

“Journey of the Mind”

—On Total Amnesia—

Michio YAMADA, Nobuko OKUDA,
Shosaku NODA and Shigeru TAKAMATSU*

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

***Department of Neurology,
Yamaguchi Prefectural Central Hospital, Hofu.*

(Received February 12, 1977)

INTRODUCTION

Reports on total amnesia originated in the oppressive mechanism due to psychogenic reaction are not necessarily many (Tani¹⁾, Shioiri et al.^{2,3)}, Sakabe et al.⁴⁾, Yamada et al.⁵⁾, Yamagata et al.⁶⁾, Yamada et al.⁷⁾).

The psychologic origin that constitutes the cause is varied and abundant, and not a few are understandable. Further, abnormal findings are found on electroencephalograms.

Diagnosis and elucidation of amnesia due to brain dysfunction including transient global amnesia which has come into question in recent years are relatively easy in many instances, but diagnosis of psychogenic amnesia is usually very difficult to make.

We encountered a case that took the form of fugue, left total amnesia, showed no remarkable findings on EEG and later presented clearly characteristics of diseases coming under the category of schizophrenia, and we would like to make a report here on its symptoms and clinical course together with discussion.

CASE REPORT

20 years old, male, 3rd-year student of a university of science.

Family history: Both parents are living and well, the father is a public servant and the mother, a former schoolteacher.

5th of six siblings (2 older brothers, 2 older sisters, 1 younger sister). Eldest brother is a company employee, holding a managerial position, married.

Eldest sister is married; second elder brother is unmarried, has changed his employment frequently since graduation from a senior high-school and his whereabouts is unknown. Second elder sister died of enteritis at 7. Younger sister is a second year student at a junior college. Hereditary history shows no abnormalities.

Past history: No history of head injury, nor is there any remarkable disease.

Hobby, taste: Sports, game of "go", reading; he has no habit of drinking and smoking.

Personality: Serious and gentle, docil and methodical. Left-handed, but dexterous. Reticent and has few friends but is trusted by his classmates because of his having a strong sense of responsibility, albeit with the disposition of schizoid. Not disposed to dissipate. Not particularly takes to travelling.

Growth history: Has been healthy since childhood. Was taken charge of mainly by his eldest sister till he graduated from an elementary school, since both parents were working then. Gets along well his younger sister among siblings. Reared not by overprotectiveness but by the "let-alone" principle.

Appears to be somewhat uncomfortable in the presence of his eldest brother partly because of the gap in age.

Grades were excellent at the elementary, junior and senior high schools.

Would volunteer to undertake troublesome work at home and carry it through.

When he was a third year student of the junior high school, he appeared on a television show in which he had the courage to speak up, or as a representative of the school he met the then Prime Minister.

Immediately after graduation from the senior high school, he entered a university. Joined an athletic club and became a captain when he was a fourth-year student.

Present illness: The following is the summary of information gathered from his parents, friends, school counselor, landlady of a boardinghouse and the patient himself.

Early in May when he was a 3-year student of the university, it was decided that the university in which he studies would sponsor a regular athletic meeting between several universities located in the same locality.

Because of the preparation for the athletic meeting coupled with practice at the university, he could sleep only for about three hours

every night for five consecutive days; as a result, his room at the boardinghouse which had been kept in good order till then was left in disorder.

However, he was training as a player harder than others.

He was cheerful and showed nothing unusual when he returned to his native place on New Year's day of that year and when his father visited the boardinghouse of the patient in the middle of April in the course of his trip.

According to a school counselor, he sometimes absented himself from lecture recently but attended practice; the way he acquired units so far was good and records were evaluated as "good-somewhat good". He successfully finished publication of results of research achieved in practice, took an examination performed on May 1, and immediately after which he joined a training camp at City A some 40 km away from the university, the site of the athletic meeting.

To be sure, he was busy as an officer of the athletic meeting, but other members also took their share of work; while there was some trouble as to the holding of the athletic meeting, he was not to blame.

On the morning of May 3, he disappeared on his way to an athletic hall 10 minutes walk from the training camp for the final training together with other members.

His fellow members did not pay much attention to him thinking that probably he was talking with other officers; however, since he did not return the following morning, they started inquiring at every likely place.

While it is unknown where he spent the night on May 3, he called on a friend of his in City A on the evening of May 4 and played "go" game for several hours and left there, it is reported. He appeared a little listless, and said, "I can't sleep", "I want to make a trip", according to the friend.

On May 7, some say they saw a person like him riding a bicycle near his boardinghouse in City B where the university is located or others claim that they saw him walking on the corridor of the university on the afternoon of the same day, but nothing definite is known.

On May 7, a request for search for a missing person was filed with a police station in City B.

The detailed action of the patient thereafter up to May 20 to be mentioned later is unknown; according to investigation of the police and the Postal Service Inspection Bureau, however, he drew ¥70,000 from

a passbook in the name of the person himself at a post office near the training camp on May 2.

On May 7, ¥25,000 was drawn from a post office in City C in northern Japan, some 880 km away from City A; on May 14, ¥3,990 was drawn from a post office in City D, some 760 km away from City C.

The signature and seal affixed to papers required in the procedure for drawing money were confirmed to be identical with those of the person in question.

Accordinging to the person himself, it was May 15, when reckoned backward, that he noticed his walking with a person whose identity is unknown in a mountain path. What comes to his mind next was that he was sitting alone on a bench in a park in City E facing the Sea of Japan, some 220 km away from City D.

He would rest in a garage or telephone box by day and walk by night.

It was because people kept staring at him and also because he found a piece of paper with a phrase reading "someone is chasing after me" written in an unfamiliar handwriting in a pocket of his jacket that he made it a point to walk preferably by night.

Believing firmly that he was chased after by someone, he wanted to die and tried to hit his head with a stone

Moreover, he remembered only his name, and neither address nor permanent domicile came to his mind, which made him all the more uneasy.

While walking, he questioned himself, "Why am I walking", but he could not find an answer; at any rate, he then had a strong compulsory feeling that drove him to walk and had an indefinable affliction.

Going northward on the national highway, he stopped overnight at a bus stop; heading for City F, 100 km away from City E, he spent another night at a garage; and he attempted to spend the night in a railway station in City F the following day, but finding a man who showed hostility toward him and looked at him with a watchful eye among the passengers in a waiting room, he was scared and started returning to City E in a hurry.

The headlights of cars overtaking him shone meaningfully and appeared to be threatening him; he thought something terrible would happen if he asked for a hitch hike; so, he tried keep away from cars. He spent overnight in a telephone booth in the suburbs of City F that night. With only ¥5 in his pocket, he did not feel like using train and other

means of transportation.

At dawn the following day he started walking and thought he could trust nobody but himself, and strangers all seemed him to be his enemy. He said to himself, "I wouldn't be killed because I haven't done wrong to anybody", but he was full of the feeling of being killed.

On the way he saw a road sign to City A by chance and hurried to City A 130 km away. But the going was slow because he had a pain in the foot and preferred walking early in the morning and evening.

While travelling on foot, he hardly talked with anybody because he thought he would be arrested if he spoke to anyone and if arrested, he would be beaten up. However, he did not feel like going to a police station.

For the last five days he had lived on bread while he had money, and later what with taking oranges in the orange plantations and what with biting at onions and wild grass in the field.

At least he made it over City A, but he felt passers-by were talking about him and thought it was because he was poorly dressed. A feeling like delusion of persecution was diminished.

Remembering only his own name and permanent address, he was quite at a loss. After staying overnight in a telephone booth in City A, he went to a police box and asked a policeman: "I have scarcely had anything to eat for the past five days. I'm tired. Won't you give me something to eat?"

But his request was turned down because he could not answer to the police questioning. So, he started walking toward City B 40 km away from there.

The buildings on the way which he ought to remember all appeared to him to be those he saw for the first time.

"If I get to City B, someone will tell me who I am", thought he. He stayed overnight in a telephone booth in the city and the following morning, that is, on the morning of May 20, he dropped in a police box in front of the station to find nobody there and went to the police station of City B and said, "I know my name and permanent address but I don't remember anything else, so please check it up."

On the police interrogation, he could not reply even the names of a senior high school he graduated from and university he belongs to. The police got in touch with his family, and at the request of his family, he was admitted to the Neuropsychiatric Ward, Yamaguchi University, School of Medicine after physical examination.

Upon seeing his father and older brother, he said he had never seen them before, and talked as toward a stranger.

A jacket, eyeglass, wrist watch, passbook and cash which he was supposed to have during the roving journey were lost; when asked about them, he looked embarrassed and said, "I don't know."

Psychic symptoms on admission: The consciousness was clear, expression hard; no smiles, blinking violently, restless and reticent but he was obedient in attitude and did not look scared, though looked uneasy. He said he did not remember the faces of his family members and teachers; he did not know his status and as for the address, gave the old address before readjustment of town-lots. He gave a right answer to the date of birth and age; as to the data, however, there was a time lag of about one month; retrograde amnesia was of the high degree. Understanding was good. Retention defect was prominent, and as to events for the last five days, the memory was retained only in the form of islands; as for events prior thereto, he showed general amnesia. A nuance of delusion of persecution was observed. Disturbance of intelligence was absent.

Physical symptoms and neurological findings: Of a lean and tall build, fatigue was prominent, the skin dry; nutritive conditions were poor, there were blisters one each in the soles and marked reddening and swelling in the right Achille's tendon; he was limping. The face was symmetrical, the tongue normal, the palate vertical, no disturbance of articulation; pupils were equal and regular, mesomorphic and reacted to L & A fast and satisfactorily.

Vision on the right was 0.1 (1.0), and on the left 0.04 (1.2).

Tremor of the finger was negative. No increase in the brain pressure.

Physiological tendon reflex normal. Pathological reflex was negative. Pulse 76/min, no arrhythmia. Blood pressure 136/72. The lungs were normal. The abdomen was not remarkable on palpation. The liver was palpable one fingerbreadth and soft.

Laboratory examinations: Hepato-renal function was normal, results of tests on urine and peripheral blood were normal. Serum electrolytes showed no abnormality.

Reaction to the blood Wasserman test was negative. T₃ resin test 29%.

EEG findings: (Recorded on the second hospital day) EEG showed poor alpha activity on the whole and was of the slightly low voltage (around 30 μ V). These findings remained unchanged even after activation by hyperventilation, there being no evidence of abnormal paroxysm.

Alpha activity was suppressed slightly by photic stimulation; the photic driving was most prominent at 10 c/s. However, abnormal hypersensitivity was not observed. There was noted a transient 50-70 μ V slow burst-like wave on hyperventilation following intravenous injection of 50 mg bemegride.

Progress after admission: A small dose of phenothiazine was administered and observations were made on the clinical course.

On the day of admission, he went to bed immediately after supper; he went to sleep again after breakfast the following morning.

To his parents and friends, members of the athletics club to which he belongs, he responded with more courtesy than necessary and gave a puzzled look.

To the parents, he said, "I remember I have a father and mother, but". To the friends, he said, "I have never seen you before.....", inclining his head as if in doubt.

For two days thereafter, his parents and friends came to see him, but he was in the same state as on the day following admission, had no contact with other patients and stayed still in the ward.

On the 5th hospital day, he was able to reply day of the month and day of the week, but to a question where he is now, he replied, "It's a hospital, but I dont know where it is."

About his parents, he replied. "I cannot recollect their faces. Since I have no memory, I cannot tell whether they are really my parents...".

About his friends too, he seemed uncertain saying, "They know me well and are very friendly in speaking to me, so maybe I also know them."

About himself, he looked embarrassed: "My mother says I am a student at the Department Y, University X, but.....".

To the questions "Haven't you ever captained a team of the athletic club? "Haven't you served as an officer of the Athletic Meeting?", he said decisively. "Being shy and retiring, I have never played a part looking after other persons." As to examinations, he said, "I feel like having taken an examination recently and flunked it."

His memories after admission was all correct.

On the evening of that day, his senior student who had lived in the same boardinghouse for one year plus and who is the teacher of "go" play came to see him and played "go" with him. According to this friend, he did not fall off in his skill of "go" at all.

On the 6th hospital day, he was able to describe the layout of his

boardinghouse rather correctly; but when his picture wearing a sport outfit in a photo album his parents brought was shown to him, he would not admit that he was an athlete saying, "They are all kind to me. They know me very well but I don't remember their faces, so I feel uneasy." Then he stressed: "I can't recollect the faces of my brothers and sisters. I think I had a younger sister and elder brother....."

He would have a good sleep but there continued a condition: "I often have a dream in which I am chased by a man."

On the 7th hospital day, he replied he did not remember anything about his home but could give a correct answer as to the means of returning home, passenger fares and time required.

He came to give the name and age of his parents correctly but said he could not remember their faces.

As to his friends, he smiled wryly saying, "On seeing them I just feel tired and cannot recollect anything."

When shown a textbook and queried about the content, he gave a correct answer. From this day on, he came to talk about events during the trip on foot bit by bit, the memories were insular.

On the 8th hospital day, a girl friend during his senior high school days came to see him but he could not tell who she was. We took him to the campus of his university for an hour. He quickly found the name of a professor he met at the police station B from among the names of professors shown in the notice board, but could not remember the name of a professor who is a consultant of the sports club he belongs to.

Further, he replied he did not remember the names of professors who he had received a lecture from.

When shown a list of classmates he gave no response whatsoever.

As to the layout of the campus, he seemed to have recollected it partway and gave a correct instruction on the buildings and others and in front of the school gate he gave a right answer on the direction and route to his boardinghouse.

On the 9th hospital day, he explained to a classmate: "I am hospitalized here due to loss of memory."

In the ward he would talk cheerfully with other patients and read newspapers every day, giving no abnormal impression.

He complained of not being able to remember the faces of his acquaintances and high-degree difficulty in reminiscence as to his activities before admission, but could generally recall things till before his graduation from the senior high school. He was able to talk in detail about

the girl friend who came to see him the day before.

As to the parents, he said: "not completely as yet....."

There appears to be some distance between them and I"

Retrograde amnesia started to improve, slight as it was.

On the 11th hospital day, he could recall the telephone numbers of his home and boardinghouse in relation to the telephone numbers of the homes of his friends. As to the mother, he said: "While I see her every day, I came to believe she is my mother." And the moment he saw his father who came to see him, he could tell the names of every members of the family.

On the 12th hospital day, he recalled at once the name of his friend who came to see him for the first time, but he was not sure that he himself is a university student and said only: "I have never been in employment with a company since I graduated from the senior high school, so maybe I am a university student."

As to the orientation of the places in City A and City B, there were many omissions and mistakes.

When we took him to a room of the athletic club the same day, he said only, "I remember being here several times, but....."

When he set out to the boardinghouse in company with his mother, landlady and attendant physician, he could go near the boardinghouse all right, but it was not until he made a round of the town that he found the boardinghouse.

When he entered the room in which he had lived for three years, he remarked only: "I feel like having lived here once."

While talking with the landlady, however, he gave right answers as to such things as the payment of charge for milk and breakdown of a bicycle he was using in attending the school.

Taking out a textbook which was used in practice in April from a bookshelf, he said, "I remember having read it."

While his expression and behavior were cheerful, he sometimes was sunk in thought and showed an anguished look.

On the 13th hospital day, he said: "Past things seem as if they were on the other side of a wall and remain blank to me. I feel as if I came out into this world one day suddenly. This blank is concentrated on the recent one or two years".

However, he was sure that he is a student and was able to talk much about the content of a lecture he received a year earlier. On the

15th day of hospital, he ceased to show a stranger-like behavior to his mother for the first time and talked with her in a familiar way.

On the 15th hospital day, there was held an interview under anesthesia by intravenous injection of diazepam 10 mg, the outline of which is as follows.

“Now I recall a great deal about my family, but I feel kind of shy to tell them about it there appears to be a distance Things about my grandmother I can recall very well. Not that I was beloved by her specially during my infancy Even now I cannot recognize the face of landlady. There is a subject for which I took a reexamination, but I cannot remember the face of a teacher in charge. I don't know how the publication of the results of research in partice in April came about

I remember checking up references till late at night with a couple of friends. At about that time I caught a common cold and had a fever. I cannot recall the attendance number for my class room. But I can mention the names of my classmates around me (in fact, he cited the names of 12 friend correctly)” (A poster of the athletic meeting was shown to him)..... ” Oh! It's sponsored by our university but, I have no hand in it. I took part in sport or two because I immediately noticed mistakes the practicing players made in the movement of their bodies the other day when I went to the room of the athletic club I remember studying till late at night in the practice room, but I don't know what was the practice for and I don't know when it was either. I have a feeling that I was driven by something with a deadline at that time. It was very hard.

I have been to City A, but not to stay in a camp for training.

I remember sitting in a park in City E, but I cannot recall things that happened before that. I think I did not use either a train or a ship. I don't remember staying at an inn either. All people around me appeared to have a hostility toward me. Someone is following in my track as if someone were checking up on me The blank period in my memory has been somewhat shortened. I can recall the names of my friends, but can't recognize their faces

From after intravenous injection of diazepam, he could make a detailed statement about several schoolmates and also could recall concretely the content of practice he participated in before the runaway.

The second interview under anesthesia was held on 17th hospital day (intravenous injection of sodium amytal 500 mg).

“I can recall things about my mother perfectly. I can tell all of the

names of classmates. I have a feeling that I caused some trouble to my classmates in the practice.

I remember the lecture I took and things about the professors, but the fact that I took part in a sport does not come up in my memory. (He made a correct statement about the ¥70,000 he drew from a post office in City A). Well, that was I was then in charge of something and that was the money I needed for it. I bought a championship trophy with that money (he gave an exact description about the details). While I was walking carrying a trophy, passers-by looked me with suspicion in their eyes. I stopped the night at a place like a dormitory with several friends (he cannot recall there is a dormitory for the training camp). I don't know how I spent the rest of the money I bought the trophy with.

I had a desire to travel but actually I did not make a trip. As for my spectacles. I lost them in City A. I cannot recall the details. As for my wristwatch, I lost it when I was washing hair at a place where water was running. I don't know where it was."

Then he could generally recall things immediately before the runaway, but the things for two weeks thereafter remained completely blank. He could recall the names of his acquaintances but characteristically complained of his inability to recall selectively so far as the faces are concerned.

After two interviews, he started saying, "Since I'm not attending a lecture, I worry if I can move up to the next grade."

In the ward he was cheerful and appeared to have too much vigor; on the 22nd hospital day he talked in a quite natural way with a younger sister who came to see him.

He would spend a day what with playing a badminton by day and reading an English text-book by night.

On the 30th hospital day, he went to City A with his mother, and according to his statement we examined a warehouse of the gymnasium to find the missing trophy.

We walked around the City A with him but could not get a clue which would help him bring back his memory during the runaway. Later, he came to enjoy sports with his classmates in the gymnasium of the university every day but said: "About the sports goods, personal effects, I don't remember them. I can recognize only half of the faces of my fellow members of the athletic club".

While still having the difficulty in recalling the faces of his acquaint-

tances and without bringing back his memory during the runaway, he was discharged on the 50th hospital day and returned to his native place on a month's rest cure.

Kraepelin-test performed several times during admission showed no evidence of abnormalities, the results being judged to be 「a^o」; on Yadabe-Guillford test, the judgement was given as 「A^o」.

On MMPI, findings were not remarkable.

No established diagnosis could be made on discharge; hence, it was decided that observations be made on the course deeming him as being suspected of amnesia as a reaction to schizophrenia.

Subsequent course: After the summer vacation, he began to attend the lecture and would come to the out-patient clinic of this hospital once every two weeks; with expression cheerful, he showed nothing abnormal in his speech and behavior, but continued complaining about his inability to bring back his memory during the runaway and also about being unable to recall fully the faces of his acquaintances which is suggestive of face-agnosia.

He was progressing favourably till February of the following year, but with the term-end examination approaching he would sometimes sit up all-night over his text books for the examination and from that time around he started to show a hardened face became reticent and complained about delusion of persecution and pursuit.

He tended to absent himself from the lecture and ceased to show up at the athletic club.

One day during the period of examination, he came out on a bicycle from the boardinghouse, but with ideas such as "Someone is in pursuit after me" "As it stands, I'll be killed" flashing across his mind, he started running away frantically by bike to City A without stopping at the university; but suddenly he calmed down at a point some 20 km from the university, turned back the way he came and called the home of attendant physician in the evening. With delirious mood, delusion of persecution and delusion of pursuit observed, he was restless, and showed strong anxiety and hyperphrasia. Presence of auditory hallucination was suspected, although it was denied by him.

While talking glibly, though inconsistent, he could recall the course of trip, incomplete as it was, in the previous runaway.

As to the places where he stopped overnight, however, there were many ambiguous points. Regarding the motive, he merely remarked, "without particular reason" or "I had a desire to make a trip, and I

have just carried it out, that's all."

Informing his family of it, we administered him small doses of neuroleptic and had him live with his mother at the boardinghouse, but he tended to be insomniac and would say at night, "Someone is outside", "There is someone who is watching me from outside" and would not see his classmate at all; one week after, however, the conditions were improved and he started attending the lecture and successfully passed the remaining examinations.

He has since been attending the hospital as an outpatient.

After graduation of the university, he has been progressing favourably. At present, there are no symptoms suggestive of schizophrenia.

DISCUSSION

It is well known that there is a psychological mechanism by which one tries to escape from confrontation with psychologically important issue or to keep out of a situation that brings about a difficult-to-adapt anxiety.

One takes up attitudes such as "flight into phantasy" to deny the reality, "flight into disease" as a conversion symptom or "seclusion" as a simple means to back out negatively.

This results in one's performing the "security operation without knowing in an attempt to escape from the imminent anxiety which would lead one to catastrophe; and, this behavior may be interpreted as the adjustment mechanism.

These are all recognized as defense mechanism in neurosis. Of these, the flight reaction is said to be more primitive reaction. In the flight reaction, patients present disturbance of consciousness, bad humor, stupor, pseudodementia, amnesia and so forth as psychic symptoms and there may be observed disturbances of the autonomic nerve system including hypesthesia, motor palsy and atony neurologically.

In fugue subsequent to this flight reaction, the personality is split and the patient as a man with the personality different from one innate in him gets a different job under a different name at a place far away from his original domicile and spends the social life peacefully for a certain period of time, and his memory of things before that period is entirely lost.

Such a case has come to attract attention of people at large because of the course of illness being unique, and even at present, it sometimes is taken up by newspapers as a small article for fun.

During the flight reaction, the level of consciousness is lowered and there sometimes is hallucination.

It is said that lost memory can easily be reproduced by suggestion under hypnotism or anesthesia, but it is a difficult thing in not a few instances as in the present case.

The action in this state including one of conditioned reflex is taken automatically despite the fact that the patient himself has no particular intention nor consciousness of acting; in this sense, it is called automatism.

Fugue or runaway as automatism is usually observed in an epileptic twilight state or dreamy state; besides, it may also be noted in impulsive personality disorder, hysteria, acute psychosis and at times crisis of adolescence.

Such fugue is inclined to be repeated. It is paroxysmal, but may be distinguished from dromomania which is found in those with persistent predisposition to traveling and moving (Porot⁸).

As described above, fugue is made up mainly of psychogenic one and epileptic one. The latter is called fugue epileptique or poriomania and treated as a specific type of psychomotor automatism.

Of them, one which takes the form of running dromomania is called *les automatismes ambulatoires* and leaves complete amnesia; though without aura, it is a kind of episodic attack and accompanied by the impairment of memory recording, understanding and judgement. However, the presence of delusion under this situation is not confirmed (Gowers⁹, Wada¹⁰).

In fugue epileptique, however, it is usual with the case where the running fit coexists with convulsion fit or psychomotor attack in a narrow of the word, and so far as literature is concerned, no case is reported where only the running fit is present.

Fugue *apparement lucide* (Chavany¹¹) is an attack in a state close to lucid consciousness, and Lennox et al.¹² considers it as a state of accumulated automatism.

At any rate, these are the attacks originated in the temporal lobe and abnormal findings known well on EEG examination can be confirmed.

The present case shows pathological experience suggestive of one within the scope of schizophrenia.

As a special type of schizophrenia, there is a group of cases treated as a borderline case between schizophrenia and psychogenic reaction

and/or neurosis.

As a type of personality reaction, mention can be made of "sensitiver Beziehungswahn" (Kretschmer).

Persons with schizophrenia temperament who have affinity to schizophrenia by character may develop the disease acutely with psychogenic factors as a turning point and present delusion, hallucinating state or catatonic state.

In this case, it is complicated with confusion of consciousness and there is a possibility of its taking the form of fugue with a psychological load as a cue.

Some of this type of fugue will be closer to stupor symptoms, while there will be others which we might as well interpret as a more psychogenic one.

There may be some cases that belong to atypical psychosis pathologically; however, cases with protracted clinical course should be diagnosed as schizophrenia.

As pre-disease personality in schizophrenia, it is said that the patient is asthenic and autistic and that conflict is not too prominent outwardly in terms of the cause of onset of disease and the history of life; however, there are not a few cases to the contrary.

The present case shows no evidence of abnormality on EEG, and in that sense it may be deemed as being inorganic.

As psychogenic factors, mention can be made of the physical and mental fatigue attributable to the practice and his working as an officer of the athletic meeting in the first fugue and over exertion before the examination in the second episode.

However, are these so significant as act as psychogenic factors?

According to Inoue et al.¹³⁾, there is no objective criteria by which to determine whether a psychogenic factor is significant or not, and the psychogenic factor should be evaluated only by the subjective experience of the person himself.

Fugue in this case should be taken as a psychogenic reaction rather than a neurotic one, and if a psychotic sign is observed persistently, we might as well interpret it as psychogenic psychosis attaching importance to the action of conversion mechanism (Sakurai¹⁴⁾).

Characteristic in retrograde amnesia observable with the present case was a face agnosia-like symptom observed in the convalescence of amnesia. This is similar to *negatisme mnesique*, *idée fixe de lóubi* (Séglas).

Pohl and Haitz¹⁵⁾ think negativisme mnèsique to be "elektiver Negativismus."

Of course, negativism is one of the symptoms peculiar to schizophrenia, but whether or not negativism is originated in schizophrenia itself is open to argument (Ono et al.¹⁶⁾).

If amnesia is defined as memory defect which is limited in terms of time and content (Bleuler, E.¹⁷⁾), there could possibly occur a case where the patient finds it difficult to reproduce a certain limited thing while he can recall all other things that took place at the same time (elective amnesia¹⁸⁾).

The memory reproduction disorder in the present case can hardly be identified as "die negative Halluzination des gedächtniss", nor is it likely to be originated in "transient global amnesia" (Fisher and Adams^{19,20)}) or "Durchgangsyndrom" (Wieck^{21,22)}). To interpret it as "katathyme Amnesie" (Bleuler, E¹⁷⁾) would be reasonable.

The present case is characterized by fugue caused by psychogenic factors and subsequent amnesia which are taken as a series of symptoms of schizophrenic reaction.

SUMMARY

A report was made on fugue and amnesia as a schizophrenic reaction and two episodes of escaping action leaving no definite amnesia which were observed in a 20-year old male.

The second episode showed symptoms of acute psychosis accompanied by pathological experience.

Psychopathological discussion was carried out on fugue and amnesia in the present case.

REFERENCES

- 1) Tani, N.: A case of retrograde amnesia. (jap.). *Hanzai to Igaku*, 2: 31-35, 1950.
- 2) Shioiri, E., Iwasa, K., Sone, Y. and Aiba, H.: A case of psychogenic amnesia. (jap.) *Noshinkei Ryoiki*, 7: 60-72, 1955.
- 3) Shioiri, E. and Takahashi, S.: A case of retrograde amnesia. (jap.). *Noshinkei Ryoiki*, 7: 191-200, 1955.
- 4) Sakabe, S., Matsui, T., Sano, K., Makita, H. and Umezu, K.: Three cases of amnesia totalis. (jap.). *Bull. Seishin-Igaku Inst.*, 3: 72-90, 1956.
- 5) Yamada, T., Nagamori, F., Shimoda, S. and Furuhashi, T.: A case of psychogenic amnesia all over the life-history. (jap.). *Brain & Nerve*, 9: 59-62, 1957.
- 6) Yamagata, H. and Ishikawa, I.: 2 Fälle von allgemeinen Amnesien. (jap.) *Brain & Nerve*, 10: 557-563, 1958.
- 7) Yamada, O. and Kimura, S.: A clinical study of total amnesia. (jap.) *Psychiat. Neurol. Jap.*,

- 66 : 800-817, 1964.
- 8) Porot, A.: *Manuel alphabétique de psychiatrie*. P.U.F., Paris, 1960.
 - 9) Gowers, W.R.: Somnambulism. ed. Lennox, W.G. In: *Epilepsy and related disorders*. Little-Brown, Boston, 1960.
 - 10) Wada, T.: *Epileptology-clinical and basic aspects*. (jap.) Igaku-Shoin, Tokyo, 1964.
 - 11) Chavancy, J.A.: *Epilepsie*. Masson et Cie, Paris, 1958.
 - 12) Lennox, W.G. and Lennox, M.A.: *Epilepsy and related disorders*. Little-Brown, Boston, 1960.
 - 13) Inoue, R., Shiojima, E. and Naoi, T.: Obsessional symptoms and EEG. (jap.) *Clin. EEG*, 2 : 205-211, 1960.
 - 14) Sakurai, T.: Neurosis. (jap.) eds. Imura, T. et al In: *Abnormal psychology*. Vol. 9. Misuzu, Tokyo, 1973.
 - 51) Pohl, O. und Haitz, G.: Über das Problem des mnestischen Negativismus. *Nervenarzt*, 37 : 96-110, 1960.
 - 16) Ono, S., Mori, N. und Ueno, F.: Über den mnestischen Negativismus. (jap.) *Clin. Psychiat.*, 10 : 295-299, 1968.
 - 17) Bleuler, E.: *Lehrbuch der Psychiatrie*. 10. Auflage, Springer, Berlin-Göttingen-Heidelberg, 1960.
 - 18) Hozaki, H. and Asai, M.: Pathology of memory. (jap.) Imura, T. et al eds. In: *Abnormal psychology*, Vol. 9., Misuzu. Tokyo, 1973.
 - 19) Fisher, C.M. and Adams, R.D.: Transient global amnesia. *Trans. Am. Neurol. Ass.*, 83 : 143-149, 1958.
 - 20) -----, -----: Transient global amnesia. *Acta Neurol. Scand.*, 40, Suppl. 9 : 1-83, 1964.
 - 21) Wieck, H.H.: Zur Klinik der sogenannten symptomatischen Psychosen. *Dtsch. Med. Wschr.*, 81 : 1345-1349, 1956.
 - 22) -----: *Lehrbuch der Psychiatrie*. Schattauer, Stuttgart, 1967.