<Case Report>

Treatment Interventions in Three Adolescent Female Patients with Eating Problems Due to Dysfunctional Family Relationships

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ABSTRACT

Eating problems, often seen in girls in mid-to-late adolescence, have an unknown etiology. The family backgrounds of patients are diverse, and previous studies have reported an intrusive, hostile, and negative attitude toward the patients with eating disorders by their family members. In this case series, we report about three adolescent female patients with eating disorders due to dysfunctional family relationships, particularly mother-child relationships. In case 1, the mother crossed generational boundaries and the roles of mother and child were reversed. In case 2, the mother was over-involved with the child and the mother-child relationship was in an enmeshed state. In these two cases, therapeutic intervention was aimed at adjusting the family system based on the assumption of family dysfunction. However, in case 3, maltreatment by the mother was observed, which directly affected the eating disorder. In family therapy, the entire family is considered as the target of intervention, rather than assuming a single cause. However, focusing solely on this may overlook ongoing maltreatment, as in case 3. To avoid overlooking such situations, it is necessary to listen to both the patient and the family in the consultation setting and to tailor interventions to each family member without preconceptions.

INTRODUCTION

Eating problems are often seen in girls in mid-to-late adolescence. The etiology of the disease has not yet been identified. It is believed to be caused by a combination of various factors, including biological vulnerability, psychological vulnerability, and cultural and social influences [1]. Although various names are given to the disease in operational diagno-

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ses, the family backgrounds of the patients are diverse, and there is no uniformity in the manner in which the symptoms are expressed. According to case reports and studies on family interactions, family members of patients with eating disorders are said to be intrusive and hostile, with a negative attitude toward the patients [2] and overly concerned with parenting [3]. In this case series, we report about three adolescent female patients with eating disorders due to dysfunctional family interactions, particularly in the mother-child relationship, for whom we provided family and psychological interventions. To ensure anonymity, we used a format that does not allow the identification of individuals. Written informed consent was obtained from all the patients and their parents.

Case 1: International Classification of Diseases (ICD)-10 diagnosis of anorexia nervosa (F50.01) in a 17-year-old girl

The 17-year-old patient had been diagnosed with an eating disorder at a pediatric clinic. After entering high school, she continued to eat less and consulted several internal medicine and obstetrics and gynecology clinics without success. At her first visit to our hospital, she exhibited an impaired body image, with an increased fear of gaining weight and excessive food restriction. She had also undergone a weight loss of more than 15% of the standard body weight, which was not due to any other medical condition, leading to the diagnosis of anorexia nervosa. After admission to our hospital and implementation of behavioral restriction therapy, her weight recovered from 30.8 kg at admission to 33 kg within a month and she was discharged from the hospital. After discharge, the patient continued outpatient treatment under the condition of "inpatient treatment if the weight drops to less than 30 kg." Although she expressed anxiety about weight gain and eating, she was able to continue outpatient treatment. Four months later, she was hospitalized again because she could no longer meet the weight maintenance goal. At admission, she was 152 cm tall and weighed 29.8 kg (body mass index [BMI] 12.9, percentile 0.1). The patient was started on behavioral restriction therapy, wherein a range of activities was set according to her weight; however, her eating habits did not stabilize because of frequent episodes of emotional instability. After setting a goal for discharge and gradually gaining weight, the patient began talking about her mother. The patient told us that her mother often expressed resentment toward her and that her mother had left the house and abandoned them over trivial matters. Simultaneously, the mother also displayed an overprotective and over-cooperative behavior with her. When her mother was emotionally unstable, the patient often soothed her and talked to her younger siblings. Based on this narrative, six months later, we began interviewing with the mother. Since the father was rarely mentioned in family discussions, we continued the interviews with him in the same room. The psychologist continued to conduct psychological interviews, including role-plays, from the viewpoint of which specific parent-child relationships were appropriate for the child. The mother was advised not to become emotionally unstable in front of the child and maintain a stable relationship with the child by not interfering excessively. The patient's weight gradually improved and her mother did not exhibit any emotionally unstable behavior when interacting with her. The patient gained weight and was discharged from the hospital when her weight reached 35 kg (BMI 15.1, percentile 0.1), which was decided upon during hospitalization.

Case 2: ICD-10 diagnosis of avoidant/restrictive food intake disorder (ARFID; F50.8) in a 14-year-old girl

The 14-year-old patient had a serious and introverted personality, unlike her older sister who was closer to her father than her mother. She was a top ranking and perseverant student at a public junior high school and a member of the track and field club, and regular with her intense sports practice. One year prior to her first visit to our department, her food intake decreased without any specific inducement. She consulted various medical institutions, but her condition did not improve. She was referred to our department for the first visit. At her first visit, her height was 159 cm, and her weight was 32.8 kg (BMI 13.0, percentile 0.1). The patient responded "yes," "no," or "I don't know" to most questions, and spontaneous expression of intention was rarely heard. Although she had been fasting for some time, she had no body image disorder and did not appear to exhibit self-induced vomiting behavior. Therefore, she was diagnosed with an avoidant/restrictive food intake disorder. After explaining her condition to her and her parents, the patient was admitted to the hospital for treatment without any protest. Based on discussions with the patient, we conducted an intervention centered on behavioral restriction therapy, wherein a range of activities was set according to the patient's body weight. Although the patient understood that she needed to eat, she seemed unwilling to do so.

A "rewards at milestones" approach was used and discussed with the patient's mother. When the patient refused to eat, she was fed through a gastric tube; however, her feeding behavior did not stabilize. The patient's mother also visited the patient, and the staff observed that the mother wrote letters to the patient every day during her visits and massaged her feet while talking to her throughout the visits without considering the patient's wishes. We began interviewing the mother, and while listening to and sympathizing with her thoughts and feelings, we continued to discuss how her thoughts could be conveyed to the patient regularly. The mother and the patient discussed the feeding policy, and it was decided that the patient would eat in stages, starting with foods that were easy for her to eat. The amount of food intake gradually increased as we encouraged the patient to express her feelings and advised her mother on how to relate to the patient in a way that

Table 1 A summary of the three cases of eating disorders in adolescents resulting from an unstable family background

Case	Diagnosis (ICD-10)	Age of the first hospitalization, Sex	Siblings	Family-relationship	Period of decreased dietary intake	BMI and Percentile at Admission
1	Anorexia Nervosa (F50.01)	17 y Female	Younger sister and brother	Mother crosses generational boundaries	At the start of studying for the high school entrance exam	12.9, 0.1
2	Avoidant/Restrictive Food Intake Disorder (F50.8)	14 y Female	Older sister	Mother is overprotective	After entering junior high school	13.0, 0.1
3	Conversion Disorder (F44.4)	17 y Female	Younger sister	Little or no interaction between the parents	After entering high school	14.4, 0.1

respected the patient's wishes. Subsequently, the amount of food intake gradually increased. Seven months later, the patient was discharged from the hospital when her weight reached 36 kg (BMI 14.2, percentile 0.3).

Case 3: ICD-10 diagnosis of conversion disorder (F44.4) in a 17-year-old girl

The 17-year-old patient was quiet and introverted and had a strict and disciplined upbringing by her mother. About 4 months before her first visit to our hospital, she experienced anxiety about her future and career. She also began to experience heavy headaches, loss of appetite, and difficulty walking and breathing, although no abnormalities were found on examination. Regardless, she lost 4 kg in a month and was admitted to our hospital for her first visit. After admission, her food intake was erratic, with some days when she could hardly eat at all and other days when she could eat half a meal. Two months later, upon a request for discharge by the patient's mother, she was temporarily discharged. However, even after discharge, the patient's food intake was inconsistent, and she occasionally ate a large meal. Additionally, she experienced aphonia. Therefore, six months later, she was readmitted to our department. Her height at the time of admission was 163 cm, and her weight was 38.3 kg (BMI 14.4, percentile 0.1); further, she had difficulty walking. Because she was unable to eat at all, a gastric tube was inserted and nutritional supplementation was administered. After her mother came to visit, the patient showed some unfavorable changes such as a lack of responsiveness. During her stay at the hospital, the patient's food intake gradually increased and she was able to walk using crutches. At the same time as the examination of the patient, we continued to meet with the mother to discuss how not to discipline her daughter too harshly. Initially, the patient did not talk about her inability to eat, but ten months later, she confided in us that her mother had not fed her and had been violent and abusive toward her. Discharge to her home was temporarily suspended, and discussions were held with her parents. The parents were ated; however, as the patient had an amicable relationship with her father, she decided to live with him. After deciding to live away from her mother, her food intake gradually increased. Although the target weight for discharge was not set, the patient's eating improved, and her gait disturbance became mild. Fourteen months later, she was discharged from the hospital.

In all three cases, summarized in Table 1, the eating problems did not improve immediately after the intervention, but the family relationships tended to improve, and the patients are now able to continue regular outpatient visits.

DISCUSSION

Eating problems in clinical psychiatry require comprehensive treatment including psychotherapy, physical management, nutritional guidance, and treatment of comorbidities. In particular, family intervention is considered particularly effective for children and adolescent patients because the family system has a great influence on eating behavior [4]. In a study by Minuchin et al., 53 patients with anorexia nervosa were treated with family intervention, and after 1–7 years of follow-up, weight normalization and improvement in eating behavior and social adjustment were highly significant [2]. Furthermore, Russel et al. reported that family therapy had a much better prognosis than individual therapy at 1 and 5 years of follow-up in patients who had been ill for less than 3 years and in those who were aged 19 years or younger [5]. Family therapy is known as system-based therapy. This therapy aims to solve problems not only within the patient's mind but also focuses on the environment and circumstances surrounding the patient. The family is considered to be the focus of and a resource in solving the problem and not the "cause" of the problem. Family therapy assists individuals and their families in resolving their problems. Fisher et al. stated that family therapy is a therapeutic approach that does not remove the

cause of the problem, but rather amplifies the slightest change [6]. The attitude of not removing the cause has the advantage of allowing treatment to proceed without "looking for the bad guy." Thus, the theory of family therapy is that the dysfunction of the family system causes problematic behaviors and symptoms in specific family members and the specific family member who has the symptoms is called the identified patient [IP] [7]. In the present three cases, we hypothesized that eating problems emerged in IPs due to the underlying dysfunction of the family system. For this reason, we focused not only on setting goals for weight gain during hospitalization but also on family intervention.

Case-by-Case Discussion

Case 1: In the families of patients with eating disorders, generational boundaries are often ambiguous, mothers over-interfere with their children, the mother-child attachment is strong, and fathers are often alienated [2]. Similarly, in the present case, the generational boundary was ambiguous and the bond between the parents was weak. Therefore, we decided to intervene to clarify generational boundaries and bring the father into the family. We conducted psychoeducation with role-play for the mother and an interview with the father in the same room. Thus, the coalition between the parents was re-established based on the premise of working toward the same task. The roles were divided: the attending physician listened to the patient's concerns and continued psychoeducation and behavior restriction therapy, whereas the psychologist listened to the parents' concerns and continued role-playing to reflect on situations wherein the mother exhibited abrupt behavior and was advised on how to specifically respond to it to help her adjust as a parent. As a result, the mother's calm response increased and her position as the mother was no longer reversed. Thus, the patient no longer had to shoulder the responsibility of motherhood in a psychological sense and was able to return to a position where she was promised growth as a child. In addition, the mother no longer worried or excessively interfered with the child's life. This increased the number of situations wherein the child was able to think and make choices for herself, thus promoting independence and self-esteem.

Case 2: The mother's proximity to the patient was so strong that the patient could not express her intentions. Cerniglia et al. found that adolescents with eating disorders such as anorexia nervosa, bulimia nervosa, and binge eating disorder were significantly more likely to have an "enmeshed" family-type parent-child relationship. An enmeshed family is one in which the boundaries of family relationships are blurred and fused [8]. Bowen has stated that cohabitating family members resolve the conflicts of other family members and eliminate anxiety in the family system as a whole. This perspective is reflected in the relationship between the family system and the identified patient (IP), wherein the patient manifested the disorder of the entire family system as a symptom of an inability to eat [9]. The mother's relationship with the child was so strong that it manifested in a tendency to represent the child's wishes and the child did not have the opportunity to express her wishes. Until now, this had not posed a problem. However, even during the process of separation from her mother and independence as an adolescent, her mother maintained a relationship with her child, wherein she refused to allow her child to express her own will. Judith has stated that women with anorexia often fear becoming adults and are unable to successfully separate from their families [10]. Patients are also thought to have latent separation anxiety, and it is possible that the mother and child's efforts to work together contributed to the persistence of the symptoms. To intervene in the mother-child relationship, we asked the mother and child to maintain distance from each other during hospitalization and set a schedule for visits. On visiting days, the mother was asked to refrain from interrupting the patient's words and actions and was encouraged to respect her opinions and actions as a human being. We encouraged the

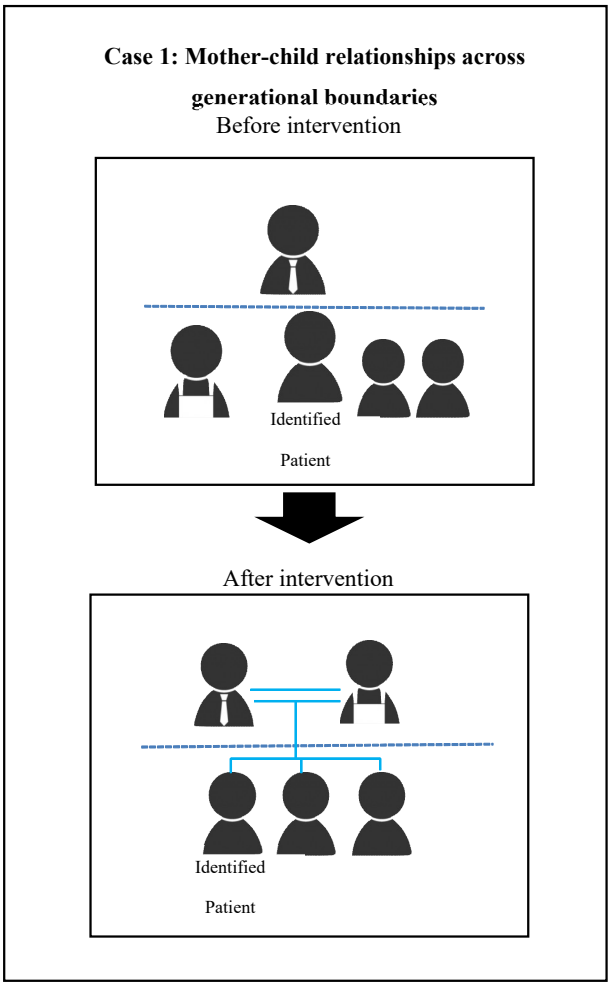

Figure 1

patient to express her feelings and to verbalize her discomfort and feelings toward her mother. The IP's feeding behavior gradually changed as her mother's attitude toward child-rearing changed, and the IP was able to express dissatisfaction with her mother.

Case 3: Ziobrowski et al. reported that the probability of developing some kind of eating behavior abnormality was significantly higher in children who had been abused by their parents during adolescence than in those who had not [11]. Ludwig et al. also reported that parental abuse was related to the subsequent incidence of the conversion disorder [12]. In the present case, the eating disorder was diagnosed as a conversion disorder. The mother's abusive behavior was thought to be related to the patient's eating disorder. The mother's relationship with the child was filled with violent words and actions, amounting to maltreatment. As mentioned earlier, there is a theory that family therapy does not look for "the bad guy." In the two cases described above (cases 1 and 2), the feeding problem was not considered an individual pathology but a family system dysfunction. However, in the present case, the mother's involvement directly influenced the patient's symptom deterioration. We stopped visits with the mother and considered environmental adjustments at the hospital discharge site. The patient's family was seriously disengaged, and it was considered difficult for the healthy family subsystem to function adequately. Therefore, the subsystem was separated in the form of the patient living with her father. Consequently, the patient was able to live more comfortably than before, and her eating problems decreased.

CONCLUSION

We presented three cases of patients with eating disorders due to dysfunctional family relationships and discussed the clinical aspects of these cases. Although all patients had dysfunctional families and feeding problems, the diagnoses and interventions required were different. In case 1, the mother crossed a generational boundary, and the roles of mother and child were reversed. The goal was to bring the family back to

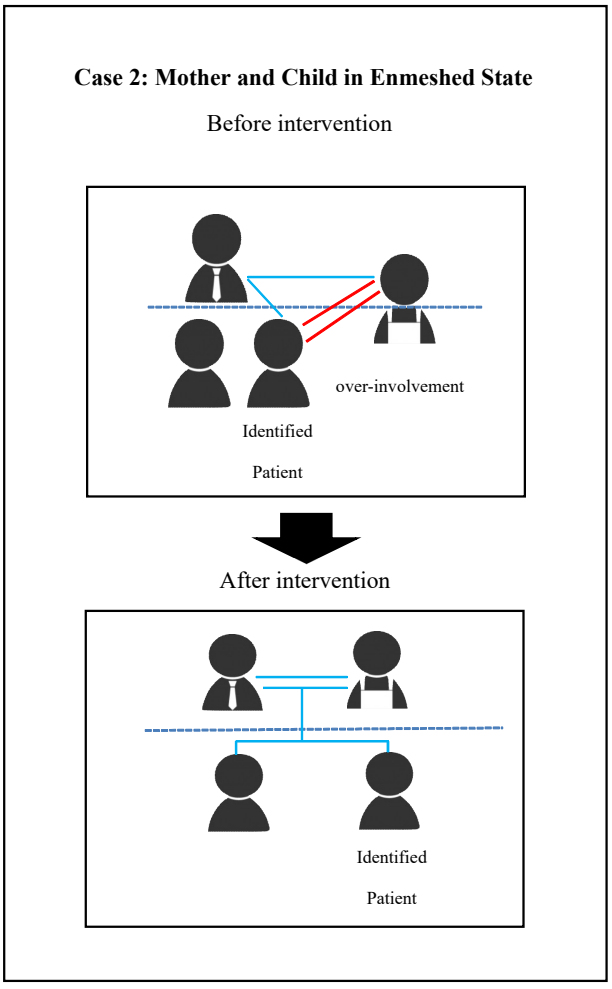

Figure 2

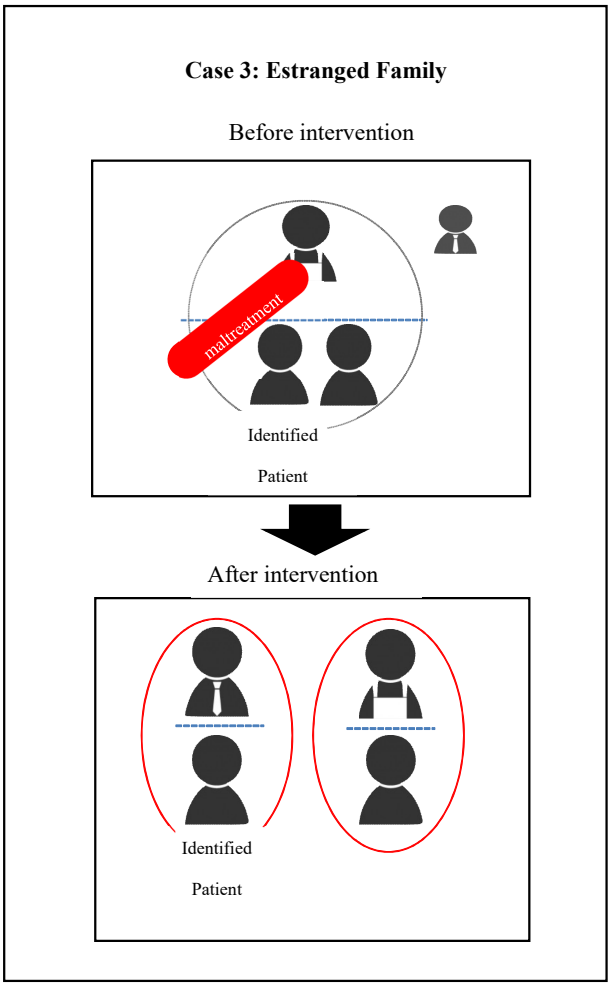

Figure 3

its original relationship through role-playing. In case 2, the mother over-interfered with the child, and the mother-child relationship was in an enmeshed state. Consequently, the child lost the opportunity to express herself and take action. We continued to interview both the mother and daughter to ensure the maintenance of an appropriate distance in the parent-child relationship. In cases 1 and 2, treatment intervention was conducted with the aim of adjusting the family system based on the assumption of family dysfunction. However, in case 3, maltreatment by the mother was observed, which was thought to have directly affected the feeding problem. Therefore, we proceeded with an intervention called mother-child separation. In family therapy, the entire family is considered the target of the intervention without assuming a single cause (commonality). However, focusing only on this would have resulted in missing the ongoing maltreatment, as in case 3. To avoid overlooking such a situation, it is necessary to listen to both the patient and the family in the consultation setting, always taking a bird's-eye view of the whole situation, and providing interventions suited to each family member without being bound by preconceived notions.

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