Case Report

Medical Child Abuse: An Unusual "Source" of Vaginal Bleeding

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A B S T R A C T

Background: Medical child abuse (MCA) is challenging to diagnose. Although young children are often affected, adolescents can be victims through caregiver coercion. Presentation is highly variable. Diagnosis is essential because of high associated morbidity and mortality.
Case: We describe the case of a 12-year-old girl who presented to multiple subspecialty clinics with reported menorrhagia. Despite reassuring clinical examinations, the family described menorrhagia that failed to respond to standard treatment. After an urgent evaluation for reported heavy bleeding revealed only scant blood, the diagnosis of MCA was made.
Summary and Conclusion: Vaginal bleeding is a rare presentation of MCA, but must be considered whenever reported symptomatology does not follow physiologic patterns, respond to standard medical treatment, or correspond to clinical evaluation. Prompt identification is important to prevent further harm.
Key Words: Medical child abuse, Factitious disorder imposed on another, Munchausen syndrome by proxy, Menorrhagia

Introduction

Heavy menstrual bleeding is a common complaint in adolescence. Clinicians must thoroughly assess bleeding patterns to distinguish normal menstruation from menorrhagia because patients and their families might overestimate bleeding. Clinicians often rely on "red flag" symptoms—such as frequent pad/tampon changes, flooding, or leaking—from the history to identify patients who require further evaluation.

When the clinical evaluation for menorrhagia is normal, clinicians should reassure patients about bleeding and offer hormonal methods to minimize symptoms. However, when patients and families continue to describe significant symptomatology and pursue further evaluation, clinicians must consider another atypical diagnosis other than overreporting: medical child abuse (MCA). MCA occurs when caregivers purposefully feign symptoms or inflict illness in children. Although younger, preverbal children are most often the victims, MCA also can occur in older victims—including adolescents—who might be coached to give false history by caregivers. MCA must be considered whenever reported symptomatology does not follow physiologic patterns, respond to standard medical treatment, or correspond to physical, radiologic, and laboratory evaluations.

Case

A 12-year-old young woman with medical history of recurrent episodes of bleeding and developmental delay presented to the adolescent medicine clinic for the evaluation of prolonged menstrual bleeding.

The patient had experienced menarche 2 weeks earlier. Her adoptive mother related that bleeding had lasted 2 weeks, though stopped the day of the clinic appointment. The mother sought hormonal contraception for the patient for menstrual hygiene and pregnancy prevention.

The patient's medical history included moderate developmental delay due to fetal alcohol syndrome, attention-deficit/hyperactivity disorder, anxiety, depression, migraines, and idiopathic urticaria. The patient's mother also reported recurrent episodes of bleeding and easy bruising throughout her life, including bleeding from her eyes, navel, and palms, as well as episodes of gross hematuria and hematemesis. Her mother described that these episodes had been evaluated by her primary care provider, urology, ophthalmology, gastroenterology, and hematology without a cause of her bleeding identified. She had multiple previous hospitalizations and diagnostic procedures to evaluate the etiology of the bleeding, although no cause was identified.

The patient had been adopted at 6 months of age because of maternal substance abuse during and after pregnancy. Although both parents were retired, the patient's mother previously worked as a clinical manager in the hospital. The patient was home-schooled since early childhood. They denied any history of physical or sexual abuse, sexual activity, genital trauma, or masturbation.

The patient's physical examination, including chaperoned genital examination, was unremarkable. The cause of her prolonged bleeding was believed to be an anovulatory cycle, because of the mother's report of a previous normal evaluation by hematology. After discussion about hormonal options, treatment was started and the patient was given monophasic 35-μg combined oral contraceptive pills (COCP).

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Table 1
Laboratory Studies

Laboratory Study	Emergency Department	Outpatient Clinic Follow-Up	Reference Range
White blood count, k/mm^3	6.36	5.75	4.5-13.5
Hemoglobin, g/dL	14.1	13.6	11.4-15.4
Hematocrit, %	38.9	39.6	32-46
Mean corpuscular volume, fL	84.2	85.5	77.0-95.0
Platelet count, k/mm^3	288	236	150-400
Prothrombin time, s	11.6	11.2	9.0-12.0
Partial thromboplastin time, s	29.4	31.9	25.0-36.0
von Willebrand multimeric	–	Normal	Normal
Factor VIII, %	67	85	50-100
Factor VIII activity, %	48	92	50-150
Von Willebrand Antigen (%)	86	91	60-150
von Willebrand ristocetin cofactor, %	75	81	50-150
Platelet Aggregation	–	Normal	Normal response to all agonists
Hemoglobin A, %	–	96.6	94.0-98.0
Hemoglobin A2, %	–	2.7	0.7-3.1
Hemoglobin S, %	–	0	0
Hemoglobin C, %	–	0	0
Hemoglobin F, %	–	0.7	0.0-2.0

In the days after the initial clinic visit, the mother called to relate that the patient's bleeding had restarted. The family was instructed to increase dosing frequency of the COCP with a taper as bleeding stopped. The following day, the mother called to report that the patient continued to have heavy bleeding despite increased COCP dosing and was soaking through a menstrual pad every 20 minutes. She was instructed to take the patient to the emergency department for evaluation.

In the emergency department, the patient had age-appropriate vital signs, normal hemoglobin, and negative pregnancy test. A von Willebrand panel was drawn. The physical exam was unremarkable, although the family declined a genital examination. The patient underwent a transabdominal pelvic ultrasound examination, which was normal. Gynecology was consulted. The mother related that the patient had developed migraines with aura after starting the COCP, and it was discontinued. The patient was discharged home with a follow-up appointment in the gynecology clinic. During the emergency department visit, a postpartum pad was placed under the patient, and on discharge several hours later, only a quarter-sized area was saturated with blood.

At follow-up appointment in the gynecology clinic, the family described ongoing heavy bleeding since emergency department discharge. After discussion with the family about progestin-only hormonal options, the patient underwent etonogestrel rod placement. She was given a prescription for tranexamic acid for future use. The family elected to follow-up in adolescent medicine.

In the interim, the von Willebrand panel resulted as borderline low and the patient was re-referred to hematology. Interim labs were drawn (Table 1).

The mother continued to report that the patient had heavy menstrual bleeding, placing calls to multiple clinics including hematology, adolescent medicine, and gynecology. She was advised to have the patient evaluated in the emergency department because of reports of soaking through a pad within minutes. The mother declined to take her to the emergency department, so the patient was urgently evaluated in the adolescent medicine clinic.

In clinic, the mother reported that the patient wore a tampon and pad, changing both every hour because of saturation. She was on day 3 of tranexamic acid treatment. The patient denied pallor, but reported shortness of breath and fatigue. On examination, the patient's heart rate was 70 beats per minute, and blood pressure was 108/51 mm Hg. The patient was casually dressed, wearing white shorts. Cardiopulmonary examination was within normal limits; she had no pallor. On chaperoned genital exam, the patient had normal sexual maturity rating IV external genitalia with a small amount of blood at the introitus, no visible trauma. Her menstrual pad was saturated, although blood on the pad appeared old. The family reported the pad had been changed 1 hour before the clinic visit. Given the incongruence the history and physical exam, the child abuse team was consulted, who confirmed the diagnosis of MCA.

Summary and Conclusion

MCA is the diagnosis given to the child victim of factitious disorder imposed on another (FDIA), previously known as Munchausen syndrome by proxy. Munchausen syndrome was first described by Richard Asher in *Lancet* in 1951 as a psychiatric illness in which adult patients purposefully, often dramatically misrepresent illness.[1] FDIA, a variant in which illness is faked or produced in a child by another, was first described by Roy Meadow in 1977.[2] FDIA is defined by criteria in the *Diagnostic and Statistical Manual of Mental Disorders* (fifth edition; Table 2) and differs from malingering in its motivation.[3] Although those with malingering are motivated by external benefit (eg, financial

Table 2
Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition Criteria: Factitious Disorder Imposed on Another (Previously Factitious Disorder by Proxy)

A. Falsification of physical or psychological signs or symptoms, or induction of injury or disease, in another, associated with identified deception
B. The individual presents another individual (victim) to others as ill, impaired, or injured
C. The deceptive behavior is evident even in the absence of external rewards
D. The behavior is not better explained by another mental disorder, such as delusional disorder or another psychotic disorder

Note: The perpetrator, not the victim, receives this diagnosis.

gain, avoidance of work), the motivations of FDIA are difficult to elucidate, but frequently stem from the psychologic gratification and attention given by medical professionals.

MCA, although rare, is variable in its presentation. The victims of MCA are usually younger children, on average 4 years or younger, although older children can also be affected.[4,5] Adolescents might provide false history or feign symptoms in coordination with perpetrators to maintain their relationships, gain reward, or avoid further abuse—although they still remain the victims. In this case, information later obtained revealed that this patient was coerced into providing false history. Presenting symptoms vary. The most common complaints include apnea, feeding difficulties, seizures, cyanosis, diarrhea, asthma, and behavioral problems.[4,5] In one literature review and analysis of MCA, although any cause of bleeding was a relatively common presentation in 83/451 (18.4%) patients, vaginal bleeding was rare, only accounting for 2/451 (0.4%) of cases.[5] Patients often present with several symptoms, which might evolve over time. In this case, the patient presented with 9 different medical complaints since the suspected onset of MCA, most of which predated the complaint of vaginal bleeding. Review of her records revealed frequent evaluation of intractable symptoms (eg, hematuria, hematemesis) that were not witnessed by others—only reported by the patient and her family. The average time from onset of symptoms to diagnosis of MCA is nearly 22 months.[5] For this patient, the time from onset of symptoms indicative of MCA to diagnosis was 94 months, significantly longer than average. We suspect this delay was because of intentional fragmentation of the patient's care in part by the family's "doctor shopping." When only considering outpatient visits for all MCA symptoms, this patient was evaluated by 12 different providers in her primary care clinic and 14 providers within 10 different subspecialty clinics before diagnosis. These clinicians used multiple medical records systems that do not communicate, and there was limited communication between subspecialty and primary care clinics. Timely identification of MCA is essential because its associated mortality and morbidity is high. In one study, at time of diagnosis 27/451 (6.0%) of victims had died and 33/451 (7.3%) had long-term or permanent injury.[5] The diagnosis of MCA also has implications for other children in the family—53/210 (25.2%) of siblings of MCA victims were deceased and 131/210 (61.3%) had similar illnesses.[5]

The diagnosis of MCA is challenging to make, in part because of intentional fragmentation of care by the perpetrator, variable presentations, and lingering diagnostic uncertainty. This disorder also undermines the fundamental truth-telling relationship between the clinician, patient, and their family. Additionally, perpetrators might attempt to manipulate clinicians through flattery to continue unnecessary evaluation in search of a "mystery" diagnosis. There should be a high index of suspicion for MCA when a child presents with unexplainable symptoms, poor response to treatment, multiple evaluations by specialists without diagnosis, and an evolving pattern of new symptoms.[6] Being mindful and keeping track of small details and inconsistencies, such as this patient who wore white shorts to clinic despite reporting heavy menstrual bleeding, can help to make this diagnosis. When this diagnosis is suspected, the physician must extensively review the patient's records and coordinate with other providers. These actions can be labor- and time-intensive. Clinicians are mandated to report suspicions of child abuse and do not need conclusive "proof" to make a report. In cases in which the diagnosis remains unclear, consulting child abuse specialists or admitting the patient to the hospital for video monitoring can aid in diagnosis, although this evidence might not be admissible in court in every jurisdiction.

As with all cases of child abuse, clinicians must consider the current safety of the child and the future risk for harm. Involvement of child protective services is essential, because the patient might need out-of-home placement, although providing the "least restrictive setting" is best according to the American Academy of Pediatrics clinical report on MCA.[7] Ultimately, this patient entered out-of-home placement because the threats to her safety were believed to be significant. In foster care, all symptoms stopped. Further investigation revealed coercion of the patient and ongoing attempts to harm the child while in foster placement. The state sought termination of parental rights, and the family voluntarily relinquished custody.

MCA is difficult to diagnose and has significant, potentially irreversible health consequences for victims. Clinicians must consider MCA on their differential diagnosis whenever patients present with nonphysiologically explained symptoms and symptoms not improved with standard treatments. Clinicians who suspect MCA must review medical records, maintain thorough documentation, and coordinate care to protect vulnerable children.

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