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It is an old maxim of mine that when you have excluded the impossible, whatever remains, however improbable, must be the truth.

—Arthur Conan Doyle [1]

16.1 History of a Name

Baron Hieronymus Karl Friedrich von Münchhausen (1720–1797) fought in the army of the Prince of Brunswick against the Turks. Later he retired to his castle, where he entertained guests, recounting incredible tales about his adventures in

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battle. Some of these stories were published by Rudolf Erich Raspe in 1785 in a book entitled *Baron Munchausen's Narrative of his Marvelous Travels and Campaigns in Russia*. Gottfried August Bürger translated the book into German and Théophile Gautier into French [2].

In 1951, Asher [3] used the name Munchausen syndrome to describe patients—generally men—that went from one hospital to the next complaining of factitious somatic disorders that could lead to unnecessary and costly medical and surgical procedures had the patients not been found out or had they not spontaneously avoided treatment.

In 1977, the pediatrician Roy Meadow [4] finally gave the name Munchausen syndrome by proxy (MSbP) to situations in which a parent, generally the mother, invents fictitious symptoms in a child: “Here are described parents who, by falsification, caused their children innumerable harmful hospital procedures—a sort of Munchausen syndrome by proxy.”

Munchausen syndrome by proxy (MSbP) is a severe form of abuse.

16.2 Definitions and Diagnostic Criteria

The term “parent” is generally used, but in fact designates any adult having parental responsibilities.

The name MSbP is under discussion, because there is the risk that it involves a psychiatric diagnosis and that the focus is not be placed on the child. Who has Munchausen syndrome by proxy? The child or the parent? Many authors now use the term fabricated or induced illness by carers (FIIC).

Three mechanisms leading to MSbP have been described and can coexist:

- Fabricated signs and symptoms, which can include invention of a medical history.
- Fabricated signs and symptoms with falsification of clinical or biological data.
- Inducing illness by various means.

Faced with the wide variety of clinical presentations, it is necessary to define criteria to affirm or eliminate a diagnosis.

In 1987, Rosenberg provided four diagnostic criteria [5], all of which must be present:

- The illness is fabricated or induced by a parent.
- There are repeated requests for medical care for the child, leading to numerous medical procedures.
- The parents deny knowing the causes of the symptoms.
- The symptoms regress when the child is separated from the person responsible for the syndrome.

Rosenberg took another look at these criteria in 2003 [6] and highlighted the difficulties of diagnosing MSbP, leading to inconclusive determinations, wrongful exclusion of MSbP, or, on the contrary, wrongful diagnosis of MSbP when there is some other real pathology. She insisted that MSbP is a pediatric diagnosis, not a psychiatric one, as there is no univocal psychopathological agreement among authors.

She distinguished between:

- Criteria allowing a positive diagnosis, by inclusion or exclusion.
- Criteria for possible diagnosis.
- Inconclusive criteria.
- Criteria allowing exclusion of the diagnosis.

16.3 Epidemiology

The incidence and prevalence of MSbP are difficult to specify, as the diagnosis is often not made and the number of cases found in the various epidemiological studies depends on the defined criteria. The risk is that only the most serious or obvious cases will be included, which could lead to underestimating the incidence of the syndrome.

One can nevertheless suppose that it is not a rare syndrome. Among siblings of certain MSbP victims, one often finds a complex medical history that could result from a factitious disease, including situations of abusive treatment or negligence, or deaths from unknown causes from birth to the age of 18 months.

A review of the literature published in 2003 by Sheridan [7] analyzed 451 cases of MSbP published in the United States and Europe, in 154 medical or psychosocial journal articles. The syndrome was found in victims between the ages of a few weeks to adulthood. Nearly a third of the cases were diagnosed before the age of one and 51.7% before the end of a child's second year. The average time frame between onset of the symptoms and the diagnosis was a little less than 2 years (21.8 months), with an average age at diagnosis of 4 years.

Mortality is 6%, and 7.3% of the surviving children had permanent or prolonged damage. Among siblings, 25% of known children were deceased, and 61.3% had a pathology comparable to the indexed case or leading to suspected MSbP.

In 1996 [8], McClure published an epidemiological study covering cases found in Great Britain between 1992 and 1994. Upon the basis of 128 cases, he estimated that the annual incidence is at least 0.5/100,000 in children under the age of 16 and at least 2.8/100,000 in children less than 1 year old. Using larger inclusion criteria, Watson [9] estimated that over a period of 2 years, the prevalence was 89/100,000.

All the available data found in the literature confirms that the syndrome is more frequent among young children and that the sex ratio is 1/1.

16.4 Clinical Signs

Symptoms are fabricated by parents in 25% of cases, including repeated declarations of inexistent symptoms, such as bleeding manifestations [10], addition of maternal blood (from menstruation or self-inflicted injury) to urine, stools or the child's diaper, convulsions, fainting, apnea, vomiting, etc.

In 50% of cases, symptoms are induced, e.g., with the administration of toxic substances or medication such as laxatives leading to chronic diarrhea, emetics, antidepressants, anxiolytics or neuroleptics, hypoglycemic medication [11], theophylline, etc.

Signs can take the form of prolonged fever subsequent to septicemia from septic manipulation of a central catheter, rashes from the application of various colorants and caustics, and bullous lesions from friction.

In 25% of cases, the symptoms are both fabricated and induced.

In a 2000 study that examined 120 cases [12], the initial presentation took the form of convulsions in 24 cases, life-threatening events in 22 cases, lethargy or coma in 13 cases, and hematemesis or rectal hemorrhage in 13 cases.

A recent review of the medical literature describes fabricated or induced neurological manifestations [13].

Other cases have been published more recently, including one in which lethargy and tachycardia led to the discovery of hypoglycemia in an 8-week-old infant [14] and another one of intoxication with salt in an 8-week-old newborn, a situation first published by Meadow [7, 8].

The syndrome has entered fiction as well: Thierry Jonquet, a French writer of excellent crime novels, some of which have been translated into English, described a case of recurrent hypoglycemia by insulin injections that were the object of an investigation in his book *Moloch* [15].

The majority of MSbP cases are encountered in hospital. Emergency-room doctors, gastroenterologists, and pediatric neurologists are the specialists most often confronted with this kind of abuse.

Generally speaking, discrepancy between the fabricated clinical history and lab tests should raise alarm and suggest this diagnosis [16].

It is important to note that symptoms are often induced in the hospital setting [17], which means the dangers persist in the hospital if the perpetrator of the abuse has access to the child.

Doctors find it all the more difficult to suggest a MSbP diagnosis since in 75% of cases, short-term morbidity is caused both by the medical team (which prescribes additional invasive tests and useless and dangerous therapeutic interventions) and by the parents and in 25% of cases by the medical team alone, particularly when the perpetrator of the abuse invents the symptoms without causing them himself (Table 16.1).

False allegations of sexual abuse within a MSbP can occur, often in the context of parental separation [18]. These false allegations are often associated with some induced organic symptoms, notably gynecological in nature, such as perineal irritation.

Table 16.1 MSbP symptoms, induction methods, and diagnostic strategies [5]

Symptoms and incidence	Methods for simulating or inducing	Detection method
Bleeding 44%	Intoxication with anticoagulants Intoxication with phenolphthalein Exogenous blood Bleeding caused by mother	Toxicology screen Stool or diaper testing Blood type testing Observation of mother
Convulsions 42%	Fabrication Intoxication (theophylline, insulin, psychotropic drugs)	Context; interviews with other members of the family Toxicology screening
CNS depression 19%	Intoxication (barbiturate, benzodiazepines)	Toxicology screening (blood, urine)
Apnea 15%	Strangulation or deliberate smothering	Usually no visual signs
Diarrhea 11%	Intoxication with laxatives Intoxication with salt	Blood in stools Testing Na in urine and stools
Vomiting 10%	Fabrication Intoxication with ipecacuanha	Context Toxicology screening
Fever 10%	Fabrication Bacterial contamination of IV perfusion	Checking temperature Unusual bacteria in culture
Rash 9%	Intoxication Scratching wounds	Toxicology screening Topography the child could not reach

16.5 Perpetrators of the Abuse

Among the 117 cases compiled by Rosenberg in 1987 [5], 97 perpetrators were identified: in 98% of cases, it was the biological mother and in 2% the adoptive mother. The mother—a nurse, social worker, and wife of a doctor—generally had good knowledge of medical topics. Typically, the mother responsible for MSbP appeared to be very cooperative and seemed to want to help the doctors to understand the child’s medical problems. She was constantly present at the hospital with her child and blossomed in an environment that others found depressing. Caregivers often found her “admirable.”

These mothers were not considered sick on a psychiatric level, but frequently they had had a difficult childhood, and many of them said they had undiagnosed diseases, history of depression, suicide attempts, and personality disorders. It appears that these mothers are trying to take the center stage and use their child to attract attention to themselves. Some MSbP mothers recently published blogs [19] in which they deformed the information given by the caregivers, with occasional requests for financial assistance to meet the child’s needs.

In MSbP involving several siblings successively, the maternal psychopathology is more serious.

The father is often in the background and can be considered a passive accomplice [20].

Sheridan [7] found considerably different results concerning the perpetrators of MSbP: the mother was responsible in 76.5% of cases, the father in 30.6%. In her review of the literature, she found 22.8% of the perpetrators had a psychiatric diagnosis, the most frequent being depression but sometimes various personality disorders: 21.7% had, or said they had, a history of abuse in childhood or by their partner.

16.6 Differential Diagnosis

It is as important not to miss a diagnosis of MSbP as it is not to overdiagnose it. At the two ends of the spectrum of clinical signs that can suggest MSbP, the diagnosis can be wrong, either by a lack of understanding of another pathology that could explain the signs or in the face of excessive maternal concern, in which a mother multiplies doctor visits, sincerely believing that there is some pathology [21]. It is often possible to reassure the mother, but the situation could repeat itself. It can then be necessary to suggest psychotherapy.

16.7 Short- and Long-Term Impact

The children who are victims can be subjected to numerous unpleasant or dangerous interventions (surgery), spend more or less long periods in the hospital, or undergo useless treatments. Their daily life could be considerably impacted through missing school, a limitation of their activities, and the use of a wheelchair to get around. The latter can be requested by parents looking for secondary benefits, such as financial aid for handicapped children. A study by Bools [22] covering 54 children showed that 30 young victims, whose cases had not appeared to be very serious, still lived with their mother; in this group, Munchausen syndrome had continued in ten of them, and eight had major disorders (somatic symptoms, difficulties of concentration, etc.). The 24 other children lived with other family members or in a foster home.

Around half of the children, living with or without their mother, had a range of troubles including conduct and emotional disorders and problems related to school, including difficulties in attention and concentration and nonattendance. In total, 20 children, or half of those that could be followed, had outcomes considered unacceptable. This study demonstrates that separation from the perpetrator of the abuse is not enough to resolve the issues for the children, although the children separated from their mother were doing better than the others.

Another study of 13 children [23] showed that 10 children who were assessed and then returned to their family with therapy had a good evaluation 17 months later. The authors of the study highlighted that it is necessary to provide long-term follow-up to ensure that the children are not subjected to psychological abuse; the parents' mental health must be monitored.

Another study by Bools [24] focused on comorbidity associated with MSbP. The study examined 56 children victims of MSbP and 82 of their 103 brothers or sisters. Sixty-four percent of the index cases had had other MSbP manifestations in the past, and 29% of them showed failure to thrive and 29% a history of non-accidental injury, inappropriate medication, or neglect. A total of 73% of the index cases had suffered at least one of these additional problems. Among siblings, 11% died in early childhood from an unexplained death, 39% were victims of MSbP from their mother, and 17% had a history of non-accidental injury, inappropriate medication, or neglect.

A remarkable document [25] published by the government of the United Kingdom in 2008 (revisited in 2012) for professionals noted that according to international research, mortality in children who are victims of MSbP is around 10%, and around 50% have a long-term morbidity. The consequences can be physical but also psychological and emotional.

Some children, in particular the older ones, collude with the perpetrators in fabricating and inducing pathologies before they eventually become active in fabricating or inducing their own illnesses or in developing a somatization [20]. We can cite the case of a 16-year-old girl [26] with multiple sites of mucous or visceral bleeding that only the mother witnessed; the mother and daughter were obviously colluding in this simulation.

Children who are victims of MSbP can also become abusive when they become parents and can even reproduce MSbP with their own children.

16.8 Management

Initial management should occur as early as possible, which highlights the necessity of bringing up the possibility of MSbP broadly, in order to reduce the diagnostic delays reported in the literature (Table 16.2). Let us recall here that the diagnosis of MSbP is clinical, and it is indispensable to reconstitute the entire past and present medical history of the child and his or her family. The diagnosis is not, in general, made with a single event, but with a series of events over a period of time that is

Table 16.2 Guidelines for early MSbP recognition

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- Suggest MSbP if the clinical and biological signs do not correspond to any medical reasoning
 - Consider scheduled hospitalization to help establish the diagnosis
 - In a hospital context, expect some team members to formally reject the diagnosis, due to the mother's "exemplary" behavior
 - Right from the start, consider tests that can confirm MSbP or the use of a differential diagnosis: MSbP cannot be diagnosed by elimination, and investigating less likely hypotheses could have useless iatrogenic effects
 - Take into consideration other hypotheses that could explain the clinical signs: Anxiety or a parent's lack of knowledge, a parent's psychiatric condition that could lead her to think that the child is sick, or an organic illness in the child
-

more or less long, and treatment could have occurred beforehand in different places. It is highly recommended, when there is suspicion of MSbP, that a referring pediatrician be named to coordinate the investigations and to lead the majority of interviews with the parents.

One question should be raised immediately: is the child in danger? It could be necessary to hospitalize the child urgently and, if the parents do not agree, to request a temporary foster placement via legal channels.

Clinical strategies and those designed to protect the child must be shared among the various teams taking care of the child.

Other diagnostic tools discussed in English-language papers [21] include video monitoring, which cannot be used legally in France.

What should one say to parents when there is suspicion of MSbP? Mentioning it too early, when it is just a suspicion, could push the parents to break from the team in charge and take the child elsewhere. At this stage, it is possible to explain to the parents that the medical team does not understand what is happening very well and that they need to place the child under observation to complete the examination.

Only when a decision to report the case has been made in a multidisciplinary meeting with caregivers who know the child (doctors, nurses, social worker, psychologist, and child psychiatrists), and only then, should the parents be informed and get an explanation for the report being made.

It is recommended that this announcement be made to the parents with tact, in a place that offers intimacy and confidentiality, never in the presence of the child, and by at least two people such as the referring pediatrician and the social worker.

The situation of danger to the child must be clearly enounced to the responsible parent. This often leads the parent to reaffirm any denial of the etiology of the disorders and could lead to “seeking a second opinion” and the medical team no longer seeing the child, unless the authorities have been notified.

A detailed report of the meeting must figure in the child’s medical file.

The perpetrating parent could attempt suicide after such a meeting.

It is hard to provide proof of MSbP and it is not exclusively the role of the caregivers. As in other situations of abuse, they are not required to have proof of abuse or know with certainty who committed the abuse in order to alert the authorities.

In practice, reporting to the authorities is indispensable in the majority of cases and most of the time, protecting the child requires separation from the responsible parent. Keeping the child at home depends for the most part on the manner in which the responsible parent recognizes the facts and accepts the proposal of psychotherapy. In the case of separation, it is rare that the child ultimately returns to that parent’s care [27].

The diagnosis of MSbP, which often meets with initial skepticism among doctors when it is mentioned, risks causing even more skepticism among magistrates. It is therefore necessary to evaluate the situations with extreme care, to provide all the necessary arguments, and to insist on the danger to the child if the abuse continues.

Key Points

- Munchausen syndrome by proxy (MSbP) is a “fabricated or induced illness” that is a severe form of child abuse.
- MSbP is more frequent in young children, with no predominance in one sex or the other.
- Three mechanisms can combine: fabricated symptoms, falsification of clinical or biological data, and/or inducing an illness using various means.
- MSbP is a difficult clinical diagnosis to make, relying on a series of events that have occurred over what is often a long period of time.
- The symptoms regress when the child is separated from the perpetrator.
- The danger persists even in the hospital if the perpetrator has access to the child.
- MSbP has high long-term morbidity.
- Notifying the authorities and separating the child from the perpetrating parent are required in most cases to protect the child.

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