Tokai J Exp Clin Med., Vol. 28, No. 1, pp. 27-33, 2003

Early Crisis Intervention to Patients with Acute Stress Disorder in General Hospital

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(Received September 3, 2002; Accepted February 13, 2003)

This report presents 2 patients who were diagnosed to have acute stress disorder (ASD), received early psychiatric intervention (crisis intervention as a short-term psychotherapy), and subsequently had good outcome. Encounter with an event that causes psychological trauma may induce post-traumatic stress disorder (PTSD). However, the 2 patients described here have shown no particular mental symptoms for more than 2 years after the event and are leading normal lives. Psychological debriefing as a group used to be regarded as effective for the prevention of PTSD, but early identification of the stress-related disorder and intensive treatment of individual patients is recently considered to be more necessary. Both of the 2 patients presented here showed good outcome, and early crisis intervention in individual patients is suggested to be effective for the treatment of stress-related disorders and prevention of PTSD.

Key words : Post-Traumatic Stress Disorder (PTSD), Acute Stress Disorder (ASD), Crisis intervention, Consultation-liaison psychiatry, General hospital psychiatry

I. INTRODUCTION

We have carried out various activities as psychiatric consultation liaison service in Tokai University Hospital [21, 22]. In this service, liaison activities of examining patients at wards have originally been requested in large numbers, but the number of requests is increasing, reflecting the contemporary medical circumstances such as shortening of the hospitalization period. According to our survey, the mean annual number of consultations was 314 from 1992 to 1996 [21], but it more than doubled to 642 in 2000. In the background of this increase, there are the increase in patients who have attempted suicide and patients with stress-related disorders as a reflection of the recent unstable social situation and the increase in discomfort of inpatients associated with the trend to high-tech medicine and the resultant increase in patients exhibiting various mental symptoms.

Acute stress disorder (ASD) and post-traumatic stress disorder (PTSD), which are typical stress-related disorders, have become rapidly recognized as diagnostic categories in recent psychiatry in Japan. ASD is an acute and temporary psychiatric disorder that develops after an event that causes psychological trauma, and it advances to a diagnosis of PTSD if the patient begins to exhibit more diverse symptoms over a longer period. However, an early stage of PTSD, which is a more lasting disorder, may be provisionally diagnosed as ASD, but strict differentiation of the two conditions immediately after exposure to stress is difficult. In fact, according to international diagnostic criteria (such as DSM-IV), important points of differentiation between ASD and PTSD are that the onset

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of ASD is within 4 weeks after the exposure to the event that has caused psychological trauma and that the duration of symptoms of ASD is within 4 weeks [1].

There have been few epidemiological studies concerning the incidence of ASD, but a large-scale epidemiological investigation on PTSD carried out in the United States put the life-time prevalence of the disease at 5 % in males and 10 % in females [13]. Also, in addition to the insight obtained through many psychosocial investigations, research on PTSD has advanced to a new stage aimed at clarification of the etiology due to the rapid development of biological research in the 1990's, and studies using practical methods concerning the diagnosis [2] and treatment [3, 7, 9, 10, 14, 17, 19, 20] are being accumulated.

This report presents 2 patients with ASD who received psychotherapeutic crisis intervention and showed good outcome. On the basis of this experience, the usefulness and significance of early psychotherapeutic crisis intervention for the prevention of PTSD are evaluated.

II. CASES

The cases are presented below. More than 2 years have passed since the end of treatment in both patients, but neither of them has had particular mental symptoms or needed psychiatric or psychosomatic consultations after the episode described here.

Case 1: A 19-year-old female, student of an occupational school.
[Primary complaints] Fear and anxiety after an assault.
[History of present illness] No previous history of psychiatric consultation.

The patient was studying for examinations late at night, but she went out for shopping to a convenience store for diversion. About 50 meters away from her house, she was suddenly hit in the face several times by a young male stranger, dragged to a dark place, and pushed down. When she screamed, she was hit in the face several times again. As she continued to resist and scream, a neighbor came rushing to the site, and the assailant ran away. She was confused with an event that threatened serious injury, and her response involved intense fear. After experiencing the distressing event, she had a reduction in awareness of her surroundings, derealization, and depersonalization. Since she suffered severe contusion in the face, the neighbor contacted her family, and she was taken by ambulance to the emergency care center of our hospital. After arrival at the hospital, the patient showed anxiety and fear. The resident (male) who first examined the patient immediately consulted a neurosurgeon because of the swelling of the face and contusion of the head caused when the patient was pushed down. As no organic abnormality was revealed by examinations, the neurological evaluation was completed. The resident was present at the examinations by the neuro-surgeon, listened to the patient between the examinations about the fear that she experienced, saw the confused mother, and judged that the patient needed intervention by a psychiatrist. The resident said to the patient and her mother that he thought there would be no serious physical problems but that psychological trauma might persist, and advised that they consult a psychiatrist. With consent by the patient and her mother, they were referred to the psychiatric department.

[Past history] Nothing in particular. No previous history of drug abuse.
[Familial history] No family history.
[Course] The patient sat on a stool with her face still swollen and kept sobbing. The traumatic event is persistently reexperienced in thoughts and a sense of reliving the experience. The psychiatrist was informed of the situation by the resident in the presence of the patient and talked gently to the patient, "It was some surprise, wasn't it?" Hanging her head down, she nodded and kept crying without talking voluntarily. After a pause, the psychiatrist talked to the patient again, "I guess it was a horrible experience for you, but do you think you can tell me how it happened?" She nodded again and began to talk on and off about what happened. She said that she thought going out at night was completely safe, because nothing had happened before though she had often gone out shopping late at night, that she did not realize what was happening and just kept screaming, and that after the man left she suddenly became so afraid that she could not speak; only cry. She complained of the anxiety about the future, saying, "I am afraid to even come close to that house." Anxiety and

emotional confusion were observed as psychiatric symptoms, and both of them were considered to be due to acute psychological trauma. After the psychiatrist listened to the patient, he explained to her about "things that may occur to patients who have exposed to a very stressful situation", showing sympathy to her fear and anxiety. In his explanation, he described that the patient might suffer anxiety and insomnia, she might unexpectedly recall what she had experienced and feel anxiety or fear even a considerable time after the event, that medication is expected to be effective for managing such symptoms, that, thank to the early intervention, he could talk to her about measures to restore her psychological stability, and that this process helps her avoid unpleasant symptoms. The psychiatrist prescribed single-dose medications for anxiety and insomnia on the basis of consultation with the patient and her family. After this interview for crisis intervention, which took about 1 hour, the patient made a reservation for a psychiatric consultation a week later and went home.

After a week, the patient visited the clinic with her mother, smiling and saying, "Thank you for your help the other day." Although she had used sleep pills a few times, she "felt at ease by just having the drug for anxiety at hand and did not use it". She said that she went to the police with her mother after the event, told them about the matter, and asked them to intensify their patrol, that they had the community organization to put up posters and billboards warning against assaults, that these actions made her feel considerably secure, and that she realized that she was "careless to have gone out alone late at night." When the psychiatrist advised her to consult again after 3 month, she willingly agreed and left smiling. On the day of appointment 3 months later, the mother came alone and reported the patient's recent state, saying, "She is well and has no particular problem. She is desperately hunting for a job." The mother said, "We will consult you again if she has any problem," and outpatient psychiatric care was thus ended.

[Summary of case]

At the first interview with this patient, the psychiatrist guided her to review the steps through which she fell into the crisis by slowly tracing the course of the event. The psychiatrist, expressing his sympathy, explained to the patient that her anxiety and emotional confusion were responses to cope with a psychological crisis that was likely to occur during the course. Through this interview, the psychiatrist could improve his understanding about the patient's maladjustment reactions. The patient and the psychiatrist considered measures to cope with the crisis, and agreed to medication if necessary, for the patient to go to the police with her mother so that similar events might be prevented from occurring again in the neighborhood, and to promote a campaign against assaults such as putting up posters and signboards in the community. The patient was supported by these visual actions, reflected in her own defenselessness, and learned measures to avoid crises. The fact that the patient did not show up at the clinic after 3 months may be interpreted as "resistance" often observed in psychotherapy, but it could also be understood as a sign that measures to avoid crises that the patient had learned were working adequately. In this situation, the psychiatrist told the mother to consult him if any problem should occur and explained also to her about symptoms that might occur in the future such as flashbacks, whereby he handled this "resistance". As a result, the patient has followed an uneventful course without developing PTSD to date.

Case 2: A 58-year-old female, head nurse at a hospital.
[Primary complaints] Anxiety, mild depression.
[History of present illness] No previous history of psychiatric consultation.

Screening for uterine cancer indicated the necessity for close evaluation, and the patient consulted our hospital on the next day. A diagnosis of cancer of the uterine cervix was made, and the patient was admitted for surgery 6 days after screening. Surgery was successfully completed on the day after admission, and the postoperative course was uneventful. However, some nurses noticed that the patient closed the curtain around her bed in her room, which was shared with other patients, and was crying since the 4th hospital day. The patient, herself being a nurse, did not say more than "I am OK" to the nurses in charge. When a resident (female) said to her that hospital staff was wor-

ried about her having been crying and told her that she would be pleased to listen to her if she had anything she wanted to talk about, the patient said: "I was suddenly told I had cancer, and I spent these 10 days like I was dreaming while I was admitted and operated on. Probably because I was relieved being told that the operation was successful, I have begun to think about myself having cancer for the past few days. I have met many cancer patients who have died. I thought maybe my turn has come, and I have come to have fits of agitation and sadness." She experienced an event that involved threatened death. After the operation, she had a subjective sense of numbing and detachment, a reduction in awareness of her surroundings, and derealization. Her disturbance caused clinically significant distress and impaired obtaining necessary assistance or mobilizing personal resources by telling nurses about the traumatic experience. After the resident listened to the patient for a while, she said, "If you are still agitated, consulting the psychiatrist may be an idea, so I would like you to think about it." On the next day, the patient voluntarily wanted psychiatric consultation.

[Past history] Nothing in particular except appendicitis and fracture. No previous history of drug abuse.
[Familial history] No genetic predisposition to mental disorders. She lived with her husband and a daughter.
[Course] At the psychiatric outpatient clinic, she began to talk somewhat bashfully, "I am embarrassed to talk about this, but...," but she began to cry as she continued to talk. She talked tearfully that she had always been devoted to her work, that she was told she had cancer so unexpectedly that she helplessly left herself to the routine procedure leading to operation without preparation, that after the operation was completed successfully, she remembered cancer patients whom she had cared before and became afraid and worried, that she was disappointed with herself as she realized that she had not at all understood how the patients felt despite her long career of caring cancer patients, and that she became worried about how she was going to fare physically and mentally. Fear for death, anxiety, insomnia, and mild depression were noted as psychiatric symptoms. The psychiatrist said to her that it was unavoidable for one to become psychologically unstable because of the sudden exposure to such a situation and that some worries the patient was feeling was due to her experience of having seen many patients as a nurse and recommended (1) to make efforts to recover physically as the first step, (2) to take drugs if they are effective for alleviating some of the symptoms that may hinder physical recovery, and (3) to periodically consult a psychiatrist to put her problems in order. The patient agreed to periodically visit the outpatient clinic but showed hesitation against the aggressive use of psychotropic drugs so that it was agreed to manage anxiety and difficulty to fall asleep with single-dose medications. When the psychiatrist visited the patient 2 days later for evaluation of mental symptoms, she smiled, saying, "I have settled down a little." She said that she was not as tearful as she had once been and felt easier, partly because she was recovering physically. When she was seen again at the outpatient clinic 1 week after the initial psychiatric consultation, she said that she was doing fine without medications and that symptoms such as depression and insomnia were being alleviated. However, she appeared to be even more confused and worried about her "future living". She told that she had lost confidence in working as a head nurse now that she was made to realize her incompetence by this event but that she was at a loss how she should live the rest of her life without being a nurse. The psychiatrist said that it was premature to decide on such matters at this stage and advised her to ask her husband and daughter, who were supposed to support her life from then on, for opinions. At the outpatient visit 2 weeks after the initial consultation, she said, "It was a discovery to me, doctor," and smiled. She said, "My daughter, whom I had considered unreliable, was calmer than I had expected, had her solid plans for her life, and was not agitated even though she came to know that I had cancer," and "My husband told me not to worry about work since we are prepared for what to do if I retire." She appeared to have felt relieved and psychologically supported as she saw her daughter and husband ready to accept her in a composed manner. She consented to the proposal that she be temporarily discharged over a weekend and, if she was all right, be formally discharged,

saying "I think I will be OK." She had no problem during the temporary discharge, during which she talked with her family about her life after discharge, and returned to the hospital, having made up her mind to continue working as a head nurse. She had no persisting mental symptoms and said, "I am not sure how much I can do, but I think I will do my best. This has been a very precious experience to me, and I think it will help me in my future work." Her outpatient care was completed by agreeing that she would visit the clinic if she had any problem after discharge.

[Summary of case]

In his interview with the patient, the psychiatrist went over the process in which the patient required surgery for cancer and developed a psychologically as well as physically critical situation. The psychiatrist sympathized with her psychological instability as an unavoidable consequence. At the same time, he explained the mechanism of the appearance of this symptom and helped the patient understand her maladjustment reactions. He proposed single-dose medications, physical rest, and periodic interviews with the psychiatrist as adaptive measures for the crisis, and clarified the therapeutic approach. The patient gradually regained composure and was discharged, having decided to make good use of this experience in her future nursing career (part of intellectualization) with support by her family as a measure to avoid crises in her life after discharge. The course of this patient has also been uneventful without the development of PTSD.

III. DISCUSSION

This report presents 2 patients who received psychotherapeutic crisis intervention by a psychiatrist early after the diagnosis of ASD and showed good outcome. ASD is a condition that develops after an experience of intense fear characterized by re-experiencing of the intense fear under similar situations and flashbacks, in which the scene of the experience is recalled with marked emotional changes. Its diagnostic criteria (DSM-IV) includes dissociation symptoms in addition to the 3 major symptom clusters of PTSD, i.e. re-experiencing, aversion, and increased vigilance [3]. Also, ASD is clearly a risk factor for PTSD, and many patients who develop PTSD are reported to exhibit symptoms of ASD after the traumatic event. Concerning the treatment, the effectiveness of intervention performed early after the traumatic event (e.g. psychological debriefing) has been suggested by subsequent studies to be unpredictable, but it has recently been reported that the incidence of PTSD could be reduced by cognitive-behavioral therapy for ASD [5] and that the early therapy was effective for the treatment of combat stress reactions [16]. We treated 2 patients with ASD by short-term psychotherapy (brief psychotherapy) using the technique of "crisis intervention" (1. Focusing on the crisis alone, 2. reviewing the processes that have led to the crisis, 3. helping the patient understand the maladjustment reactions that the patient uses for coping with the crisis, 4. helping the patient learn adaptive methods for crisis management, and 5. teaching methods to avoid dangerous situations that may occur in the future) [11] along with medical therapy. Concerning the outcome, both patients have followed an uneventful course without developing PTSD to date more than 2 years after the traumatic event. These results suggest that "crisis intervention", or early short-term psychotherapy performed while the patient is still emotionally agitated after an event that may become a psychological trauma, may not only alleviate the symptoms but also be useful for the prevention of PTSD.

These results suggest that psychotherapeutic "crisis intervention" performed while the patient is emotionally confused early after an event that may cause psychological trauma is useful for the prevention of PTSD as well as palliation of symptoms.

The preventive measure against PTSD that has attracted greatest attention in various countries is psychological debriefing. This technique usually takes the form of a single group meeting held shortly after a catastrophe or an event, and the participants, being encouraged to express thoughts and emotions about what they have experienced during the event, talk with one another and try to perceptively organize them under the coordination by a facilitator. Mitchell advocated a debriefing technique that consisted of 7 stages as Critical Incident Stress Debriefing (CISD) [15]. This technique has been tested for confirmation by a number of investigators. Hytten and Hasle *et al.*

evaluated the effect of CISD in firefighters called to a hotel fire in Norway [8], and Kenardy *et al.* compared 62 who participated in debriefing and 133 who did not among rescue-crew members for 2 years after an earthquake in New Castle, Australia [12]. Bisson *et al.* performed individual or group debriefing for 133 patients with burn injury and evaluated its effects by the randomized controlled method [4]. Hobbs *et al.* also examined its effect in patients who had emergency admission due to traffic accident trauma by a randomized controlled trial [6]. However, the effectiveness of CISD was not demonstrated objectively by any of these studies. In addition, Wessly *et al.* reviewed all reported studies on debriefing from the viewpoint of evidence-based medicine and concluded that application of individual debriefing after psychological trauma cannot be recommended as a routine at this stage. As an alternative, they suggested intervention focused on early identification and treatment of pathologic conditions that may occur after psychological trauma as more desirable [23]. Although Bryant *et al.* reported that early intervention within 2 weeks after the incident was effective in 45 patients with ASD due to assaults other than traffic accidents or sexual assaults [5], they did not mention whether the condition developed into PTSD or not in individual patients or matters related to the prevention of PTSD. In the 2 patients reported here, psychological trauma was caused by violence and cancer, and early psychotherapeutic crisis intervention is considered to have contributed to the prevention of PTSD. However, how much preventive effect early psychotherapeutic crisis intervention has in individuals (not in groups) and for what types of trauma it is effective need further evaluation by accumulation of cases.

Both of the patients reported here were advised to have psychiatric consultations by a resident or a nurse, who routinely have contact with patients. This suggests the importance of undergraduate education of medical students and postgraduate education of residents in psychiatry and the necessity for reevaluation of their educational and training programs.

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