

## **ARTÍCULO ORIGINAL**

# Munchausen syndrome by proxy in Mexican children: Medical, social, psychological and legal aspects

Jorge Trejo-Hernández,\* Arturo Loredo-Abdalá,\* José Manuel Orozco-Garibay\*

\* Clínica de Atención Integral al Niño Maltratado, Instituto Nacional de Pediatría.

#### ABSTRACT

Introduction. The Munchausen Syndrome by Proxy (MSP), is considered as an unusual less frequent variety of child abuse (CA). In this type of abuse the perpetrators purposely provide factitious information, tamper with specimens or actually induce an illness in a child. Nowadays, it is a clinical entity described in pediatrics as more frequently than before. Despite the fact of its presence worldwide, there are still problems in order to get an appropriate diagnostic. It is also difficult to handle both the clinical and legal aspects in various countries. Objective. Make our academic fellows aware of various pediatric, psychological, social and legal aspects of a series of cases attended at the Clínica de Atención Integral al Niño Maltratado from Instituto Nacional de Pediatría (CAINM-INP), Mexico [Integral Clinic of Attention for Abused Children, at National Institute of Pediatrics, Mexico]. Material and methods. From a series of 25 cases, 18 minors of age were considered with this syndrome since we found that they shared medical, psychological, social and legal characteristics. Results. 18 minors of age belonged to 14 families. 4 of those families had two affected children each one. These affected children were girls 13/18, predominant in children under six years in 10/18. Syndrome expression was distributed as follows: fever from a non determined origin, seizures, chronic diarrhea, hematuria, and probable sexual abuse. 14 children were hospitalized. In all cases, the aggressor was the mother. The psychological evaluation of six perpetrators revealed psychotic, histrionic, and compulsiveobsessive traits. The socio-economic condition was low in 50% of the cases. A legal demand was posed for seven patients in which all the children remained under the custody of the mother. Conclusions. In Mexico, reports of CA have increased within the last years according to experience. Some complex forms as MSP require the participation of an interdisciplinary team for both diagnosis and integral attention.

Key words. Munchausen Syndrome by Proxy. Factitious disorder by proxy. Child abuse.

Síndrome de Munchausen por poder en niños mexicanos: Aspectos médicos, sociales, psicológicos y jurídicos

#### RESUMEN

Introducción. El síndrome de Munchausen por poder (SMP) es considerado como una variedad poco frecuente de maltrato infantil. En esta forma de maltrato el perpetrador proporciona a propósito información falsa, altera muestras o induce una enfermedad real en el niño. Actualmente es una entidad clínica cada vez más descrita en pediatría. A pesar de su presentación a nivel mundial, aún existen problemas para su diagnóstico, manejo clínico y legal en varios países. Objetivo. Dar a conocer los aspectos médico-pediátricos, psicológicos, sociales y jurídicos en una serie de casos atendidos en la Clínica de Atención Integral al Niño Maltratado del Instituto Nacional de Pediatría (CAINM-INP), México. Material y métodos. De una serie de 25 casos, se consideraron 18 menores con este síndrome por reunir las características médicas, sociales, psicológicas y jurídicas. Resultados. Los 18 menores pertenecían a 14 familias, donde cuatro de éstas contaban con dos hijos afectados cada una. Fueron niñas 13/18, predomino en menores de seis años en 10/18. La expresión sindromática se distribuyó como fiebre de origen no determinado, convulsiones, diarrea crónica, hematuria y probable abuso sexual. Fueron hospitalizados 14 niños. En todos los casos el agresor fue la madre. La evaluación psicológica en seis perpetradores mostró rasgos psicóticos, histriónicos y obsesivo-compulsivos. La condición socioeconómica fue baja en 50% de los casos. Se practicó denuncia legal en siete pacientes y todos los niños quedaron bajo la custodia de la madre. Conclusiones. En México, los reportes por maltrato infantil han aumentado en los últimos años. Algunas formas complejas como el SMP requieren de la participación de un equipo interdisciplinario para su diagnóstico y una atención integral.

Palabras clave. Síndrome de Munchausen por poder. Trastorno facticio por poder. Maltrato infantil.

## INTRODUCTION

Munchausen Syndrome by Proxy (MSP), also known as factitious disorder by proxy, is a complex and potentially deadly form of child abuse (CA). Even though this pathology is included since 1994 in the Diagnostic Statistical Manual of Mental Disorders, Fourth Edition (DSM IV) as a «Factitious disorder by proxy» (FDP), there still persist numerous difficulties for its knowledge and definition in the pediatric group.<sup>2</sup>

After thirty years since the first description of this pathology in Pediatrics, performed by Meadow,<sup>3</sup> nowadays there are almost six hundred publications of this phenomenon in world's literature. Mainly from countries with a high socio economic level of development, such as: England, New Zealand, USA, and recently Japan.<sup>4-8</sup> However, in the so called "third world countries", this clinical entity is not well known. As a result of this, it is also poorly described.<sup>9-10</sup>

In Mexico there are isolated reports of patients in the pediatric field and mental health.<sup>11,12</sup> From those, reports of thirteen cases stand out that were attended at the "Clínica de Atención Integral al Niño Maltratado del Instituto Nacional de Pediatría (CAINM-INP)", where we emphasize the clinic expression, the characteristics of the minor and those of the aggressor.<sup>13</sup>

Therefore, it is possible to suppose that pediatricians, family doctors and general medics attending children, do not know this pathology, which is also clinically diverse.

Since that time, there has been much discussion as to whether the definition should apply to the parent, the child, or both.

Recently, the American Professional Society on the Abuse of Children (APSAC) has recommended that the child who is the victim of this abuse be diagnosed with "Pediatric Condition Falsification" (PCF) and that the term Factitious Disorder by Proxy (FDP) be reserved for the psychiatric diagnosis of the caretaker who causes the abuse. The caretaker often harms her child though PCF for particular self-serving psychological needs. The term Munchausen by proxy then refers to the abuse caused by these two disorders. They termed the abuse of the child 'pediatric condition falsification' (PCF), which may or may not be associated with FDP.

The APSAC guidelines, therefore, specify that both FDP and PCF must be present for a diagnosis of MSP to be made. PCF committed with intent other than fulfilling psychological needs is therefore not MSP, but should still, in most cases, be classified as child abuse, and appropriate reporting and involvement of social services should take place.<sup>14</sup>

Yet, it is necessary to emphasize that in some cases it may be possible to be precise in diagnosing the factitious disorder by proxy of the aggressor; nonetheless in other cases such a possibility is absent, and that does not mean that the syndrome does not exist. In this way, we cannot corroborate that this element is always present.

In order to support in children the "Pediatric condition falsification", we use criteria proposed by Rosenberg, <sup>15</sup> which are the following:

- The presence of a simulated illness which the children claim to suffer, caused by a parent or somebody taking care of the children.
- Minor is presented for medical evaluation in a persistent way, and usually giving rise to multiple medical procedures which are not always necessary.
- Knowledge on the etiology related with the illness of the child is denied by the aggressor, despite the fact that they possess information about the case; and
- Both signs and acute symptoms tend to disappear in the children once they are separated from the aggressor.

The PCF is a form of child abuse, where the caregiver causes injury to a child that involves unnecessary and harmful or potentially harmful medical care. Any time that a dependent child is being hurt by an adult's action, child protective services should become involved.

There is no typical presentation of PCF. Suspicions may arise when parents misinterpret or exaggerate normal behaviors, and true cases range from apparent fabrication of reported symptoms to outright fabrication of signs of disease.

Some authors classify clinical manifestations on the basis of syndromes in order to facilitate medics to suspect the diagnosis. This also permits medics to establish a diagnosis. Of those syndromes, we can point out some patterns of seizures which are accompanied with suffocation of caused apneas. There is also a history of recurrent bleeding (hematemesis, melen, hematuria), and the sudden alteration of the state of consciousness (either somnolence or deep comma). We can also find fever of an unknown origin where in some cases there is not an etiological explanation. In other occasions we can identify alte-

rations in a sample for laboratory tests (blood in urine), the presence of medicines as either barbiturate or tricyclic antidepressants in a blood level, or the presence of an infectious persistent process for non common germs. <sup>16-20</sup> Actions of this sort are usually caused by the mother as a consequence of an important alteration of her personality.

This investigation aims at presenting to the medical community and paramedic the medical, psychological, social and legal aspects of MSP syndrome attended by CAINM-INP, through 2000-2007.

#### MATERIAL AND METHODS

An analytical, observational, and retrospective study was done in 25 documented cases at CAINM-INP. From them, 18 satisfied the bare four fundamental areas in the team interdisciplinary work (pediatricians, psychologists, social workers and lawyers). In this study both patients and families were considered. Information was obtained from a review of clinical files. In all cases diagnosed as MSP we founded our research on established criteria proposed by Rosenberg. Socio demographic variables of the minors include: age, sex, nutritional state (weight/size).

Clinical manifestations in children were grouped according to symptoms present in this syndrome. Psychiatric evaluation of those mothers who accepted treatment was possible through interview and criteria associated on the basis of DSM-IV.<sup>2</sup>

The socio-demographic status of families was studied applying the Mc Master scale.  $^{21}$ 

The juridical condition of minors, family, and possible aggressor was based upon the report of a competitive authority.

#### RESULTS

#### General characteristics

Are described in table 1. Minors belonged to female sex 13/18 (72 %). The age studied went from 5 months to 12 years. Of those, four were lactating children, six preschoolers students, three attended primary school, and five teenagers.

Of all this, six presented associated malnutrition: four of them in a moderate way, and two of them in a severe way affecting size.

All 18 minors belonged to 14 families where four of them counted with two affected children each one.

#### Pediatric medical aspects

The main clinical manifestation which motivated this study, made by diverse specialties, is described in tables 1 and 2.

Average time for suspecting MSP was 14.1 months.

Clinical incoherence was the most observed diagnostic 11/18.

MSP was detected when children were hospitalized  $14/18 \ (78 \ \%)$ .

More than five subspecialists were consulted 16/18 (89 %).

Table 1. Characteristics of victims of MSP.

Average gender and age of victim at diagnosis	Family structure when abused (No.)	Symptoms reported among the victims (Falsifications illness)	Psychiatric evaluation accepted for the mother	Report to authorities
F 11 <sup>a</sup>	(1) BM	Fever of unknown	No	No
F 2º11m	(2) BM, FF	Hemorrhagic syndrome	No	No
M 9m	(3) BM	Fever of unknown	No	No
F 5m	(4) BM	Chronic diarrhea	Yes	Yes
F 2ª 9m	(5) BM	Sexual abuse	Yes	Yes
F 4a; F 12a	(6) BM	Unconsciousness	Yes	Yes
M 10a	(7) BM, BF	Chronic diarrhea	No	No
M 3a; F 8a	(8) BM, FF	Seizures	No	No
F 2a 3m	(9) BM	Fever of unknown	No	No
F 10a; F 8a	(10) BM, FF	Hematuria	No	No
F 8a; F 11a	(11) BM	Sexual abuse	Yes	Yes
F 5m	(12) BM	Hypoglycemia	Yes	Yes
M 1a 11m	(13) BM	Chronic diarrhea	Yes	No
M 4a 10m	(14) BM, BF	Hematuria	No	No

BM: Biological mother. BF: Biological father. FF: Foster father.

Table 2. Pediatric characteristics MSP.

• Sex Female	10/18
Malnutrition     Moderate     Severe	4 2
<ul> <li>Provocation mechanism         Simulation         Induction         Simulation-induction</li> </ul>	6 11 1
Confirmed diagnosis     Clinical incongruence     Separation of minor     Conduct or actions against the child's health	11 (61%) 4 (22%) 3 (16%)
Site of diagnosis     Hospital     As outpatient	14 (77%) 4 (23%)
<ul> <li>Previous hospitalizations         Yes</li> </ul>	13 (72%)
<ul> <li>MSBP-associated co-morbidity</li> </ul>	
Number of consulted specializations	
< 5	2 (11%)
5 to 10 > 10	11 (61%) 5 (28%)
	3 (20%)
Invasive procedures     Yes	14 (77%)
<ul> <li>Association to other types of abuse         Physical         Sexual         Psychological         Negligence     </li> </ul>	13/18 6 2 4 1
Siblings affected with similar illness     Yes	4 (29%)
100	- (LO /0)

Children were submitted to many invasive procedures 14/18 (77%). Studies were made on seven patients using anesthesia as: Computerized Axial Tomography, gamma graph or esophagus-gastroduodenal series. Three of the children suffered a biopsy; two of them suffered from an aspiration of the medulla, and two were intervene with a surgery.

We could establish an association with physical abuse in six cases, psychological abuse in four cases, sexual abuse in two cases, and one case of negligence.

# Psychological aspects

## General characteristics of the aggressor

These characteristics can be reviewed in table 3. From them we distinguish the following:

Table 3. Perpetrator's characteristics MSP.

Clinical behavior	
<ul><li>Knowledge of medicine</li><li>Empathy with health personnel</li><li>History of MSP</li></ul>	6/14 (43%) 7/14 (50%) 5/14 (35%)
Psychological and psychiatric aspects	
<ul> <li>Psychological aspects n = 6         High IQ         Low self-esteem         Low frustration tolerance         Problems relating to people</li> </ul>	4/6 4/6 5/6 4/6
<ul> <li>Psychiatric aspects n = 6         Psychotic traits         Hysterical traits         Obsessive-compulsive behavior         Paranoid traits         Schizophrenic traits     </li> </ul>	5/6 4/6 3/6 2/6 2/6

In all cases the aggressor was the mother.

Mechanisms to cause the problem in children were, mainly, induction 11/18. Simulation was observed in six cases, and both mechanism and simulation (induction-simulation), were observed in one case.

The level of medical knowledge these mothers had was related to some sort of activity in this field: two of them said they were doctors, one said she was a social worker, one had knowledge as a nurse, another belonged to the cleaning personnel at INP, and another got information from the internet.

Seven mothers established a plain empathy with the health personnel by means of gifts (four), invitations to have meal (two), and one of them exhibited a seductive behavior.

In 5/14 mothers were found to have suffered MSP as children.

### Psychiatric and psychological evaluation

We could only make a psychological evaluation in six mothers. The other eight mothers did not collaborate either directly or indirectly for different reasons. Some of them arrived late to appointments saying that they did not have time. They also did not complete tests since they were afraid of being appointed as bad mothers.

It was necessary to point out that the intellectual level of the mother was outstanding in three cases. Self esteem was reported to be low in four, medianaverage in one, and high in the other. We could establish intolerance to frustration in five mothers. One of them showed an aggressive behavior. The main personality traits were: psychotic stages, hysteric attitudes and obsessive-compulsive behavior. Two mothers only presented a difficulty in socialization.

## Family aspects

In table 4 we present both family and social characteristics. The socio economic condition was low in 50% of the cases.

As the place of origin, 10 mothers lived in the Federal District, 2 in the State of Mexico, 1 in Aguascalientes, and 1 in Guanajuato. It is to be noticed a single parent family in 9/14 (65 %).

Five mothers had a job (35 %). They possessed a house of their own, 5/14 (35 %).

#### Legal aspects

A legal demand was posed is seven patients. Five demands were made by CAINM-INP team, and two demands were made by the father. The CAINM-INP team was followed in seven cases, and all patients returned to live with the mother since 'authorities' didn't find basis for saying that there was maltreatment or bad attention to children.

### DISCUSSION

Even though worldwide MSP is still considered as an uncommon entity of CA, publications of cases with this pathology, compared with other forms of maltreatment, is increasing. As a result, we have more clinical evidence of the phenomenon.<sup>1,7,8</sup>

Due to the complexity of the clinical picture of this pathology, it is very difficult to establish both a frequency and real incidence of the syndrome. Although CAINM-INP has developed an interdisciplinary activity, in each of the 25 cases studied, only in 18 cases we could gather the necessary information for inclusion in this study (Table 1).

The demographic variables studied in children showed that the age of the victim can be a useful indicator in this pathology. Patients have been described since the first months of life, or through the first decade of life. Usually, children under six years old are the most frequently affected, which is confirmed with the fact that 10/18 belonged to this group of age. According to sex in victims, literature does not point out a noticeable difference. In this study, we found that 13 out of 18 patients were girls. We could not relate this phenomenon neither

to their age nor to their social status. Nevertheless, it is necessary to mention that in four cases where we found that a brother had been victim of MSP, all were girls. At the same time, from a group of four families the youngest child was the most damaged (the number of hospitalizations, specialties involved in interventions, and time of visit to hospitals, were included data). This suggests that siblings are being inadequately protected by the child protection process and that greater emphasis should be placed on protection of these children rather than waiting for firm evidence of individual abuse. It is important to establish that three of this four cases corresponded to girls younger than their sisters who were detected afterwards. Surely, a major casuistic would let us find a more logical explanation on this matter.

The nutritious state of the victim is an indicator which is no very much studied in literature.<sup>23</sup> We found a sequence from moderate to severe state of malnutrition in the third part of the 18 cases studied. Generally, this phenomenon was caused by cases of chronic diarrhea as described.<sup>24</sup> However, it is quite possible that in the generation of this pathology other factors intervene as the chronic character of the problem, as well as its co-morbidity in infections, neurological symptoms, and fever, mainly.<sup>23</sup> Within the neurological context of some patients, the physician must remember that clinical manifestations tend to vary. We go from an apparent chronic psychomotor delay till the sudden presence of somnolence, seizures, or loss of consciousness without an evident cause.

A feature of the syndrome is the delay in diagnosis. We found a mean time from onset of symptoms to diagnosis of 14.1 months in our cases; this finding was similar to results described by Rosenberg.<sup>5,15</sup> The early detections of the syndrome remains a problem for the physician group. In this regard, it is important to note the role of physicians and other members of the team of health in the detection and perpetuation of MSP. Physicians who have a genuine desire to help the child and to establish a diagnosis must be aware that the very qualities that make them good pediatricians may, in cases of MSP, make them more vulnerable to manipulation by the perpetrator. Several authors argue that medical interest and active participation with the child and parent(s) through the investigative and diagnostic process is the crucial factor in the maintenance of the syndrome.<sup>25</sup> If we as medical professionals do not recognize the cause of symptoms as abuse, we contribute to the damage.

Table 4. Family and social aspects MSP. Families = 14.

Age     Maternal     Paternal	Mean 32.5 Mean 33
Mother's marital status     Separated     Second partner     Domestic partner     Single mother	8 (57%) 3 (21%) 2 (14%) 1 (7%)
<ul> <li>Mother's education         Elementary         Jr. High         Sr. High         Technical level         University degree</li> </ul>	1 (7%) 3 (21%) 2 (14%) 2 (14%) 6 (49%)
Father's education     Elementary     Jr. High     Sr. High     University degree     Unknown	1 (7%) 3 (21%) 4 (29%) 2 (14%) 4 (29%)
Mother's occupation     Housewife     Teacher     Employee	9 (65%) 2 (14%) 3 ( 21%)
Father's occupation     Employee     Professional     Unemployed     Unknown	8 (57%) 1 (7%) 1 (7%) 4 (29%)
History of alcoholism     Father	4 (29%)
Dwelling     Own     Rented     Shared with a relative	5 (35%) 3 (21%) 6 (49%)

As noted, the pediatrician is frequently a central figure in perpetuating MSP abuse through unnecessary or harmful treatment. Therefore, a recommended strategy to stop the abuse is improvement in the capacity to recognize MSP by the pediatrician and the health care system; this will contribute in reducing morbidity, the subsequent management must be guided by a child maltreatment team.

Pediatric condition falsification can be carried out through simulation (i.e., false reporting of symptoms, chart falsification, or contaminating lab samples), production of symptoms (that is, any action that affects the child's body), or both. Common presentations include apnea, CNS depression, seizures, bleeding, vomiting, diarrhea, fever, rash, allergies, or psychiatric symptoms.

Before an acute chronic pattern of unconsciousness, it is necessary to discard a pharmacological intoxication, the tricyclic antidepressants should be considered, or a case of hypoglycemia. <sup>12,18,26</sup> We insist in this last etiology from our experience in a case which presented frequent loss of consciousness. For this reason, this girl was attended in three different pediatric hospitals of the City and in four times in the shock room of the INP.

In all the occasions we found hypoglycemia, and, therefore, we made many studies in order to discard an organic cause. Suspect about the fact that these episodes were intentionally caused came out when the girl was hospitalized and did not present hypoglycemia, yet the 'illness' came back again after 24 hour of being in her home. The hospitalization was a consequence of that fact. The psychological study of the mother showed that the mother suffered from a psychopathic personality.

Diagnosis of the fabricated disease can be especially difficult, because the signs and symptoms are undetectable (when they are being exaggerated or imagined) or inconsistent (when they are induced or fabricated). Our review of cases suggests that induced illness was the more reported. This may reflect the higher likelihood of more severe cases occur in the hospitals. Induced illnesses included: poisoning, medications given inappropriately, infections related to injection of non-sterile materials into medically placed lines or into the skin, starvation and seizures from overdoses of medications.

The study of the syndrome is diverse because it is diverse itself. Children were sent to the hospital, which permits us to prove the initial complexity of these cases since we could not corroborate the appointed clinical pattern for the mother. This must lead medics to suspect MSP. So, it is very common that we misunderstand the clinical approach in cases of MSP. For this matter we can understand the intervention of numerous groups of pediatricians and subspecialists. 25,27 The series of our study was composed by 10 subspecialists. It also included a great quantity of laboratory tests, and diverse surgical procedures which the patients were submitted to. This was done with a single purpose: to identify an organic etiology. With frequency health care professionals can be seduced into prescribing diagnostic tests and therapies that are potentially injurious. Therefore, any case in which PCF is strongly suspected should be discussed with a multidisciplinary team, including the hospital's child protection team and legal counsel, and a report should be made to child protective services if indicated.

On the other hand, association with other modalities of maltreatment, as sexual abuse, physical abuse, negligence, as shown in our series of studies, make difficult the specific diagnosis at the time of adding the clinical characteristic data of this association. 5,23,27

Despite de clinical severity observed in some patients, the difficulty in establishing a diagnosis, and the fact that the mother was the mechanism of induction, no one suffered any death. We must remember that the overall mortality from MSP has been reported as 6-10%, but may be as high as 33% when suffocation or poisoning is involved. In addition, pediatricians handling these cases should be more careful in order to prevent any fatalities.

Taking into account that in most cases the active aggressor is the mother, we could determine that this was the case in 18 patients. Therefore, it is quite important to point out that before a clinical picture as the mentioned above, we must both analyze and consider the behavior of the mother with her daughter. It is to be considered also the behavior of the mother with personnel related to medicine: doctors, nurses, paramedics, in order to register such behavior as an important element to suppose and establish a diagnosis of MSP, according to ASPAC criteria. 1,14

In this last condition we must have in mind that the mothers are apparently dedicated and tender to their children. This is quite clear when another person is present, mainly in the presence of health personnel. These women usually establish empathy with doctors, nurses, and social workers, whom they tend to show kindness, cooperation, and seductive behavior too.<sup>28</sup>

They are secure based upon the knowledge they have about different clinical aspects having to do with the supposed pathology of their son. It is obvious that this behavior is a consequence of her personality problem. This is a characteristic that other authors have determined already as well in six cases evaluated in our series.<sup>29,30</sup>

In some cases of maltreatment we have described that an abused child will be an adult who will maltreat their child, however, in the MSP it has not been exactly studied. We should add that five of the mothers suffered this kind of maltreatment, which leads us to pose the hypothesis about the possibility of generational transmission (which constitutes material for investigation).

We could identify that in these women there is a high intellectual level, usually above the average, as we have already said. This is the reason why they use the medical knowledge they achieved through the pediatric attention of their child, which permits them to understand and handle medical terminology. They falsify both signs and symptoms of which the patient does not suffer from. This constitutes a key condition to attack the minor and convince medical personnel that they must have a full dedication to their child. They also realize that these mothers use any excuse to avoid the attention of a professional of mental health for the evaluation that is requested as it happens in other cases.<sup>31</sup> In all six cases studied we found that four of them had low self esteem which explains their need to be accepted as good mothers. A low tolerance to frustration in five cases explains why they behave aggressively against their closer relatives. They can also be mentally sick women suffering of mental instability<sup>31,32</sup> (Table 3).

Though in general terms, it is very difficult to psychologically study these mothers, doctors attending these cases must raise awareness in mental health professionals about the importance of dealing urgently with these mothers. In order for them to accept such handling, it is necessary to establish a strategy of persuasion.

We have already said that in MSP there is a general tendency of avoiding psychological evaluation and psychological follow up in the case of mothers. We have to remember that mothers are usually afraid of the legal consequences since they are aware of their lies. This does not mean that there is no abuse, so the strategy is to count with an experienced interdisciplinary team which knows how to deal with this pathology in order to support diagnosis. 1,27

To achieve that six mothers accept psychological attention was a consequence of having implemented a strategy done in CAINM-INP.

In some cases, a strategy that is helpful in the diagnosis of MSP, is to separate the child from the mother. This has been observed in four cases. Therefore, medical personnel must observe and record the mother's attitude with the child, either when alone or before them.<sup>33</sup>

All this makes possible that we accomplish two objectives: first, to confirm our suspect of MSP, and second, to offer a transitory measure of protection for the child. It is important to register this expe-

rience in video since its efficacy has been proven in other investigations.  $^{34}$ 

It is also clear that the identification of personality disorder in the mother would lead us to have a proper therapeutic intervention.

The reproduction of this phenomenon in a brother is a situation described in 60 % of cases. <sup>1,24,33</sup> In this study we could determine such an association in four patients in establishing the diagnosis of MSP in his four brothers.

The implications for the management not only of the index children in cases of fabricated illness, but also of the siblings, are clear. In a family where this behavior has occurred, the risk to all children in the family, of a variety of abuses and neglect, is high.

For this reason, medics attending these patients must look for this associated risk.

The socio-family situation is an aspect which has not been studied enough. 6,24 More than half of the cases belonged to mono parental families, when the mother is separated from the father (Table 1 and 4). Despite his academic level, the mother does not work in the majority of the cases. The main economic support was the father; sometimes a close relative. It is possible that this explains why 50% of families under the study belonged to a low economic level. However, this does not avoid considering the fact that this syndrome can be present in other economic classes.

Having found patients from four different states of the Country, we can raise the point about the universality of the problem in Mexico. The fact that we found most cases in the DF (Federal District), is because our institute has a major incidence according to the high density of the population.

Six families lived in their grandparent's house. Other families lived with another relative. We tend to believe that this pathology can also be observed in populations of countries with emergent economies, within an urban environment, as much as both with a labor and academic level going from middle to high.<sup>9-10</sup>

One of the big problems of this type of maltreatment is to be able to establish a complete interdisciplinary handle which can be adequate, while protecting the child from further harm.<sup>34</sup> The use of a multidisciplinary team (including pediatricians and subspecialists, nurses, social workers, the child protection team, and hospital legal counsel) is essential in this process.<sup>1,26</sup> This is a similar situation in developed countries in spite of the fact that there is a more developed sensitivity in both the legal and medical aspects.<sup>1,27</sup>

In Mexico it is mandatory, according to NOM-190-SSA1-1999,<sup>35,36</sup> to pose a judicial demand once a diagnosis is established. Yet, we have experienced frequently that clinical data of the victim and the psychological evaluation of the mother cannot be sufficient proof so that legal authorities consider that there is MPS. Therefore, the authorities do not issue an order to protect the child. The child is not sent to an institution, or to a relative, in order to achieve secondary support. This protection should be provided by the state while the mother is in psychiatric treatment. In seven denounced cases this situation was verified since the authority decided to maintain the custody of the child in the mother's hands. This confirmed that the risk of reabuse in these children is high if they remain unprotected. This is the reason we could not establish a proper coverage of the cases. The physical condition of the children is unknown for that very reason. There is a deep ignorance in Mexico about the legal handle of this maltreatment.

If the parent's care-seeking is harming the child but the parent refuses to cooperate with the physician in limiting the amount of medical care to an appropriate level, the state child protective services agency should be informed. If the parent persists in harming the child, medical child abuse should be reported in the same way as physical and sexual child abuse. Any time that a dependent child is being hurt by an adult's action, child protective services should become involved.<sup>27</sup>

The judicial aspect of these patients is complex. Not only for professionals dealing with this medical pathology, but also for general attorneys and lawyers who also ignore this pathology. This happens even in countries where it is supposed to have a higher sensitivity before the problem. <sup>1,5,36</sup>

Efforts should be made from the medical area to convince those who have power to decide that abuse is real MSP, which is not uncommon, it should included in the legal statutes as a separate species of abuse/neglect, policies and procedures relevant to MSP must be reviewed and that the formation of interdisciplinary teams of health is essential.

So it is fundamental to sustain medically that the etiology of the clinical pattern does not correspond to an organic specific pathology. In some cases, we can conclude that there is a mental disorder in the mother, as it is pointed out by ASPAC. Such a disorder is of a high risk since the mothers appear to have "a very good treatment of their child", having an empathetic behavior with the medical personnel.<sup>37,38</sup>

The pediatrician is frequently a central figure in perpetuating MSP abuse through unnecessary or harmful treatment and in defending the seemingly dedicated and loving parent. Our recommendation is that for the diagnosis and management of child abuse cases in the medical setting "a pediatrician with experience and expertise in child abuse should be consulted". If the physician has access to a multidisciplinary child protection team, the team can help coordinate efforts to protect the child and facilitate communication with the state child protection agency.

Finally, it is very important that the teams consider in an objective manner the emotional impact in the child, the family, and medical personnel, as much as the economic impact in both the medical institution and the family.<sup>39</sup> Within this last subject, it is necessary to take into account the time of hospitalization which can be extended in unpredictable ways, even for weeks or months. In some cases, the period of hospitalization elapsed till six months.<sup>6,13,14</sup>

It has been reported that 75% of the morbidity to the child 'occurred in hospitals and at the hands of the physician. Therefore, it is important to involve all the treating physicians in the process to avoid in a child unnecessary harmful or potentially harmful medical care.

There also needs to be pediatric follow up of the family, especially when the child remains in the care of the perpetrator. This would usually be by the pediatrician who made the diagnosis and is most familiar with the abuse, or by a specialist in child protection.

All aspects analyzed in this paper claim to offer both to health personnel and judicial professionals with clear information of this phenomenon. We make an emphasis in the clinical aspects of the minor. We also pose an important signal upon the emotional aspects of the mother, judicial problems, and economical impact as a result of the syndrome. This pathology permits the development of an interdisciplinary professional activity and the need for an interinstitutional work which is mandatory to be followed in XXI century.<sup>40</sup>

#### CONCLUSION

The MSP is a variety of maltreatment described worldwide, each time reported more frequently. This syndrome presents itself no matter the socio economic level of the families. It is a complex form of child abuse (CA) requiring the participation of both a specialized and interdisciplinary team in attending this pathology. This work intends to enlighten upon the subject of diverse medical aspects, and also psychological, social and judicial traits of the syndrome.

#### REFERENCES

- Galvin HK. Newton AW, Vandeven AM. Update of Munchausen syndrome by proxy. Curr Opin Pediatr 2005; 17: 252-57.
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (DSM IV). Washington DC: American Psychiatric Association; 1996, p. 483-7.
- Meadow R. Münchausen syndrome by proxy in the hinterland of child abuse. *Lancet* 1977; 31: 332-5.
- Feldman MD, Brown RM. Munchausen by proxy in an international context. Child Abuse & Neglect 2002; 26: 509-24.
- Sheridan MA. The deceit continues: an updated literature review of Munchausen Syndrome by Proxy. Child abuse & Neglect 2003; 27: 431-51.
- Goñi GT, Marínez RM, De la Cerda OF, Gómez TI. Síndrome de Munchausen por poderes. An Pediatr 2008; 68(6); 609-11.
- Catalina L, Mardomingo J. Síndrome de Munchausen por poderes: revisión de 35 casos de la literatura. An Esp Pediatr 1995; 42: 269-74.
- Fujiwaraa T, Okuyamaa M, Kasaharaa M, Nakamura A. Characteristics of hospital-based Munchausen Syndrome by Proxy in Japan. Child Abuse and Neglect 2008; 32: 503-09.
- Garrote N, Indart AJ, Puentes A, Smith M, Bagge P, Pérez CM. Síndrome de Munchausen por poder y manifestaciones de supuesto evento de aparente amenaza a la vida. Arch Argent Pediatr 2008; 106(1): 47-53.
- Guiraldes E, Bernard D, Trevino X, Larrain F. Factituius gastrointestinal hemorrhage in 3 school-age girls. Rev Méd Chil 1996; 123: 874-9.
- Loredo-Abdalá A, Carbajal RL, Sierra GQ, Skvirsky OD. Síndrome de Munchausen en niños: Informe de dos casos. Bol Med Hosp Infant Mex 1991; 48: 121-5.
- Montoya CM. Síndrome de Münchausen infantil inducido por adultos mediante intoxicaciones. Rev Med IMSS 2001; 39: 469-71.
- 13. Trejo Hernández J, Pérez Espinosa JR, Loredo Abdalá A. Síndrome de Münchausen por poder. Enfermedades inducidas y/o fabricadas en el niño por un adulto. Comportamiento clínico de los menores y sus perpetradores. Acta Pediatr Mex 2002; 23(6): 412-3.
- Schreier H. Munchausen by proxy defined. *Pediatrics* 2002; 110: 985-8.
- Rosenberg DA. Web of deceit. A literature review of Munchausen syndrome by proxy. Child Abuse & Neglect 1987; 11: 547-63.
- McClure RJ, Davis PM, Meadow RS, Sibert JR. Epidemiology of Munchausen syndrome by proxy, non-accidental poisoning, and non-accidental suffocation. *Arch dis Child* 1996; 75: 57-61.
- 17. Valentine JL, Schexnayder S, Jones JG, Sturner WQ. Clinical and toxicological findings in two young siblings and autopsy in one sibling with multiple hospital admissions resulting in death. Evidence suggesting Münchausen syndrome by proxy. Am J Forensic Med Pathol 1997; 18: 276-81.
- Aranibar H, Cerda M. Hypoglycemic seizure in Munchausen by proxy syndrome. *Pediatric Emergency Care* 2005; 21: 378-79.
- Seferian EG. Polymicrobial bacteremia: A presentation of Munchausen syndrome by proxy. Clinical Pediatrics 1997; 36: 419-22

- Salmon RF, Arant BS, Baum MG, Hogg RJ. Factitious hematuria with underlying renal abnormalities. *Pediatrics* 1988; 82(3): 377-9.
- Awadallah N, Vaughan A, Franco K, Sharaby N, Goldfarb. Munchausen by proxy: a case, chart series and literature review of older victims. *Child Abuse and Neglect* 2005: 29: 931-41.
- Bools CN, Neale BA, Meadow SR. Co-Morbidity associated with fabricated illness. (Munchausen syndrome by proxy). Arch Dis Child 1992; 67: 77-9.
- Lasher LJ, Feldman MD. Celiac disease as a manifestation of Munchausen by proxy. South Med J 2004; 97: 67-69.
- Schreier HA, Libow JA. Munchausen by proxy syndrome: a modern pediatric challenge. J Pediatr 1994; 125: S110-S115.
- Marcus A, Ammerman C, Bahro M, et al. Benzodiazepine administration induces exogenic psychosis: a case of child abuse. *Child Abuse & Neglect* 1995; 19: 833-36.
- Stirling J and Committee on Child Abuse and Neglect. Beyond Munchausen Syndrome by Proxy: Identification and Treatment of Child Abuse in a Medical Setting. *Pediatrics* 2007; 119: 1026-30.
- Pompili M, Mancinelli I, Girardi P, Ruberto A, Tatarelli A. The importance of transference and countertransference in Munchausen Syndrome by proxy. *Child abuse & Neglect* 2003; 27: 353-5
- Bools C, Neale B, Meadow RS. Munchausen syndrome by proxy: a study of psychopathology. *Child Abuse & Neglect* 1994; 18: 773-88.
- Marcus A, Ammermann C, Klein M, Schmidt MH. Munchausen syndrome by proxy and factitious illness: symptomathology parent child interaction and psychopathology of the parents. Eur Child Adolesc Psychiatry 1995; 4: 229-36.
- Schreier HA. Factitious presentation of psychiatric disorder: When is it Munchausen by proxy? Child Psychology & Psychiatry Review 1997; 2(3): 108-15.
- 32. Polledri P. Munchausen syndrome by proxy and perversion of the maternal instinct. *The Journal of Forensic Psychiatry* 1996: 7(3); 551-62.
- 33. Schreier HA. Munchausen by proxy. Curr Probl Pediatr Adolescent Health Care 2004; 34: 126-43.

- Hall DE, Meyyazhagan S, Kenney RD, Johnson SC. Evaluation of Covert Video Surveillance in the Diagnosis of Munchausen Syndrome by Proxy: Lessons from 41 Cases. Pediatrics 2000; 105: 1305-12.
- 35. Perea MA, Loredo AA, Trejo HJ, Monroy VA. Responsabilidad del pediatra ante la Norma Oficial Mexicana NOM-190-SSA1-1999. Prestación de Servicios de Salud. Criterios para la Atención Médica de la Violencia Familiar. Rev Mex Pediatr 2002; 69: 37-40.
- Academia Mexicana de Pediatría. Novedades Clínicas y Jurídicas del Maltrato Infantil. Programa de Actualización Continua en Pediatría. México: Editorial Intersistemas; 2004.
- Donald T, Jureidini J. Munchausen Syndrome by Proxy. Child abuse in the medical system. Arch Pediatr Adolesc Med 1996; 150: 753-8.
- 38. Eminson M, Jureidini J. Concerns about research and prevention strategies in Munchausen Syndrome by Proxy (MSBP) abuse. *Child Abuse & Neglect* 2003; 27: 413-20.
- Sanders M. Hospital protocol for the evaluation of Munchausen by proxy. Clin Child Psychol Psychiatry 1999; 4: 379-91.
- 40. Loredo AA, Trejo HJ, García PC, López NGE, Perea MA, Gómez JM, Casimiro VA, et al. La Clínica de Atención Integral al Niño Maltratado: Implementación de una estrategia de aplicación nacional en investigación, docencia y asistencia. Bol Med Hosp Infant Mex 2009; 66: 283-92.

#### Reimpresos:

#### Dr. Jorge Trejo-Hernández

Instituto Nacional de Pediatría Insurgentes Sur 3700-C Col. Cuicuilco, Coyoacán 04530, México, D.F. Tel. y Fax (55) 1084 0900 Ext. 1411

Correo electrónico: jorgethz@yahoo.com.mx

Recibido el 18 de diciembre 2009. Aceptado el 18 de noviembre 2010.