

Pitfalls in the Recognition and Diagnosis of Munchausen Syndrome by Proxy

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Abstract

Munchausen syndrome by proxy (MSBP) is a type of child abuse in which the perpetrator intentionally causes illness in an offspring. It remains a challenge to determine the actual medical course in MSBP. Here, we report two cases of MSBP. The pediatric patients were diagnosed with chronic organic diseases at other hospitals. Their symptoms persisted and were eventually referred to our hospital. The patients were not considered as MSBP at the time of admission. However, a series of evaluation by an interdisciplinary team led to the detection of the incompatibilities of the medical courses in the earlier period with the patients' condition. The patients were diagnosed with MSBP. Careful evaluation of patient's history is important in the diagnosis of MSBP.

Introduction

Munchausen syndrome by proxy (MSBP) is a form of child abuse in which the perpetrator, usually the mother, intentionally causes illness in her own child. The aim of the perpetrator is usually to fulfil her own psychological need for attention or sympathy, as well as her desire to maintain her role as the caretaker.

Since the first report of MSBP in 1977 [1], many studies on MSBP have been conducted [2,3]. While there is increasing awareness of the features and diagnosis of MSBP, there is a scarcity of diagnosis guidelines for clinicians. The possibility of the fabricated and induced symptoms, even if they appeared to be related to organic chronic disease, should be considered. To date, the detection and confirmation of the diagnosis of MSBP remains difficult. Here, to highlight important clinical issues in detection of MSBP in the initial period, we present two MSBP cases with chronic organic diseases in relation to the recognition, correspondence and diagnosis.

Case Presentation

Case 1

A nine-year-old boy accompanied by his mother presented to our kidney outpatient department due to persistent proteinuria. He was detected with the condition through urinalysis at school when he was eight years old. Blood test and abdominal ultrasound examination showed no abnormalities; however, proteinuria persisted. At the age of nine and a half years old, he was admitted to our hospital for further investigation. This time, he was again accompanied by his mother.

The mother told us the following past history. The boy had a history of intractable diarrhea following rotavirus infection at the age of eight months. He was admitted to the pediatrics ward at another hospital. After hospitalization, he suffered from persistent diarrhea despite central venous nutrition management and treatment with steroids. At 14 months, he was transferred to another hospital where he was diagnosed with ulcerative colitis. Consequently, he was referred to the gastroenterology outpatient clinic of our hospital. At the age of 24 months, he was given cyclosporine A and tacrolimus, followed by

central venous catheter insertion at three and a half years old. Since then, he has been on central venous nutrition at home. At seven years old, he was admitted to the department of gastroenterology of our hospital for intractable diarrhoea. Stool examination on the absorption of sugar and fat revealed no abnormalities. During hospitalization, his anemia worsened suddenly, and he was given red cell concentrate (RCC) transfusion. The cause of the worsened anemia was not identified.

On the first day of the most recent hospitalization, kidney biopsy showed no abnormalities. Lower gastrointestinal tract endoscopy revealed decreased vascular permeability with edema and reddening in the mucosa of the anal side of S-shaped colon. Pathological findings of the mucosa suggested Crohn's disease. He was given methotrexate, infliximab, and betamethasone, but the extent and the frequency of diarrhea did not improve. On hospital day six, he lost consciousness because of decreased blood pressure. Laboratory tests showed low hemoglobin level (7.7 g/dL). He was moved to the pediatric intensive care unit. The cause of the low hemoglobin level was unknown. Based on the patient's unusual and prolonged history, a doctor at the pediatric intensive care unit suspected MSBP. The Suspected Child Abuse and Neglect (SCAN) team of our hospital intervened in the case.

The patient received two units of RCC transfusion and recovered from the low hemoglobin state. The mother informed us that the boy was previously diagnosed with ulcerative colitis. However, the SCAN team could not find this diagnosis in his medical records. Consequently, we requested for the mother to be separated from the boy, but to no avail. Meanwhile, we did not manage to determine the cause of the progressive anemia, diarrhea, proteinuria, which is evident of MSBP. Thereafter, he continued to experience a reduction of hemoglobin, and had to be transfused four units of RCC every week. Stool examination showed small amount of blood in the stool, but it was not sufficient to be ruled as the cause of the progressive anemia. On hospitalization day 47, back pain and the systemic edema with unknown origin were recognized.

The separation of the mother from the child remained difficult. On day 49, we requested for the child consultation center to have temporary custody of the boy. During admission, the mother stayed

with the boy throughout the day, and she prevented us from performing the desired medical procedures, including admission to the pediatric intensive care unit.

On day 57, we found that the degree of proteinuria varied by day and also the time of the day. Electrophoresis of the boy's proteinuria urine samples provided by the mother revealed no human proteins in them. On day 73, we detected lysozyme in the urine, which is usually present in hen egg white. On day 75, we found a bag of magnesium oxide around the boy's bed, and stool examination showed high concentration of magnesium.

On day 81, scintigraphy was conducted to determine the cause of the progressive anemia. By using a Geiger counter, we found hidden radioactive blood samples in the mother's bag. The blood was likely to be obtained from the central venous catheter by the mother. Taken together, we confirmed the diagnosis of MSBP, and the evidence of MSBP was handed over to the child consultation center. The center then made a decision take temporary custody of the boy, and he was eventually moved to another hospital to be separated from the mother.

Case 2

A boy of three years and eleven months old accompanied by his mother was referred to our hospital for a second opinion on the diagnosis of idiopathic hypothalamic syndrome.

The mother told us the following past history. He had suffered from recurrent fever and vomiting at the age of 10 months, and has since been repeatedly admitted to other hospitals. During the hospitalizations, he received a considerable amount of invasive examinations including blood tests, cerebrospinal fluid examinations, and magnetic resonance imaging and systemic scintigraphy, but the causes of symptoms were never detected. At the age of one year and one month, he began to demand an increased amount of water consumption, revealing the symptoms of polyuria. At the age of one year and four months, he was diagnosed with central diabetes insipidus and was commenced on desmopressin. Thereafter, he occasionally presented recurrent convulsions with hyponatremia. At the age of three years and four months, the symptoms of the instability of the hypothalamus persisted, and he was found to have idiopathic hypothalamic syndrome. The attending doctor at the time warned the mother of a possibility of sudden death. Subsequently, he gradually showed the tendency of overeating, hypersomnia, and increased impulsivity and irritability.

At admission to our hospital, the mother requested for us not to use diazepam due to the reason that he would be overly excited because of it. On day one, he stayed out of the hospital to attend a birthday party at his kindergarten. Upon his return to the hospital on day three, he had vague consciousness. The attending doctor suspected MSBP due to the incompatibility of his medical history with the current condition and the mother's request not to use diazepam. Blood test was conducted to investigate the concentration of diazepam in the blood.

On day 16, he had an episode of seizure in front of the mother, and laboratory tests showed hyponatremia (125 mg/dL). We wanted to move the boy to the intensive care unit, but the mother rejected our proposal. The mother was always with the boy and refused to be separated from him in spite of our request for her to do so. On day 21, the results of the blood test conducted on day 3 came back and revealed a high concentration of diazepam (288 ng/mL) in the blood. We informed the mother of the results, and she told us that a friend was caring for the child on that day when he left the hospital for the

party. On that day, the boy was apparently given 8 mg of diazepam because he was too excited. However, this did not correspond with the finding that the boy had a high level of diazepam in his blood 48 hours after that day. Subsequent blood test of sample taken on day 16 also revealed a high concentration of diazepam (65 ng/mL). Therefore, we believed that the mother had been secretly giving the boy diazepam. Taken together, we confirmed the diagnosis of MSBP, and the SCAN team of our hospital intervened in this case. The boy was referred to the child consultation center, and a decision to take temporary custody of him was made. He was eventually moved to another hospital to be separated from the mother.

Discussion

We found that the MSBP cases in this report highlighted two important clinical issues in detection of MSBP in the initial period. First, it is necessary to evaluate the compatibility of the patient's history with current condition even if the caretaker informed the doctor that the patient was previously diagnosed with chronic organic diseases and that medical treatment has already been administered. Second, evaluations by a team of interdisciplinary medical staff are important for the detection of incompatibilities of the medical course with the patient's condition.

Previous literature reported several specific features of MSBP [4]. The clinical course is often unusual and prolonged, with the unresponsiveness to treatment being inexplicable. In our patients, we had the preconception that they had already been diagnosed with chronic diseases and had received the necessary treatment. We did not pay sufficient attention to the incompatibility of the patient's history with the current condition. Therefore, we did not consider the cases to be MSBP at the time of admission.

The perpetrator in MSBP tends to establish a close relationship with the medical staff, particularly with the attending doctor. This leads to a difficulty for the attending doctor in having an objective judgment on the medical course. A previous report noted the importance of an interdisciplinary team in determining MSBP [5]. In our cases, the eventual recognition of MSBP was made possible by one of the attending doctors among involved departments. In addition, the SCAN team intervened and summarized the evaluation of the medical course from the stance of a third party.

The medical courses of the two cases were similar, in which the patients were diagnosed with chronic organic diseases and were treated in other hospitals. The medical courses were consistent with previous reports [6-8]. In some cases, diagnosis of MSBP was determined by the attending doctor without the intervention of an abuse response organization. Nonetheless, in all cases, the suspicion of MSBP arose from the unusual and refractory history of the patients.

In conclusion, to determine MSBP, we need to scrutinize the history of the patient and employ the expertise of a multi-disciplinary medical team. Although it remains challenging to determine MSBP, the difficulties could be overcome by increasing the awareness of MSBP and sharing knowledge among medical staff from various disciplines. We believe further investigation of MSBP is warranted to heighten the possibility of earlier detection of MSBP.

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