



CLINICAL REPORT

Caregiver-Fabricated Illness in a Child: A Manifestation of Child Maltreatment

abstract

FREE

Caregiver-fabricated illness in a child is a form of child maltreatment caused by a caregiver who falsifies and/or induces a child's illness, leading to unnecessary and potentially harmful medical investigations and/or treatment. This condition can result in significant morbidity and mortality. Although caregiver-fabricated illness in a child has been widely known as Munchausen syndrome by proxy, there is ongoing discussion about alternative names, including pediatric condition falsification, factitious disorder (illness) by proxy, child abuse in the medical setting, and medical child abuse. Because it is a relatively uncommon form of maltreatment, pediatricians need to have a high index of suspicion when faced with a persistent or recurrent illness that cannot be explained and that results in multiple medical procedures or when there are discrepancies between the history, physical examination, and health of a child. This report updates the previous clinical report "Beyond Munchausen Syndrome by Proxy: Identification and Treatment of Child Abuse in the Medical Setting." The authors discuss the need to agree on appropriate terminology, provide an update on published reports of new manifestations of fabricated medical conditions, and discuss approaches to assessment, diagnosis, and management, including how best to protect the child from further harm. *Pediatrics* 2013;132:590–597

INTRODUCTION

Few conditions are as difficult to diagnose and manage as illness induced or falsified by caregivers. Although this condition has been widely known as Munchausen syndrome by proxy, there is ongoing debate about alternative names, including pediatric condition falsification, factitious disorder (illness) by proxy, child abuse in the medical setting, and medical child abuse. The previous clinical report from the American Academy of Pediatrics called this form of maltreatment "child abuse in a medical setting," noting that it can include physical abuse, medical neglect, and psychological maltreatment.¹ This term was used to focus attention on the harm caused to the child. Roesler and Jenny² concurred that pediatricians should focus on the maltreatment that happened to the child rather than the offender's motivation. They coined the term "medical child abuse," which they defined as "a child receiving unnecessary and harmful or potentially harmful medical care at the instigation of a caretaker." Despite the

Emalee G. Flaherty, MD, FAAP, and Harriet L. MacMillan, MD, and COMMITTEE ON CHILD ABUSE AND NEGLECT

KEY WORDS

Munchausen syndrome by proxy, pediatric condition falsification, factitious disorder by proxy, medical child abuse, child maltreatment, Child Protective Services, covert video surveillance, multidisciplinary child protection team, Munchausen syndrome

ABBREVIATION

CVS—covert video surveillance

This document is copyrighted and is property of the American Academy of Pediatrics and its Board of Directors. All authors have filed conflict of interest statements with the American Academy of Pediatrics. Any conflicts have been resolved through a process approved by the Board of Directors. The American Academy of Pediatrics has neither solicited nor accepted any commercial involvement in the development of the content of this publication.

The guidance in this report does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

www.pediatrics.org/cgi/doi/10.1542/peds.2013-2045

doi:10.1542/peds.2013-2045

All clinical reports from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2013 by the American Academy of Pediatrics

variability in terms, there is general agreement that this condition causes serious harm and is associated with significant morbidity and mortality.³ The sections that follow provide an overview of the spectrum of the condition, the epidemiology, and an approach to assessment, diagnosis, and management.

DESCRIPTION

The essential feature of the condition that will be referred to in this report as fabricated illness in a child is the caregiver's falsification and/or inducement of physical or psychological symptoms or signs in a child.⁴ The term "fabricated illness in a child" has been used in this report to reflect the emphasis on the child as the victim of the abuse rather than on the mental status or motivation of the caregiver who has caused the signs and/or symptoms.

Just as the name has been under debate, the definition has been controversial, partly because early definitions often included the offender's motivation. To be consistent with the approach to diagnosing other forms of child maltreatment, the definition and diagnosis of caregiver-fabricated illness in a child should focus on the child's exposure to risk and harm and associated injuries or impairment rather than the motivation of the offender.^{1,2,5,6} Caregiver-fabricated illness in a child is best defined as maltreatment that occurs when a child has received unnecessary and harmful or potentially harmful medical care because of the caregiver's fabricated claims or signs and symptoms induced by the caregiver.²

SPECTRUM OF PRESENTATIONS

This type of maltreatment has no typical presentation, but a broad range of manifestations has been described,

as shown in Table 1. In separate literature reviews, Rosenberg⁷ and Feldman and Brown⁸ determined that bleeding, seizures, central nervous system depression, apnea, diarrhea, vomiting, fever, and rash were the most common presentations. Approximately one-quarter of children present with renal and urologic manifestations, including urinary tract infections and hematuria.⁹ Illnesses commonly are reported to involve multiple organs, and the children are frequently seen by numerous subspecialists. Apnea and anorexia/feeding problems are the 2 most commonly reported symptoms.¹⁰ Emotional and behavioral conditions, such as attention-deficit/hyperactivity disorder, learning disabilities, dissociative disorders, and psychosis, have all been fabricated by caregivers.^{11–13} Allegations of sexual abuse have also been fabricated.^{14–16}

Some of the forms of fabricated illness reported in more recent literature include hyponatremic dehydration,¹⁷

immunodeficiency,¹⁸ celiac disease,¹⁹ and Gaucher disease.²⁰ A retrospective review of calls to the National Poison Data System from 2000 to 2008 for pharmaceutical exposures that were coded as "malicious" and occurred in a child younger than 7 years revealed 1437 cases (average of 160 cases/year).²¹ Ethanol, laxatives, and benzodiazepines, in that order, were the most common pharmaceutical categories. The pharmaceutical exposure may have been an intentional poisoning, drug-facilitated sexual abuse, or fabricated illness. Eighteen children (1.2%) died, and 2.2% suffered some major signs or symptoms related to the exposure. Most of the deaths were related to exposure to a sedating agent, including antihistamines and opioids.

The offending caregiver may fabricate or invent a history of illness, exaggerate a real disease, or underreport signs and symptoms. The caregiver may actually produce the signs and symptoms of illness or may both fabricate the

TABLE 1 Symptoms and Signs by System Involved

Allergic: food allergy, rash
Dermatologic: erythema, vesiculations from burns, lacerations, scratches, puncture wounds, eczema
Developmental: learning disabilities, attention-deficit/hyperactivity disorders, neuromotor dysfunctions, pervasive developmental delay, psychosis
Endocrine: polydipsia, polyuria, hypoglycemia, diabetes, glycosuria
Gastrointestinal: abdominal pain, anorexia, diarrhea, dehydration, esophageal burns, vomiting, weight loss, bowel obstruction, gut dyskinesias, bleeding including hematemesis and hematochezia or melena, bleeding from nasogastric tube, bleeding from ileostomy, disorders leading to a need for parenteral nutrition
Hematologic: bleeding, easy bruising, anemia
Infection: fever, leukopenia, sepsis, septic arthritis, osteomyelitis; failure to resolve infections with antibiotics to which bacteria are susceptible; onset of new infection while the child is receiving antibiotics to which the bacteria are susceptible; unusual bacteria from the site of infection or infection with multiple simultaneous organisms of low pathogenicity
Metabolic: mitochondrial disorders, without positive testing
Neurologic: seizures, headaches, weakness, disorder of consciousness
Oncologic: leukemia, other cancers
Ophthalmic: recurrent hemorrhagic conjunctivitis, keratitis, eyelid swelling, unequal pupils, nystagmus, periorbital cellulitis
Orthopedic: limping
Otic: otorrhea, recurrent infections
Renal: hematuria, proteinuria, renal calculi, bacteriuria, renal insufficiency, hypertension, nocturia, hyponatremia, hyponatremia, hypokalemia, pyuria, renal failure
Respiratory: presentation with an acute life-threatening event, apnea including sleep apnea, cystic fibrosis, bleeding from the upper respiratory tract, intractable asthma, hemoptysis, cyanosis, hypoxia
Rheumatologic: arthritis, arthralgia, morning stiffness

Data are from refs 2, 3, and 7.

clinical picture and cause the signs and symptoms. There is a spectrum of severity of fabricated illness, and 1 form may evolve into another: for example, a caregiver may begin by fabricating a history and move on to actually cause signs and symptoms of illness.

The caregiver's fabrications may lead physicians to cause chronic medical complications or disabilities through their treatments, for example, by inserting an unnecessary gastric tube for feeding. Caregivers' actions may induce emotional or psychiatric disease in their children. The caregiver may coach the victim or others into misrepresenting the victim as ill. The child and family members may be convinced of the child's illness. There is often a significant delay from months to years between when the child presents with initial symptoms to the time of diagnosis.^{7,22}

EPIDEMIOLOGY

Although fabricated illness in a child is relatively rare, best estimates suggest that health professionals will likely encounter at least 1 case during their career.²³ This form of maltreatment often goes unrecognized and unreported even when it is recognized. The reported incidence is approximately 0.5 to 2.0 per 100 000 children younger than 16 years.^{7,24,25} Inappropriate invasive investigations or treatments, including drug therapy, were inflicted on 93% of the children in the cases reported over 2 years in the United Kingdom.²⁴ In this prospective surveillance study conducted in the United Kingdom and the Republic of Ireland, 85% of the notifying pediatricians estimated the certainty of their diagnosis as greater than 90%. In this study, it appears that pediatricians needed to have a strong degree of certainty before reporting, suggesting that many cases go unreported when a physician is less sure of the diagnosis. A diagnosis of

fabricated illness in a child may also not be made because of the inconsistency in diagnostic criteria. Failure to consider the possibility in the differential diagnosis is the most common reason for the missed diagnosis.^{7,26}

Males and females are victimized equally.^{7,10} The median age at diagnosis is between 14 months and 2.7 years.¹⁰ Most of the victims are infants and toddlers, although approximately 25% of cases occur in children older than 6 years.^{10,22,24} Illness fabricated by a caregiver has been described in many other countries and cultures.⁸ Siblings of children who are victims of fabricated illness are also frequently abused.^{24,27,28} In 1 large series, 25% of the siblings had died and 61.3% of the siblings had illnesses similar to those of the victims of fabricated illness.¹⁰

Although mothers are most commonly the offenders, fathers, grandparents, boyfriends, and child care providers have been found responsible.^{24,29} Cases in which parents have colluded to fabricate illness have been reported as well.¹¹ There are reports of children who appear to actively collude with the offender in producing the fabricated illness and who later independently fabricate their own illness as they become older.³⁰ In addition, older children have been reported to fabricate illness, both by falsifying symptoms and/or signs of illness, without adult collusion.^{18,25,31,32}

Although a discussion of the etiology for such behavior by caregivers is beyond the scope of this report, it is important for clinicians to be aware of some of the caregiver risk indicators for fabricating illness in a child. These include caregivers who (1) appear to need or thrive on attention from physicians,¹³ (2) insist that the child cannot cope without the parent's ongoing attention,¹³ (3) are either directly involved in professions related

to health care³ or at least are very knowledgeable medically and have a familiarity with medical terminology, and (4) have a history of factitious disorder or somatoform disorder.^{33,34} Although such indicators are useful in raising awareness about the possibility of fabricated illness among children of otherwise apparently caring families, such features are quite non-specific and should not be used to make the diagnosis.³⁵ These characteristics overlap considerably with those of caregivers who are advocates for their children with genuine illnesses, and some parents who fabricate illness in their children do not show such features.³⁵ It is important to underscore that there is no consistent psychological presentation or psychiatric diagnosis among caregivers who have fabricated illness in a child.³⁶

Children who are victims of fabricated illness can suffer significant morbidity and mortality.^{21,24,27,28,37} Mortality rates of 6% to 9% have been reported, and approximately the same percentage suffer long-term disability or permanent injury.^{7,10,24} By definition, all victims suffer some short-term morbidity related to unnecessary procedures or treatments. The abuse often continues in the hospital³⁸ and has even occurred in the ICU.^{17,39} Approximately 75% of the morbidity experienced by children has been precipitated by caregivers' behaviors while the children are hospitalized.⁷

DIAGNOSIS

The diagnosis of fabricated illness in a child can be especially difficult, because the signs and symptoms reported by a caregiver may not actually be present during the physician's evaluation. When illness is induced or fabricated, the signs and symptoms may fluctuate and be inconsistent with normal physiology. Indicators that should cause the pediatrician to consider

fabricated illness in a child are shown in Table 2. A caregiver who seeks another medical opinion when told that the child does not have illness or who resists reassurance that the child is healthy should raise concern about possible fabricated illness. Other potential areas for concern include a caregiver who perseverates about borderline abnormal results of no clinical relevance, despite repeated reassurance, or who refutes the validity of normal results. In the previous clinical report, it was suggested that the physician consider the following 3 questions in the diagnostic assessment of suspected fabricated illness:

1. Are the history, signs, and symptoms of disease credible?
2. Is the child receiving unnecessary and harmful or potentially harmful medical care?
3. If so, who is instigating the evaluations and treatment?

A multidisciplinary evaluation involving medical, psychosocial, child protective services, and legal professionals is important.⁴⁰ Because of the complexity of the diagnosis of fabricated illness in a child, the physician may want to consult with a specialist in child abuse pediatrics. A physician with expertise in child abuse and fabricated illness in a child may be able to provide a more objective opinion than a physician more closely

involved with the family.^{41,42} A complete review of the medical record, although potentially daunting, is imperative.³⁵ Because medical records are generally extensive and usually involve multiple medical sites, identification of the condition as fabricated may be missed if the complete medical records are not reviewed. The complete medical record may not be readily available if care has been sought at different clinical settings.

It is important to understand that as many as 30% of children with fabricated illness have an underlying medical illness.⁷ Eventually, most of the victims will have iatrogenic signs and symptoms of illness.

When reviewing medical records, it is useful to make a chronological summary of medical contacts. This summary may reveal one or more of the following: (1) use of multiple medical facilities; (2) excessive and/or inappropriate pattern of utilization, including procedures, medications, tests, hospitalizations, and surgeries; (3) a pattern of missed appointments and discharge of the child against medical advice; and (4) a history of the opinions of physicians about the child's medical problems, illnesses, and treatments being misrepresented to other physicians. It is essential to review the entire record, including daily notes by all health care

professionals, rather than simply focusing on summary reports, such as discharge summaries. When a child is hospitalized, it is important that all staff attribute the source of medical information in their notes: for example, nurses should document whether they witnessed that a child was apneic or that the caregiver told them the child was apneic. As shown in Table 3, it is useful to create a table that includes the following elements for each health contact: name of patient, date, location, reason for contact, reported signs/symptoms as stated by the caregiver, objective observations documented by the physician, conclusions/diagnosis made, treatment provided, efficacy of treatment, and other comments or observations. The veracity of the claims made by the caregiver can then be assessed for each symptom and sign.³⁵ An important overall issue to consider is whether the medical history provided by the caregiver matches the history in the medical record and whether the diagnosis reported by the caregiver matches the diagnosis made by the physician. Because fabricating caregivers can misrepresent medical information provided by various medical professionals, it is helpful to have all involved physicians conference and develop a consensus management plan.

Because physicians may be reluctant to identify possible concerns about induced illness in the record, it is also important to contact the individual physicians to discuss whether they have any concerns about possible fabrication of illness. A physician directly involved in the ongoing assessment or treatment of a child who may be the victim of fabricated illness can legally contact other physicians involved in the current or past care of the patient to obtain information relevant to the ongoing assessment or treatment of the child. If there is any aspect of that physician contact

TABLE 2 Indicators of Possible Fabricated Illness in a Child

- Diagnosis does not match the objective findings
- Signs or symptoms are bizarre
- Caregiver or suspected offender does not express relief or pleasure when told that child is improving or that child does not have a particular illness
- Inconsistent histories of symptoms from different observers
- Caregiver insists on invasive or painful procedures and hospitalizations
- Caregiver's behavior does not match expressed distress or report of symptoms (eg, unusually calm)
- Signs and symptoms begin only in the presence of 1 caregiver
- Sibling has or had an unusual or unexplained illness or death
- Sensitivity to multiple environmental substances or medicines
- Failure of the child's illness to respond to its normal treatments or unusual intolerance to those treatments
- Caregiver publicly solicits sympathy or donations or benefits because of the child's rare illness
- Extensive unusual illness history in the caregiver or caregivers' family; caregiver's history of somatization disorders

TABLE 3 Sample Table for Chart Review

Date	Location	Reason for Contact	Reported Signs/Symptoms per Caregiver	Objective Observations by Physician	Conclusions/Diagnosis Made	Treatment Provided	Efficacy of Treatments	Other Comments or Observations

that may be for forensic purposes or done in consultation with child protective services, consider obtaining the caregiver's consent and/or obtaining legal advice before making such contact. The medical record of the siblings should be reviewed in the same thorough fashion.

If a child with the possible fabricated illness is verbal, the child should be interviewed separately from the caregiver for his or her recollection of any symptoms, including where and when they occurred. It is also important to take a careful family and social history, including information about any unusual or frequent illnesses in the extended family and siblings.

Fabricated illness in a child, like other forms of child maltreatment, is not a diagnosis of exclusion. The pediatrician should evaluate the child for illness fabrication while simultaneously searching for other medical explanations for the illness: for example, unusual and rare medical problems, such as cyclic vomiting or mitochondrial disease. Some parents are overanxious or difficult, and others perceive their child as vulnerable because of some earlier traumatic event, such as extreme prematurity, and may "shop around" for a physician.⁴³ When parental behaviors result in harm to the child, the child has been maltreated, whatever the caregiver's motivation.³⁷

The specific features of an evaluation for fabricated illness in a child depend on the type of fabrication suspected. The pediatrician may need to perform toxicology tests if poisoning is suspected or may need to request blood

group typing or subtyping if blood contamination is a concern. If testing is needed to confirm the diagnosis, the child must be protected from any additional or ongoing harm while the evaluation is underway. Although the hospital is generally considered an appropriate setting to complete this testing, the offending caregiver often continues the illness fabrication in the hospital.⁷ Consequently, the caregiver's contact with the child may need to be supervised to protect the child from further harm.

If there are concerns that a child may be a victim of fabricated illness, physicians should defer procedures and prescriptions. The physician's responsibility is to protect the child.

COVERT VIDEO SURVEILLANCE

Covert video surveillance (CVS) has been proposed as a method of ensuring the child's safety during the hospitalization, as well as to expose and document the offending caregiver's fabricating behavior toward the child while in the hospital.^{44,45} The use of CVS has been controversial.⁴⁶ Some argue that it is an invasion of the parent's right to privacy or that it represents entrapment.⁴⁷ Others respond that privacy is not guaranteed in a hospital setting, because health care providers, such as nurses, may walk into patient rooms at any time unannounced. Also, for some conditions, monitors are attached to a child and sound at the nurses' station. Some consider CVS to be a diagnostic tool,⁴⁸ but others argue that the recordings can be difficult to interpret and that

a caregiver may be falsely accused of harm.⁴⁷ Because it can be difficult to prove to child protective services and in legal proceedings that illness has been fabricated, some children will not be protected from further harm without the use of CVS to document the abuse. Some of the disadvantages of the use of CVS include its cost, the need for real-time monitoring to interrupt any harm to a child, and the risk of additional harm to the child even with close monitoring.^{44,45}

In 1 series, CVS was required to make the diagnosis of fabricated illness in a child in more than half of the cases. In 10% of the cases, however, it proved helpful because it showed that the child had a medical problem.⁴⁵ CVS has been used to detect caregivers suffocating infants, intentionally causing fractures, administering poison, and injecting harmful substances into intravenous lines. Some offending caregivers, who were previously thought to be very attentive to the child, were shown to ignore the child when no one was watching. CVS can also disprove a caregiver's falsified claim, such as showing that apnea did not occur when a caregiver has reported it. Furthermore, CVS has the potential to show that the abuse was premeditated and occurred without provocation.

If CVS is to be implemented, the hospital should develop protocols that guide its use. The protocols should include provision for continuous monitoring, training for the observers or monitors, and a plan that ensures rapid intervention if the child is observed to be at risk.

An approach that can be considered instead of CVS is separation of the child from the suspected offending caregiver and subsequent observation of the child's condition. The child must be separated for sufficient time to determine whether there is any change in the child's condition while, as much as possible, maintaining constant all other management, such as medication use. During this trial period, the suspected offending caregiver must not be allowed any contact with the child unless strict third-party supervision is maintained. Intervention by child protective services will likely be required to establish and maintain this separation. If symptoms do not disappear, this is strong indication that the symptoms were not fabricated, providing the child has been adequately protected during the separation. The association between the trial separation and any improvement in a child's condition may be difficult to prove in a legal setting, especially because improvement in a child's condition may be attributed to a spontaneous remission or resolution of the underlying medical problem.

MANAGEMENT AND PROGNOSIS

Reporting Suspected Maltreatment

Physicians should report any reasonable suspicions of child abuse promptly to child protective services authorities. All states have laws that mandate physicians report suspected child maltreatment if they have reasonable cause to suspect. In a review by Sheridan,¹⁰ only approximately one-third of the cases of suspected fabricated illness in a child had been reported. Another study found that pediatricians do not report unless they are almost certain of the diagnosis of fabricated illness. In this study, the pediatricians estimated the probability that their diagnosis was correct as greater than 90%.²⁴ Although the laws do not require this

level of certainty for reporting, physicians may be concerned that a caregiver will escalate the illness induction to "prove" the child's illness. Also, pediatricians may be reluctant to report suspicions of illness fabrication because of previous experience with child protective services and the legal system failing to protect a child without additional corroborating evidence. Many state child protective services systems do not list fabricated illness or any of its various names as a specific form of child maltreatment. When reporting suspected fabricated illness in these states, the pediatrician should focus on how the child was affected: for example, the pediatrician may report suspected physical abuse, emotional abuse, risk of harm, and all the categories that apply to the particular situation. Pediatricians should collaborate with child protective services and law enforcement to ensure the best outcome for the child.

Outcome if Reported

Even when fabricated illness is reported to child protective services, many children are not protected from further harm. In the 2-year surveillance study in the United Kingdom and the Republic of Ireland referred to previously,²⁴ approximately one-third of the children (46 of 119) were allowed to return home.²⁸ Approximately one-quarter of the children (27) still had signs or symptoms of abuse at follow-up. Only one-third of the children were placed in caregiving arrangements outside the control of the alleged offending parent. Child protective services and the courts were more likely to intervene and protect children who were young and who had been physically abused as opposed to older children who suffered other harm.

If children who have been victims of fabricated illness are returned home to the care of the offending caregiver,

reabuse is common.^{28,49} Approximately 40% suffer further abuse, including other forms of maltreatment, such as physical and emotional abuse.⁴⁹ On the basis of Rosenberg's review,⁷ in 20% of the fatal cases the child had been returned home after the parents had been confronted about the suspicion of fabricated illness, and the child subsequently died. In a study in 54 children with a diagnosis of fabricated illness followed for 1 to 14 years, many of the children manifested other problems, including emotional and behavioral conditions, such as conduct disorders. Criminal conviction of the offending caregiver was found in only 8% of the cases in the Rosenberg series.⁷

In a cohort study that had several methodologic limitations, including follow-up of only approximately 50% of the original sample identified, the factors associated with better outcomes for children who had been victimized included the following: (1) continuous positive input from the spouse and/or grandparents, (2) successful short-term foster care before returning to live with the offending caregiver, (3) the offender's long-term therapeutic relationship with a social worker, (4) successful remarriage for the offending caregiver, (5) early adoption of the victim, and (6) long-term foster care placement.⁴⁹ It was not possible to determine the relative benefits for children of remaining with the abusing caregiver versus being separated. Among those children who were with the fabricator of the illness at the time of this study, children placed away from their mother, even temporarily, appeared to have a better outcome than those who did not experience this separation.

Caregiver Treatment and Reunification

When confronted with the suspicion that the illness has been fabricated,

15% to 45% of offenders admitted to causing or fabricating the child's illness, although many denied any deception.^{7,45} In general, the prognosis has been poor for offenders, but there are some reports of apparent successful treatment.⁵⁰ Identifying an offender's motivation may not be critical to making a diagnosis of fabricated illness in a child, but understanding the motivation is important for determining the course of treatment.^{34,51} Schreier¹¹ outlines the following indicators of successful treatment: (1) the abuser admits to the abuse and has been able to describe specifically how he or she abused the child, (2) the abuser has experienced an appropriate emotional response to his or her behaviors and the harm he or she has caused the child, (3) the abuser has developed strategies to better identify and manage his or her needs to avoid abusing the child in the future, and (4) the abuser has demonstrated these skills, with monitoring, over a significant period of time. Schreier also asserts that the partners of offending caregivers should participate in treatment,

because they have frequently colluded in the abuse of the child. The partner's lack of nurture for the offending caregiver may also be 1 motivation for the child's abuse.

SUMMARY

Caregiver-fabricated illness in a child is a relatively rare but very serious form of child maltreatment. The pediatrician who suspects that signs or symptoms of a disease are being fabricated should focus on the harm or potential harm to the child caused by the actions of that caregiver and by the efforts of medical personnel to diagnose and treat a nonexistent disease. Pediatricians need to have a high index of suspicion and be alert to the possibility when signs and symptoms do not fit a particular illness, when they appear resistant to treatment, or when they evolve into another or additional illnesses. Proper diagnosis of fabricated disease involves a thorough evaluation of medical records, clear communication among medical professionals, and often, a multidisciplinary approach. If

the child protective services system's response seems inadequate, the pediatrician should ask a local specialist in child abuse pediatrics for advice and assistance. A focus on the motives of the caregiver, although useful in therapy, is not necessary for a diagnosis of this form of child maltreatment.

LEAD AUTHORS

Emalee G. Flaherty, MD, FAAP
Harriet L. MacMillan, MD

COMMITTEE ON CHILD ABUSE AND NEGLECT, 2012–2013

Cindy W. Christian, MD, FAAP, Chairperson
James E. Crawford-Jakubiak, MD, FAAP
Emalee G. Flaherty, MD, FAAP
John M. Leventhal, MD, FAAP
James L. Lukefahr, MD, FAAP
Robert D. Sege, MD, PhD, FAAP

LIAISONS

Harriet L. MacMillan, MD – *American Academy of Child and Adolescent Psychiatry*
Catherine M. Nolan, MSW, ACSW – *Administration for Children, Youth, and Families*
Janet Saul, PhD – *Centers for Disease Control and Prevention*

STAFF

Tammy Piazza Hurley

REFERENCES

1. Stirling J Jr. American Academy of Pediatrics Committee on Child Abuse and Neglect. Beyond Munchausen syndrome by proxy: identification and treatment of child abuse in a medical setting. *Pediatrics*. 2007;119(5):1026–1030
2. Roesler TA, Jenny C. *Medical Child Abuse: Beyond Munchausen Syndrome by Proxy*. Elk Grove Village, IL: American Academy of Pediatrics; 2009
3. Shaw RJ, Dayal S, Hartman JK, DeMaso DR. Factitious disorder by proxy: pediatric condition falsification. *Harv Rev Psychiatry*. 2008;16(4):215–224
4. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 4th ed, text revision. Washington, DC: American Psychiatric Association; 2000
5. Rosenberg DA. Munchausen syndrome by proxy: medical diagnostic criteria. *Child Abuse Negl*. 2003;27(4):421–430
6. Brown P, Tierney C. Munchausen syndrome by proxy. *Pediatr Rev*. 2009;30(10):414–415, discussion 415
7. Rosenberg DA. Web of deceit: a literature review of Munchausen syndrome by proxy. *Child Abuse Negl*. 1987;11(4):547–563
8. Feldman MD, Brown RM. Munchausen by proxy in an international context. *Child Abuse Negl*. 2002;26(5):509–524
9. Feldman KW, Feldman MD, Grady R, Burns MW, McDonald R. Renal and urologic manifestations of pediatric condition falsification/Munchausen by proxy. *Pediatr Nephrol*. 2007;22(6):849–856
10. Sheridan MS. The deceit continues: an updated literature review of Munchausen syndrome by proxy. *Child Abuse Negl*. 2003;27(4):431–451
11. Schreier H. Munchausen by proxy. *Curr Probl Pediatr Adolesc Health Care*. 2004;34(3):126–143
12. Rittner L, Pulos S, Lennon R. Pediatric condition falsification in attention-deficit/hyperactivity disorder. *N Am J Psychol*. 2005;7(3):353–359
13. Ayoub CC, Schreier HA, Keller C. Munchausen by proxy: presentations in special education. *Child Maltreat*. 2002;7(2):149–159
14. Meadow R. False allegations of abuse and Munchausen syndrome by proxy. *Arch Dis Child*. 1993;68(4):444–447
15. Hornor G. Repeated sexual abuse allegations: a problem for primary care providers. *J Pediatr Health Care*. 2001;15(2):71–76
16. Schreier HA. Repeated false allegations of sexual abuse presenting to sheriffs: when is it Munchausen by proxy? *Child Abuse Negl*. 1996;20(10):985–991
17. Su E, Shoykhet M, Bell MJ. Severe hypernatremia in a hospitalized child: Munchausen by proxy. *Pediatr Neurol*. 2010;43(4):270–273

18. Awadallah N, Vaughan A, Franco K, Munir F, Sharaby N, Goldfarb J. Munchausen by proxy: a case, chart series, and literature review of older victims. *Child Abuse Negl.* 2005;29(8):931–941
19. Lasher LJ, Feldman MD. Celiac disease as a manifestation of Munchausen by proxy. *South Med J.* 2004;97(1):67–69
20. Al-Owain M, Al-Zaidan H, Al-Hashem A, Kattan H, Al-Dowaish A. Munchausen syndrome by proxy mimicking as Gaucher disease. *Eur J Pediatr.* 2010;169(8):1029–1032
21. Yin S. Malicious use of pharmaceuticals in children. *J Pediatr.* 2010;157(5):832–836
22. Denny SJ, Grant CC, Pinnock R. Epidemiology of Munchausen syndrome by proxy in New Zealand. *J Paediatr Child Health.* 2001;37(3):240–243
23. Fabricated or induced illness by carers: a complex conundrum. *Lancet.* 2010;375(9713):433
24. McClure RJ, Davis PM, Meadow SR, Sibert JR. Epidemiology of Munchausen syndrome by proxy, non-accidental poisoning, and non-accidental suffocation. *Arch Dis Child.* 1996;75(1):57–61
25. Ehrlich S, Pfeiffer E, Salbach H, Lenz K, Lehmkuhl U. Factitious disorder in children and adolescents: a retrospective study. *Psychosomatics.* 2008;49(5):392–398
26. Squires JE, Squires RH Jr. Munchausen syndrome by proxy: ongoing clinical challenges. *J Pediatr Gastroenterol Nutr.* 2010;51(3):248–253
27. Bools CN, Neale BA, Meadow SR. Comorbidity associated with fabricated illness (Munchausen syndrome by proxy). *Arch Dis Child.* 1992;67(1):77–79
28. Davis P, McClure RJ, Rolfe K, et al. Procedures, placement, and risks of further abuse after Munchausen syndrome by proxy, non-accidental poisoning, and non-accidental suffocation. *Arch Dis Child.* 1998;78(3):217–221
29. Meadow R. Munchausen syndrome by proxy abuse perpetrated by men. *Arch Dis Child.* 1998;78(3):210–216
30. Libow JA. Beyond collusion: active illness falsification. *Child Abuse Negl.* 2002;26(5):525–536
31. Libow JA. Child and adolescent illness falsification. *Pediatrics.* 2000;105(2):336–342
32. Shapiro M, Nguyen M. Psychological sequelae of Munchausen's syndrome by proxy. *Child Abuse Negl.* 2011;35(2):87–88
33. Bools C, Neale B, Meadow R. Munchausen syndrome by proxy: a study of psychopathology. *Child Abuse Negl.* 1994;18(9):773–788
34. Bass C, Jones D. Psychopathology of perpetrators of fabricated or induced illness in children: case series. *Br J Psychiatry.* 2011;199(2):113–118
35. Sanders MJ, Bursch B. Forensic assessment of illness falsification, Munchausen by proxy, and factitious disorder, NOS. *Child Maltreat.* 2002;7(2):112–124
36. Parnell TF. The use of psychological evaluation. In: Parnell TF, Day DO, eds. *Munchausen by Proxy Syndrome: Misunderstood Child Abuse.* Thousand Oaks, CA: Sage; 1998:129–150
37. Meadow R. Mothering to death. *Arch Dis Child.* 1999;80(4):359–362
38. Schreier H. On the importance of motivation in Munchausen by Proxy: the case of Kathy Bush. *Child Abuse Negl.* 2002;26(5):537–549
39. Carter KE, Izsak E, Marlow J. Munchausen syndrome by proxy caused by ipecac poisoning. *Pediatr Emerg Care.* 2006;22(9):655–656
40. Horwath J. Developing good practice in cases of fabricated and induced illness by carers: new guidance and the training implications. *Child Abuse Rev.* 2003;12(1):58–63
41. Schreier H, Ricci LR. Follow-up of a case of Munchausen by proxy syndrome. *J Am Acad Child Adolesc Psychiatry.* 2002;41(12):1395–1396
42. Siegel DM. Munchausen syndrome by proxy: a pediatrician's observations. *Fam Syst Health.* 2009;27(1):113–115
43. Thomasgard M, Metz WP. The vulnerable child syndrome revisited. *J Dev Behav Pediatr.* 1995;16(1):47–53
44. Southall DP, Plunkett MC, Banks MW, Falkov AF, Samuels MP. Covert video recordings of life-threatening child abuse: lessons for child protection. *Pediatrics.* 1997;100(5):735–760
45. Hall DE, Eubanks L, Meyyazhagan LS, Kenney RD, Johnson SC. Evaluation of covert video surveillance in the diagnosis of Munchausen syndrome by proxy: lessons from 41 cases. *Pediatrics.* 2000;105(6):1305–1312
46. Foreman DM. Detecting fabricated or induced illness in children. *BMJ.* 2005;331(7523):978–979
47. Morley C. Concerns about using and interpreting covert video surveillance. *BMJ.* 1998;316(7144):1603–1605
48. Shinebourne EA. Covert video surveillance and the principle of double effect: a response to criticism. *J Med Ethics.* 1996;22(1):26–31
49. Bools CN, Neale BA, Meadow SR. Follow up of victims of fabricated illness (Munchausen syndrome by proxy). *Arch Dis Child.* 1993;69(6):625–630
50. Sanders MJ. Narrative family treatment of Munchausen by Proxy: a successful case. *Fam Syst Health.* 1996;14(3):315–329
51. Bursch B, Schreier HA, Ayoub CC, Libow JA, Sanders MJ, Yorker BC. Further thoughts on "Beyond Munchausen by proxy: identification and treatment of child abuse in a medical setting". *Pediatrics.* 2008;121(2):444–445; author reply 445

Caregiver-Fabricated Illness in a Child: A Manifestation of Child Maltreatment
Emalee G. Flaherty, Harriet L. MacMillan and COMMITTEE ON CHILD ABUSE
AND NEGLECT

Pediatrics 2013;132;590

DOI: 10.1542/peds.2013-2045 originally published online August 26, 2013;

Updated Information & Services	including high resolution figures, can be found at: http://pediatrics.aappublications.org/content/132/3/590
References	This article cites 47 articles, 17 of which you can access for free at: http://pediatrics.aappublications.org/content/132/3/590.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): Committee on Child Abuse and Neglect http://classic.pediatrics.aappublications.org/cgi/collection/committee_on_child_abuse_and_neglect Psychiatry/Psychology http://classic.pediatrics.aappublications.org/cgi/collection/psychiatry_psychology_sub Child Abuse and Neglect http://classic.pediatrics.aappublications.org/cgi/collection/child_abuse_neglect_sub
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: https://shop.aap.org/licensing-permissions/
Reprints	Information about ordering reprints can be found online: http://classic.pediatrics.aappublications.org/content/reprints

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since . Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2013 by the American Academy of Pediatrics. All rights reserved. Print ISSN: .

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Caregiver-Fabricated Illness in a Child: A Manifestation of Child Maltreatment
Emalee G. Flaherty, Harriet L. MacMillan and COMMITTEE ON CHILD ABUSE
AND NEGLECT

Pediatrics 2013;132;590

DOI: 10.1542/peds.2013-2045 originally published online August 26, 2013;

The online version of this article, along with updated information and services, is
located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/132/3/590>

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since . Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2013 by the American Academy of Pediatrics. All rights reserved. Print ISSN: .

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

