologically there were no abnormal findings suggestive of organic changes in the brain in any of the cases.

## DISCUSSION

A report by Eisenberg<sup>1)</sup> has it that the observed incidence of hallucination in psychotic young children is less than 0.4 percent. According to him, hallucination is very rare in children under eight years of age. As a child grows gradually from childhood, in which they do mainly visual thinking, hallucinations gradually turn from visual hallucinations to auditory hallucinations, but this concerns youngsters of at least 10-11 years of age downward (Despert<sup>3)</sup>). When hallucination in children is observed, it is most often visual hallucination, and the cases of auditory hallucination are very few (Wieck<sup>4)</sup>).

There are some cases in which a child hears a voice which comes from having a "super-ego" not yet well established in the course of normal mental development, reflecting an "ideal mother or siblings." When a child comes to believe the sayings of such a voice repeatedly, this behavior becomes very similar to the hallucination and delusion found in schizophrenics (Despert<sup>3)</sup>). The theory that auditory hallucination arises from emotional instability in non-schizophrenic children is negated (Despert<sup>3)</sup>). Schizophrenic children listen to the auditory hallucination, have their behavior controlled in answer to the voice, and come to a lack of contact with external reality (Eisenberg<sup>1)</sup>).

Visual hallucination often presents itself as simple images, the contents of which are sparks, colors, clouds, etc. These hallucinations are often accompanied by a sensation of fear. Our four cases exhibited severe anxiety and excitement when they experienced auditory hallucinations for the first time. Our four cases' auditory hallucinations were considera-

bly different from those in adults, because theirs were simple and not too systematic. And thus, the immediate family of our young patients considered the symptoms of their auditory hallucinations to be products of imagination, dreams, and day dreams, and therefore did not give much importance to them. For the children too, their auditory hallucinations sooner or later became imaginary companions (Bender<sup>5</sup>) and thus they gradually complained less often of the anxiety and fear due to them.

In emotionally deprived children auditory hallucinations occur often, the contents of which are defense of self, exaggerated selfrespect, timidity, satisfaction or inhibition of pleasure and desire, and atonement for sins (Levin<sup>6</sup>). But auditory hallucinations in schizophrenic children also have contents similar to these in many cases. Hallucination in emotionally deprived children is taken as compensation for a reality that is not satisfactory. Hallucination developing under such a situation is designated as "isolated hallucination" (Weiner<sup>7</sup>). It develops when children try to escape from reality by entering into a world of fantasy; this is essentially different from hallucination in schizophrenia. Accordingly, we can understand why children rejected by their mothers sometimes hallucinate their mother's reassuring voice (Bender<sup>8</sup>).

There was no evidence that our four cases were subjected to emotional deprivation. Intellectually, they were above average. That is, their hallucination was not pseudohallucination. When mental energy does not progress to the actual world, but regresses to the mental world of self due to auditory hallucinations, that is autism, and it has a schizophrenic aspect (Saito<sup>9</sup>). It is becoming impossible for children in the course of normal mental development to change their view of reality from a children's world rich in imagination to the real world (Conrad<sup>10</sup>). Sometimes the rich creativity of children is transformed into a schizophrenic delusional world. It is then that the auditory hallucination is combined closely with a delusion of persecution. However, it is not the case that children enter into the autistic world smoothly from the world of imagination.

In our Case 1, 2, and 3, the hallucinations had not brought about any particular disruption in school or family life for several years after the onset of auditory hallucinations. Their odd behavior due to "Gemachates Erlebnis", originating from the auditory hallucinations, were being taken as within the normal range of behavior by third parties. They tried to maintain their mental balance by telling themselves that their auditory hallucinations were voices from an object enclosed in their bodies (introject object-Bender<sup>8</sup>), or by thinking of themselves as people with supernatural abilities or with well-developed sixth senses.



In Case 1, there was a strong tendency to make a sexual association with the hallucinations. However, this was also taken as a mental mechanism to resist the autodisintegration that results from schizophrenia. Unlike children with infantile autism, our four cases did not rapidly withdraw into the shell called autism, nor did they turn their backs to the external world. Unlike most patients with hebephrenic type schizophrenia, they did not develop autism, apathy, disturbance of volition or personality disintegration, and if these symptoms did develop at all, they were very mild. In our four cases, the autism was classified as "autism riche" (Minkowski<sup>11</sup>). They withdrew into themselves, and vivid contact with reality was obstructed to some extent, but their behavior was extrovert and active. In this respect, there was no "autism pauvre" observable, like that in infantile autism in which a glass wall standing between the patients and us prevents sympathy and rapport. At first, our cases grasped their auditory hallucinations subjectively and were thrown into a state of confusion, but gradually they looked upon their hallucinations objectively and became able to live in the pathological world and real world each in its proper way without feeling any particular contradiction. That was probably why impairment of mental development did not present itself as conspicuous behavior.

When active auditory hallucinations became prevalent, our cases became so indifferent about the existence of them as to say, "Naturally, it's better to be free of the voice. But even if there is a voice, it doesn't bother me much." Their posture, "Stellungnahme" against auditory hallucinations, was neither passive nor positive. It might be that the auditory hallucinations were taken by them as mere events and thus could not exert any important influence on their psychological inner world. If interpreted as an indifferent posture resulting from personality disintegration as in schizophrenics, this does not explain their sufficient ability to contact and to adapt to the actual world.

In the aggravation stage of the disease they were often dominated entirely by auditory hallucinations, but when the hallucinations lost activity, they were dominated only partially by auditory hallucinations and fell into a stage of "Doppelorientierung" at once, which was common to all cases. At last, they developed the insight that their hallucinations were no more than the vocalization of their thinking, saying "My thinking takes the form of a voice and can be heard."

This disease might be one which is akin to hallucinosis, in that auditory hallucination does not impair the entire personality nor is it incorporated deeply into the psychotic state, but presents itself as a partial disintegration of the perceptive function.

Since these cases are characterized by the facts that: the hereditary taint is strong (Cases 1, 4), the disease develops in childhood, auditory hallucination forms a nuclear symptoms, and that personality disintegration peculiar to schizophrenia is hardly observed, it is extremely difficult at present to determine the coordinates for these cases in the system of psychoses. Consequently, there is a need to make observations on their clinical course over a long period in the future. Also, we believe that they can serve as significant subjects of study in the psychopathological study of auditory hallucination.

### SUMMARY

We have reported four cases of a schizophrenia-like syndrome in which the disease started with auditory hallucination in childhood. Phenomena and symptoms common to these four cases were that they developed "Doppelorientierung" at once after auditory hallucinations, and did not show the personality disintegration and autism common to infantile schizophrenia.

They did not have any critical problems, such as adverse effects on their mental development, from the viewpoint of growth history. Their intellectual level was above average, and EEG findings were within normal range.

### REFERENCES

- 1) Eisenberg, L.: Hallucinations in children. West, L.J. (ed.). In: *Hallucinations*. Grune & Stratton, New York, 1962.
- 2) Kanner, L.: *Child psychiatry*. 3rd ed., Charles C. Thomas, Springfield, 1956.
- 3) Despert, J.L.: Delusional and hallucinatory experience in children. *Am. J. Psychiat.*, 104 : 528-535, 1948.
- 4) Wieck, C.: *Schizophrenie im Kindesalter*. S. Hirzel, Stuttgart, 1965.
- 5) Bender, L.: Internalization of fantasy objects in the development of children. Bender, L. (ed.). In: *Dynamic psychopathology of childhood*. Charles C. Thomas, Springfield, 1954.
- 6) Levin, M.: Auditory hallucinations in "non-psychotic" children. *Am. J. Psychiat.*, 88 : 1119-1125, 1932.
- 7) Weiner, M.F.: Hallucinations in children. *Arch. ges. Psychiat.*, 5 : 544-550, 1961.
- 8) Bender, L.: Hallucinations in children. Bender, L. ed. In: *Dynamic psychopathology of childhood*. Charles C. Thomas, Springfield, 1954.
- 9) Saito, Y.: A psychopathological study of daydreaming in early childhood schizophrenia-on the awareness (Bewusstheit) in schizophrenia. *Jpn. J. Child Psychiat.*, 1 : 13-31, 1960. (in Jap.).
- 10) Conrad, K.: *Die beginnende Schizophrenie*. G. Thieme, Stuttgart, 1958.
- 11) Minkowski, E.: *La schizophrénie*. Payot, Paris, 1927.