An Evidence-Based Review Of Medical Child Abuse In The ED

At 3 am, a mother brings her 4-week-old daughter to the emergency department (ED) with the chief complaint of “stopped breathing.” The mother describes the event by stating that the baby was “lying there, turned blue all over, then was not breathing.” The mother picked up the baby, who subsequently started breathing again and regained her color. There is no history of recent feeds or reflux prior to the episode. The birth history is significant for a full-term baby, with a normal spontaneous vaginal delivery, poor prenatal care, and urine drug screen results positive for marijuana. Because of the finding on the drug screen, Child Protective Services (CPS) is already involved in the child’s life. The mom describes the infant as developmentally appropriate for a 1-month-old and notes that her immunizations are up-to-date. The social history reveals the child lives with her mother, maternal grandmother, and 1-year-old sister. The mother and father are not together. There is smoking in the home but no pets.

On physical examination, the patient’s pulse oximetry value is 100%, and she appears comfortable, in no acute distress; the rest of the physical examination is unremarkable. Examination of her skin shows no marks or bruises. Complete blood cell count and complete metabolic panel results are within normal limits for the patient’s age, except for a hemoglobin level of 10.2 g/dL. Results of a chest radiograph are also normal.

The patient is admitted for 24-hour observation due to her concerning history of cyanosis, the patient’s young age, and mild anemia. The admission diagnosis is apparent life-threatening event (ALTE).

During admission, the patient is placed on a cardiorespiratory monitor, with no apneic events noted. She feeds well and gains weight during her admission. The mother is difficult to contact during this admission, but she is eventually notified to come and pick up her child. Upon discharge, as the mother prepares to leave the hospital room with her infant, she suddenly

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comes running to the nurses’ station, saying her child is not breathing again. The nurse runs into the child’s room to find a blue, limp infant. The nurse subsequently initiates the rapid response team and stimulates the infant, who then starts breathing. Pulse oximetry is initially 89%, but it slowly returns to 98% with oxygen via facemask. By the time the rapid response team arrives, the patient has recovered. No chest compressions are required. The infant is then readmitted. A sepsis workup is initiated, and a repeated chest radiograph shows a possible small right lower lobe infiltrate. The infant is started on ampicillin and gentamicin while blood, urine, and cerebrospinal fluid cultures are pending. She is also placed on iron therapy for anemia.

Two days later, results of all studies are negative, the infant remains afebrile, and a 5-channel pneumogram is done to rule out an obstructive versus central process for the baby’s continued apneic events. Results of this study are also negative. The mother is not present during most of her daughter’s second admission to the hospital. At time of discharge, the mother is again difficult to contact. When the mother finally arrives, she momentarily leaves the child’s room; when she returns, she immediately calls for help, saying the infant is again limp and blue. The nurse enters the room, finds the infant cyanotic and limp, and again calls for the rescue response team. The nurse stimulates the patient, whose oxygen saturation is 84%. By the time the rescue response team arrives, the patient has recovered. The nurses note a drop of blood near the patient’s right nares.

The pediatric ED setting can often become quite hectic, with clinical presentations ranging from the overanxious mother worried about an infant who will not stop crying. But what does one do when a parent’s chief complaint is out of proportion to the child’s physical examination, as in the case of the aforementioned ALTE? Suppose a parent brings in a child and complains of multiple signs and symptoms, but the child appears healthy. Or suppose a child is brought in repeatedly for diagnosis and treatment of a chronic illness that appears unusual to the ED clinician in its presentation. In cases such as these, medical child abuse (MCA) should be considered in the differential diagnosis. By definition, MCA occurs when a child undergoes or receives unwarranted medical care at the hands of a caretaker.1

Medical child abuse has been known by many names over the years, including Münchausen syndrome by proxy (MSBP), factitious disorder by proxy (FDBP), and most recently, pediatric condition falsification (PCF).2 Münchausen syndrome by proxy is probably the most mainstream and well-known nomenclature. Historically, Baron von Münchausen, who is thought to have been a fictitious character, told stories of extravagant adventures. His name was subsequently used to describe a group of disorders (specifically Münchausen syndrome) in which patients fabricate complaints, leading to multiple hospitalizations and invasive tests and procedures.2 Roy Meadow first used the term MSBP in 1977 when he described 2 cases of “parents who, by falsification, caused their children innumerable harmful hospital procedures—a sort of Münchausen syndrome by proxy.”3

According to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), a diagnosis of MSBP involves 2 components: the child as the victim and the caregiver adult as the perpetrator. The child is then victimized into a sick role.4 The American Academy of Pediatrics has moved away from use of the term MSBP. There are questions regarding the term: should it be used only when the perpetrator is seeking medical care or only when trying to determine the parent’s motivation?2 Moreover, who should make the diagnosis of MSBP is controversial. Should it be the pediatrician or a psychiatrist? Should the diagnosis be applied to the parent or the child?2 Finally, if the parent does not fit the DSM-IV criteria of MSBP, does that mean the child has not been abused?

Recently, the American Professional Society on the Abuse of Children made an important distinction between the actual abuse caused to a child (ie, PCF) and the motivations behind the abuse (ie, FDBP). Whereas the former focuses on the impact to the child, the latter concerns the psychiatric state of the perpetrator.1

The truth is that clinicians who specialize in caring for children are ill equipped to diagnose the psychiatric state of the patient’s caregiver, whether the label involves MSBP or FDBP. Determining if and how a child has been abused should be their first concern; others can then focus on the motivation of the perpetrator.1 Thus, the term MCA, which is more inclusive and addresses the harm to the child from unwarranted medical care, is a more apt diagnosis for a pediatric patient. The term also clearly indicates that a form of child abuse has occurred.

Critical Appraisal Of The Literature

A literature review of articles published from 1980 to 2009 was launched using Ovid MEDLINE® (www.ovid.com) and PubMed (www.pubmed.gov). Keywords used in the search were Münchausen syndrome by proxy, medical child abuse, covert video surveillance, falsification of a pediatric condition, pediatric condition falsification, pediatric symptom falsification, and factitious disorder by proxy. Three books (Münchausen Syndrome by Proxy: Issues in Diagnosis and Treatment; Münchausen By Proxy Syndrome: Misunderstood Child Abuse; and Medical Child Abuse: Beyond Münchausen Syndrome by Proxy) were used for most of the discus-
Epidemiology, Etiology, And Pathophysiology

Although MCA was once considered rare, studies show that it is much more common than initially thought. This type of abuse occurs worldwide, but determining its prevalence and incidence is difficult, as a large number of cases go unnoticed or unidentified because of their covert presentation and the ability of the perpetrator to fool those around them. From the publication in 1977 of Meadow’s article describing MSBP to 2002, 400 reports of the disorder were published in pediatric and child psychiatry literature. Of note, the cases presented in the media and in professional journals are often the most severe. Some reports have estimated the incidence of MSBP as 0.4 per 100,000 children younger than 16 years and 2 per 100,000 in children younger than 1 year. Seventy-five percent of the morbidity associated with the disorder occurs while the patient is in the hospital. Also, despite the fact that most literature comes from the United Kingdom and the United States, MCA should not be thought of as a culture-specific disorder.

In most cases of MCA, the patient, the perpetrator, and the patient’s family do not fit specific stereotypes. In fact, the diagnosis of MCA is not based on specific characteristics but rather on the falsification of information that leads to multiple interventions on the physician’s part. In contrast, certain characteristics are associated with the diagnosis of MSBP. We will discuss the characteristics of MSBP because MCA is still seen to occur under similar circumstances, but it is important to note that the perpetrator’s motivation and the patient’s characteristics discussed here are not necessary for the diagnosis of MCA.

Profile Of The MSBP Patient

As seen in the opening vignette, victims of MSBP are often young (ie, infants or toddlers), making them easy targets who lack verbal skills and are often physically helpless. Münnchhausen syndrome by proxy is not limited to young children, however; it can occur at any time, including adolescence. Older patients may begin to adopt the falsified symptoms as their own. Current data show that boys and girls are victimized equally. When there are multiple children in the home, only one child is usually abused at a time.

Victims of MSBP usually present with an apparent recurring illness that cannot be easily explained by the physicians consulted, despite extensive medical work ups. Often, illnesses present in very atypical patterns. The diagnosis that is made may point toward a very rare disorder. In addition, the symptoms often do not respond to the usual treatments. Laboratory and clinical findings will also not match up with the clinical presentation or history. For example, laboratory findings may be physiologically impossible. Physically, the child may appear to be very healthy and may not reflect the symptoms reported by the parent.

Profile Of The Perpetrator

There appears to be a gender disparity in MSBP, as opposed to other forms of child abuse. With MSBP, the perpetrator is usually a caretaker in a motherly role. In 90% of cases, the biological mother is the perpetrator (thus, throughout this article the perpetrator will be referred to as female.) Fathers are perpetrators only 5% of the time, and in those cases, most also have concurrent psychological disturbances. When the perpetrator is the father, they are more likely to have Münnchhausen syndrome or a somatizing disorder.

Perpetrators frequently have a medical background through employment or education. Once in the hospital setting, they often do not want to leave their child alone. They may even develop a close relationship with the hospital staff, often blurring the boundary between physician and patient. In fact, perpetrators are often described in positive terms by the medical staff (eg, as nice, devoted, and caring individuals). They also tend to have a very calm demeanor toward the obstacles faced in their child’s care.

Perpetrators may also fabricate other aspects of their life in addition to the child’s illness, including employment, the family’s educational background, or prior illnesses. Not all mothers fit these stereotypes; some may be uneducated, or their psychopathology may be very apparent. Also, some sort of personality disorder may be evident, even though it cannot always be confirmed by psychological testing. Only rarely is the mother deemed psychotic or delusional. There are also often reports of significant physical, emotional, or sexual maltreatment during the mother’s own childhood.

Profile Of The Family

Cases of MSBP usually involve 2-parent households. The history may include the unexplained illness or death of a sibling of the patient who was also under the care of the perpetrator. The relationship between the patient’s mother and father is often emotionally distant. The father is often minimally involved in both the family life and the chronic illness of the child. The non offending parent is usually unaware of the falsifications and the degree of abuse and once confronted, usually sides with the spouse.
Differential Diagnosis

Perpetrators of MCA may be easily confused with the overanxious or neglectful mother. It should be noted that the overanxious mother may “doctor shop” because she feels her child has not been diagnosed correctly. She may agree with performing tests but have anxieties about them. Her anxiety lies in the fact that she does not fully understand the tests or fears the risks that come with them. In cases of MCA, the mother “doctor shops” to serve her own psychological needs. A clear distinction also exists between mothers who medically neglect their children without intending to make them sicker and the perpetrator of MCA. The neglectful parent is more likely to miss appointments or leave prescriptions unfilled, whereas the mother who commits MCA is constantly asking for more appointments and demanding that more invasive procedures be performed on her child. The mother responsible for MCA is more likely to fill prescriptions provided by the doctor and to even abuse such medications as a way of worsening the child’s condition. Or she may hold back on the use of such medications as a way of accentuating the deteriorating state of the child.

Perpetrators of MCA should also not be confused with the parent who is difficult to deal with because of clashes in personality or temperament with the doctor. It may be difficult at times to distinguish those moms who simply disagree with the treatment approach of their child’s physician. Of note, the mother of the chronically ill, non abused child is also very medically savvy. She knows the system, can verbalize her concerns, and has her child’s best interests in mind.

Prehospital Care

As with all cases of child abuse and neglect, communication between emergency medical service personnel and other first responders and hospital staff is critical in making an accurate diagnosis. Information such as the condition of the home and the emotional state of the caretaker upon arrival of emergency services personnel may provide valuable insights. First responders should also objectively evaluate the child to assure that findings from the examination meet the severity of symptoms reported by the caretaker. In addition, when children are verbal, first responders should clarify who is reporting the symptoms, the mother or the child.

Emergency Department Evaluation

There is no typical presentation for MCA. Patients may present with symptoms related to various organ systems: neurologic (e.g., seizures), hematologic (especially bleeding), respiratory (e.g., apnea), gastrointestinal (e.g., vomiting, diarrhea), constitutional (e.g., fever), and dermatologic (e.g., rash). More details on the clinical presentations are provided later in this section. Presentations in the ED can range from exaggeration of symptoms to fabrications of signs and symptoms of disease.

The perpetrator may simulate the illness or covertly produce it. When the illness is simulated, the caregiver fakes or lies about the symptoms without physically harming the child (i.e., the caregiver may report signs and symptoms that are not detectable by the medical observer). When the caretaker produces the illness, she actually does something that causes the child to demonstrate signs of the disorder. The mother may also exaggerate preexisting symptoms of a truly chronically ill child by withholding medications or treatments. Overall, the consequences to the child can range from minor to fatal.

Seizures

Episodes are often reported as occurring during sleep and witnessed only by the parent, who frequently describes them as generalized tonic-clonic seizures that are poorly controlled with antiepileptics. The perpetrator often produces these episodes via false history, poisoning, suffocation, or carotid sinus pressure.

Bleeding Disorders

The sites of fabricated bleeding disorder in patients of MCA are usually gastrointestinal or genitourinal. The perpetrator may produce blood (or bloodlike products) but not actually harm the child. The most common method involves inserting the perpetrator’s own blood into a specimen. For example, the perpetrator may simulate hematuria by adding blood to a urine specimen or hematomegaly by placing blood on a specimen or around the mouth of the victim. In cases of induced illness, the perpetrator may even cause the child to bleed to the point of anemia or unstable vital signs. The perpetrator may cause bleeding by pricking the child or forcing him or her to ingest certain drugs (e.g., aspirin or warfarin) that lead to bleeding diathesis.

Apnea

In cases of MCA, mothers may report symptoms that are not occurring. For example, a mother who has a child on an apnea monitor may report alarms constantly going off and the child sometimes even requiring cardiopulmonary resuscitation. Reports of such life-threatening events in a child older than 1 year should raise concerns about MCA, since most infants grow out of apnea and bradycardia.

The mother may also cause the apnea by obstructing the airway of the child or suffocating the
child, then presenting to the ED for assistance with resuscitation. Clinical signs of this phenomenon are often consistent with asphyxia (eg, petechiae on the face or conjunctivae).15

**Vomiting, Diarrhea**

Administration or forced ingestion of noxious substances such as ipecac or one of its derivatives can produce vomiting and diarrhea. Ipecac ingestion can be detected by the presence of emetine, a breakdown product. Emetine has a long half-life and can persist in the body for up to 60 days. Sublethal dosing of arsenic can also lead to vomiting, diarrhea, and chronic abdominal pain. Toxic effects of arsenic are usually cumulative, obscuring the clinical picture for some time and leading to delay in the correct diagnosis. Diarrhea can be induced by administration of laxatives. Failure to thrive may accompany the presentation. It is therefore important to determine whether the diarrhea is secretory or osmotic.16

**Fever**

In cases of MCA, fever can be either simulated or produced. Factitious fever can be produced by thermometer manipulation (ie, applying heated objects or substances). The thermometer may also be rubbed or switched during temperature checks.

When a fever is produced, the temperature elevation is usually a response to an infection caused by the perpetrator. This effect can be achieved by placing substances such as dirt, water, stool, or milk in central lines or intravenous sites or subcutaneously to cause polymicrobial bacteremia. Substances may also be placed in the ear to cause an infection, or the perpetrator can initiate a drug-induced fever by using perphenazine of phenolphthalein.17

**Skin Disorders**

Lesions can be produced by pinching, scratching, or twisting. Perpetrators may also create marks with their mouth by suction or biting. Eechymosis is likely fabricated when lesions on the child’s body are symmetric, paired, or patterned, since accidental trauma or disease would not present this way. An instrument is usually used to produce these signs. Eechymosis can also be induced through the use of aspirin, rat poison, or any drug that increases clotting time, leading to bleeding problems.18

Erythematous lesions can be caused by rubbing the skin, leading to vesicles that can be mistaken for a burn or bullous skin condition. (This is not to be confused with cultural practices such as coining.) Combs and brushes can also be used to create rashes and unusual lesions. Lesions from scratching or digging the skin can resemble eczema, scabies, or flea bites.18 When a lesion does not fit a typical pattern of diagnosis and is resistant to multiple treatments, the diagnosis of MCA should be considered.

### Diagnostic Studies

Many of the diagnostic tests discussed in this article are more likely to be ordered once the child is admitted to the floor team. Yet, as previously stated, the diagnosis of MCA is very difficult. In an effort to solve this perplexing problem for the child and family, the ED clinician’s immediate urge may be to order tests, some of which may be invasive. It is important to review the prior visits to the ED for patterns of behavior or symptoms that might lead to the consideration of the diagnosis of MCA. Discussion with the child’s primary care physician or other physicians involved in the care of the patient is important. Electronic health records aid in the search for patterns and in the years to come, these systems will enhance our ability to be more accurate in discovering the truth about these perplexing cases.

Many physicians often omit MCA from their differential diagnosis until they have exhausted all forms of medical evaluation and ruled out an organic cause for the symptoms. Others may hesitate to consider MCA because they rely on the history to make a diagnosis and initially have no reason to believe that the parents are not acting in the best interest of the child. It is also difficult to admit that they have been misled to perform investigations and treatments that may not have been indicated.19 Failure to diagnose MCA can lead to the child being irreversibly damaged or killed. Once included in the differential, MCA can always be excluded after a thorough medical record review and preferably consultation with other physicians who are caring for the child.8

When the diagnosis of MCA is under consideration, the main issue becomes the safety of the child.20 At this point, the balance between shielding the child from more harm while gathering proof or evidence of the abuse becomes a challenge. This task can be best accomplished through 4 avenues: a search for evidence that the illness is being fabricated, a search for proof or an explanation other than MCA, actual separation of the child from the suspected perpetrator, and lastly, a detailed review of medical records.8 Admitting the child to the hospital will facilitate these steps and allow for further evaluation of the patient. Emergency clinicians should share their concerns about MCA with the admitting team, so they can also include this diagnosis in their differential.

When searching for evidence of illness fabrication, it is important to include toxicology studies if poisoning is a possibility and blood group typing or subtyping if contamination with exogenous blood is suspected. Tests must be designed according to the suspected fabrication. For example, factitious diabetes mellitus can be confirmed by using ascorbic acid as a marker in the child’s own urine. Low C-peptide and high insulin levels can help with the determination of factitious hyperinsulinemic hypoglycemia.
Overall, if a test result is negative, it may be hard to tell if it is a false negative or if it is due to an inability to capture the assault at that point in time.³⁸

When the child can be separated from the suspected perpetrator, resolution of symptoms may carry the most diagnostic weight. First, a baseline must be thoroughly documented, with a detailed history of the child’s symptoms and signs provided by the mother. The medical and investigatory teams must be certain that the only major change in this method is excluding the suspected perpetrator from access to the child.³⁸ Thus, if this is truly a case of MCA, the reported or observed symptoms noted by the perpetrator will fail to occur when she is absent.³⁷

Nurses can be extremely valuable in confirming the diagnosis, as they often spend the most time with the patient. Nursing staff will be able to determine if the signs and symptoms are truly occurring.³⁹ This method of diagnosing MCA can be definitive without exposing the child to more risk. However, if MCA is not involved, the child will have been separated from his or her caretaker unnecessarily, and the true diagnosis may be delayed.³⁸

It is also important to review all of the patient’s medical records. The sheer volume of information accumulated may obscure medical facts. Often, the more chronic the child’s condition, the less likely it is that the records have been comprehensively reviewed.³⁸

Diagnostic approaches for the most common presentations of seizures are discussed in the Emergency Department Evaluation section on page 4.

Seizures
Diagnosis is often made retrospectively. As with all presentations of seizures, a thorough history may be diagnostic. When poisoning is thought to be the cause, a toxicology screen via blood or urine samples is diagnostic. If the child has a history of seizures and is taking seizure medications, a detailed dosing history should be obtained and levels of the antiepileptic should be checked if available. If the value is subtherapeutic, levels of the antiepileptic are even being reached; if not, the mother may not be giving the drugs at all. An electroencephalogram is also helpful, but results often provide only a snapshot in time and may not catch a seizure episode.³⁸

Bleeding
Careful history taking is key when the patient presents with bleeding. A detailed family history should be obtained, including information about any bleeding that occurred during infancy (specifically, bleeding from the umbilical stump or after the circumcision if the child is male). Inquiries about hematomas after immunizations, bleeding gums, or any history of epistaxis that indicates a true bleeding abnormality are also important. Appropriate laboratory tests include coagulation studies such as prothrombin time, partial thromboplastin time, and bleeding time. A stool specimen and Wright stain will help distinguish fake from real blood. To assess if the blood is actually from the child, blood typing is always an option.³⁵

Vomiting, Diarrhea
When noxious substances are used to induce vomiting and diarrhea, urine and drug levels may be negative. Urine, serum, and hair samples can be assessed for poisoning with arsenic. With diarrhea specifically, the fluid should be analyzed by looking at the osmolality, osmotic gap, anion and electrolyte levels, and pH. Diarrhea that is osmotic and persists during fasting is suggestive of laxative abuse.³⁷

Fever
The ED clinician should consider that a fever is factitious when no evidence of active disease is elicited by physical examination, clinical findings, or diagnostic testing. In addition, a prolonged duration of fever without any change or progression of the underlying disorder should raise suspicion. A thermometer that reads 42°C (108°F) or a fever that is reported to be that high is incompatible with life. The clinician should also lean toward the diagnosis of factitious fever when the patient’s vital signs and examination results do not correspond with the reported elevation in temperature (eg, the patient is not tachycardic or warm to the touch). A fever that suddenly defervesces without diaphoresis is suspicious. Different temperatures obtained orally versus rectally should also cause the clinician to wonder.³⁷ Other indications that a perpetrator may have induced the fever are recovery of unusual organisms in the culture and an elevated temperature that disappears when the mother leaves.³⁷

Dermatologic
Extensive bruising with irregular shapes and varied coloration should not be mistaken for chronic defects in clotting. Such a diagnosis should be ruled out by running bleeding and clotting studies.³⁸

Treatment
Often, children affected by MCA require hospital admission to assure their safety and to confirm the diagnosis. The remainder of this article concerns issues that arise after ED care and obstacles faced by the inpatient team in dealing with cases of MCA.

The Treatment Team
Diagnosis and treatment of patients affected by MCA should involve a multidisciplinary approach. The members of the medical team should include physicians (especially one who specializes in the
area of child abuse), social workers, nurses (who serve as the front line in contacts with the mother and child), hospital administrators (because investigative steps such as covert video surveillance [CVS] may involve certain repercussions to the hospital), a legal consultant, and hospital security personnel (often used to confront the deception and for monitoring CVS). Other desirable, but optional, members of this team include any subspecialists who are involved in the care of the patient and a psychiatrist, both for the patient and the parent.18

The team’s first task is to ensure that all members are educated on MCA. The main agenda must be the protection of the child, whether it requires immediate separation from the mother or keeping a constant eye on all interactions between them. The team must gather the necessary information and medical records on the child’s care, looking specifically at ongoing records of the child’s recurring symptoms or response to treatment to see if they match the mother’s reports. The team must report the case to the proper authorities according to local child protection laws. Police and child protection workers also need to be involved in the decision making team. Past involvement of CPS in the child’s life is also relevant.18

**Approaching The Perpetrator**

When the team is finally ready to approach the family with the diagnosis, the number of people involved should be limited. The case should be stated clearly and simply, and the mother should be informed that the case has been reported to social services. The most important approach is to remain supportive but not accusatory. The team should also be prepared to provide for the immediate protection of the child. Obtaining a court hold on the child is essential. Child protective services is responsible for making sure of the safe placement of the child. Returning the child to the care of the non offending caregiver may not be effective.

The response of the perpetrator varies from case to case. Some completely admit to their wrongdoing, while others remain in denial. The purpose of approaching the perpetrator is not to convince her of the diagnosis or to have her admit to any wrongdoing. Rather, it is intended to let her know that the staff is aware of what she is doing. The physician’s main interest is in protecting the child and getting help for the mother,6 who may become suicidal once her duplicity is revealed. Thus, psychiatric interventions must be available and offered.6

**Counseling Of The Perpetrator**

Once the perpetrator is confronted with the diagnosis of MCA, she may deny any involvement and attempt to leave the hospital setting. In fact, what is needed is a complete psychological evaluation of the perpetrator. A brief psychiatric inpatient hospitalization may be beneficial because it removes the perpetrator from outside influences. The main focus of the treatment is to get the perpetrator to take responsibility for her actions and to help her understand what led her to display such behaviors.20,22

**Counseling Of The Patient**

The child affected by MCA will first need psychological and developmental evaluations before beginning treatment. Patients are usually very young, so the treating clinician should be knowledgeable about the cognitive and emotional development of these age groups. Play therapy is a good option for working on violation of trust issues and disruptions in attachment that can occur during MCA. Many of these children regress and often have a distorted self-image, seeing themselves as sick and fragile.21

Treatment also requires determining what medical interventions are needed and which are unnecessary and can be tapered off (eg, medications, gastrostomy tube).

**Special Circumstances**

As with any case of child abuse, the medical team must anticipate and prepare for a variety of responses when approaching a family with the diagnosis. One concern is the risk of flight with the child. Clinicians have a duty to protect the child. If there is concern about flight from the hospital, CPS and/or the police should be present during this discussion with the family. When the perpetrator has been approached with the findings, there is also greater risk to the patient. The caretaker may attempt to harm the child to prove that something is genuinely wrong and that the medical community failed to look into the medical illness properly, instead blaming the mother for it. Many victims are now at greatest risk of death. Thus, protection should always be in place for the child to prevent further harm.

Often, after a child who presents to the ED with chronic complaints is discharged to follow-up with the regular physician, new information becomes available that raises the suspicion of child abuse. In this case, the emergency clinician is still responsible for reporting these concerns to CPS.

In many cases, the diagnosis of MCA remains uncertain, highlighting the importance of the multidisciplinary approach. Close communication with CPS is necessary to ensure the child’s safety.

**Controversies/Cutting Edge**

The use of covert video surveillance (CVS) to reach a diagnosis of MCA is a very controversial issue. Although CVS can help confirm the diagnosis as well as identify the perpetrator, the technique is often
seen as unethical and an invasion of privacy. Many proponents argue that CVS is a clinical tool that protects the patient and ensures his or her safety, an important consideration since children are unable to consent to their own safety and one that should take precedence over privacy issues. Others point out that the hospital is not a private space. Patients are viewed and monitored for safety as a part of routine care. For example, nurses are constantly in and out of the patient’s room, checking vital signs, and the door is often left open, limiting the amount of privacy that is experienced. Proponents also point out that CVS typically involves the use of video only as a line of sight in a public space and thus should not be considered an invasion of privacy. Surveillance of conversations through audio devices can be considered intrusive, however, as one would not expect conversations to be amplified by the use of audio equipment. Hospitals that utilize CVS need to have a well-crafted policy on its use that is cleared

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**Risk Management Pitfalls For The Treatment Of Medical Child Abuse**

1. **Developing intimate relationships with the patient’s parents.**
The emergency clinician should always remain objective when dealing with any family that presents to the ED. This demeanor is especially important in cases where MCA is in the differential. Oftentimes, the mother will use medical jargon, making it seem that everyone is working together for the benefit of her child.

2. **Believing that parents would never fabricate an illness.**
Physicians are trained to depend on the histories the patient’s parents provide. With MCA, understanding that the perpetrator will often lie and use deceit just so the child can be placed in the sick role is key.

3. **Continuing to order tests until a diagnosis can be made.**
Physicians often have difficulty accepting that they are unable to resolve a patient’s clinical presentation. Thus, the more uncertain they are, the more tests they order. Occasionally, physicians may have to take a step back and ask themselves why they are ordering another test and how much it will benefit diagnosis versus placating their ego as a diagnostician.

4. **Failing to communicate with others.**
The key to addressing MCA is the multidisciplinary approach. Working alone will often leave the physician feeling overwhelmed and without a tangible diagnosis. It is also important to obtain all of the patient’s previous records to decrease duplicity of testing and facilitate the possible diagnosis of MCA.

5. **Disclosing to the suspected perpetrator before gathering enough evidence or consolidating support from auxiliary staff.**
The whole team should be on the same page, so it does not appear that the primary physician is the only one who believes abuse is occurring. All the medical information should be clear-cut, and no other diagnosis should be plausible.

6. **Not considering the diagnosis in the differential.**
The physician should ensure that MCA is always in the differential diagnosis. Failure to do so could lead to further harm to the victim.

7. **Incorrectly using the term MSBP.**
Incorrect use of the term MSBP, which is widely recognized, can be detrimental to the investigation and the search for the true cause of a child’s illness. Münchausen syndrome by proxy conjures up a specific profile of the perpetrator and her interactions with the child and health care professionals. When others involved in the multidisciplinary team begin to question if the caretaker fits this profile, the focus on the child may get lost.

8. **Believing that fathers can never be the perpetrators.**
Fathers have been found to cause 5% of cases of MSBP. Fathers who are perpetrators are more likely to also have some underlying psychophysiology.

9. **Believing that MCA is rare.**
Medical child abuse is actually quite common; however, the deception and falsification that accompany the presentations allows many cases to go unreported or unnoticed.

10. **Believing that no one will take these concerns seriously.**
It is always surprising to learn how many people on the treatment team had suspicions about the clinical presentation and actual diagnosis of a patient. Without bringing the possibility of MCA into the open, however, such a diagnosis will often be missed.
by medical staff, administration, legal consultants, and security personnel.

Of note, the decision to use CVS should be based not on a single person’s opinion, but instead on a multidisciplinary approach.2 It is important to remember that the care of the child usually involves the primary care physician, medical subspecialty consultants, dieticians, social workers, and the nursing staff. Everyone should be aware that MCA is in the differential.2 In addition, the hospital’s risk management team, ethics panel, and security personnel should be involved in the process. An institution may be held liable for injury to a child while under constant surveillance in the hospital. Therefore, the CVS plan must include continuous observation of the video and a plan to intervene if an incident of abuse is manifested.

Disposition

Hospitalization of the child does not always guarantee his or her ongoing safety from further abuse. Long-term medical foster care is always an option. Ensuring the child is safe from further medical abuse involves establishing a single medical home where the patient’s primary care physician is aware of the patient’s past problems and is able to offer the child continuity of care.1

Summary

Medical child abuse has evolved through many name changes, from its original incarnation as MSBP, which is now considered a psychiatric diagnosis, to a term that focuses on the abuse done to the child. The disorder has 2 components, the child who is victimized and an adult perpetrator. Medical child abuse is not as rare as once thought, nor is it culture specific.

Perpetrators and victims of MCA do not fit specific stereotypes, although there are some commonalities between MSBP and MCA. With MSBP, patients are usually young and present with recurring illness that cannot be easily diagnosed by the primary physician despite an extensive workup. Furthermore, with MSBP, the perpetrator usually has a medical background and develops a good relationship with the hospital staff. The family dynamic seen with MSBP involves the father being emotionally distant and unaware of the extent of the abuse.

Presentations are usually atypical and often simulated or produced to present as seizures, bleeding episodes, apnea, gastrointestinal issues, fever, or rash. Diagnosis is difficult and includes searching for actual evidence that the child is being abused, looking for explanations other than MCA, separating the child from the perpetrator, and conducting a detailed medical record review.

The eventual diagnosis should involve a multidisciplinary approach. It is essential to ensure that all members of the team are well educated on MCA. It is also important that CVS not hinder the diagnosis of MCA. The floor physician should work with legal consultants, a child protection team, and hospital administrators to allow for CVS.

The main job of the ED clinician is not to figure out the motivations behind the abuse. Instead, the ED clinician’s job is to include MCA in the differential diagnosis in order to allow early detection, intervention, reporting, and protection of the child from further abuse.

Case Conclusion

After the third ALTE episode, the patient is admitted to the intensive care unit (ICU) for close observation and a second pneumogram. While in the ICU, she is started on antibiotics for presumed pneumonia but is noted to be afebrile and to lack clinical findings significant for the disorder. The treatment team becomes concerned about MCA, given that the stopped breathing episodes occurred only when the mother was around. Thus, the child abuse pediatrics team is consulted.

After the case is discussed in a multidisciplinary manner by physicians, pulmonologists, nurses, the hospital’s general counsel, and hospital security, CVS is initiated the next time the mother comes for discharge. In the middle of the night, security personnel (who have been watching the CVS in real time) witness smothering of the infant by the mother. They immediately call the patient’s nurse, who enters the room after the mother has stopped smothering the child. The nurse takes the infant, puts her in the bassinet, and examines her. The infant does not appear to be cyanotic or lethargic. The nurse does not leave the room. In the meantime, police and CPS are contacted and observe the recorded event with the floor hospitalist and child protection team physician. The mother is then taken into a conference room, where the findings are discussed with her, and she is subsequently arrested. The patient does well throughout the rest of her hospital stay, feeds well, does not experience reflux, gains weight, and does not have any other ALTE episodes. It is determined that the blood on her nares during the previous episode likely resulted from venous congestion during a suffocation event. She is discharged under the care of a relative, where her safety is assured.

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References


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1. When a child undergoes or receives unwarranted medical care at the perpetration of the caretaker, the American Academy of Pediatrics recommends the term _________ for the diagnosis.
   a. Munchausen’s Syndrome By Proxy
   b. Pediatric Condition Falsification
   c. Medical Child Abuse
   d. Fictitious Disorder by Proxy

2. The perpetrator of MSBP is most often:
   a. The child’s biological mother
   b. The child’s father
   c. The child’s stepmother
   d. The child’s stepfather
3. In households where the victimized child has siblings, the siblings are likely experiencing MCA at the same time.  
   a. True  
   b. False

4. Examples of MCA include all of the following EXCEPT:  
   a. A mom who puts her own blood into a urine sample to convince the medical team that the child has a urinary problem  
   b. A mom who exaggerates the child’s true symptoms to convince the physician that further testing is necessary  
   c. A mom who is overanxious about her child’s symptoms and asks if further testing is warranted  
   d. A dad who brings his child to multiple subspecialists with complaints of various symptoms that do not fit a specific pattern of disease

5. Which of the following actions should the ED clinician undertake when the diagnosis of MCA is suspected?  
   a. Order additional tests to ensure there is not a medical cause for the symptoms.  
   b. Probe for additional history by researching previous admissions and speaking with the child’s primary doctor.  
   c. Immediately contact CPS.  
   d. Immediately approach the parent with his or her concerns.

6. Obstacles to making the diagnosis of MCA include which of the following?  
   a. The parent is presenting a falsified history.  
   b. The physician finds it difficult to admit that he or she might have played a role in the child’s morbidity by ordering multiple tests.  
   c. The diagnosis is very difficult to prove.  
   d. A and B only  
   e. A, B, and C

7. The best way to make the diagnosis of medical child abuse includes all of the following EXCEPT:  
   a. Searching for evidence that the illness is being fabricated, including discussion of possible MCA with the parents  
   b. Searching for proof or an explanation other than MCA  
   c. Separating the child from the suspected perpetrator  
   d. Performing a detailed review of medical records

8. The diagnostic multidisciplinary team should include all of the following EXCEPT:  
   a. The non offending caregiver  
   b. Nurses  
   c. Physicians  
   d. Social workers  
   e. Subspecialists

9. The use of audio equipment in CVS in the hospital setting is typically not acceptable, as people do not expect to have their conversations recorded and enhanced.  
   a. True  
   b. False

10. When making the decision to use CVS, all of the following professionals should be involved EXCEPT:  
   a. CPS  
   b. Ethics panel  
   c. Nurses  
   d. Physicians  
   e. Risk management team  
   f. Security personnel

11. Which of the following statements is true regarding the disposition of a child in the ED when MCA is suspected?  
   a. The physician should contact the primary pediatrician for more information and discharge the patient home.  
   b. The physician should probe for more information, including discussions with subspecialists and a review of previous records.  
   c. The physician should consult with the social worker to determine if MCA is present.  
   d. The physician should consider admitting the child for further evaluation and protection.  
   e. A and C  
   f. B and D  
   g. All of the above

12. Which of the following statements is true regarding approaching the family with the diagnosis of MCA and the need to report to CPS?  
   a. The entire multidisciplinary team should be present.  
   b. All of the details concerning the case should be presented to prove the diagnosis to the family.  
   c. The perpetrator may become suicidal.  
   d. The child needs no further care, as he or she has been removed from the source of the problem.  
   e. All of the above
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