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The Bipolar Puzzle

By JENNIFER EGAN

When Claire, a pixie-faced 6-year-old in a school uniform, heard her older brother, James, enter the family's Manhattan apartment, she shut her bedroom door and began barricading it so swiftly and methodically that at first I didn't understand what she was doing. She slid a basket of toys in front of the closed door, then added a wagon and a stroller laden with dolls. She hugged a small stuffed Pegasus to her chest. "Pega always protects me," she said softly. "Pega, guard the door."

James, then 10, had been given a diagnosis of bipolar disorder two years earlier. He was attending a therapeutic day school in another borough and riding more than an hour each way on a school bus, so he came home after Claire. Until James's arrival that April afternoon, Claire was showing me sketches she had drawn of her Uglydolls and chatting about the Web site JibJab, where she likes to watch goofy videos. At the sound of James's footsteps outside her bedroom door, she flattened herself behind the barricade. There was a sharp knock. After a few seconds, James's angry, wounded voice barked, "Forget it," and the steps retreated.

"If it's my brother, I don't open it," Claire said. "I don't care if I'm being mean. . . . I never trust him. James always jumps out and scares me. He surprises me in a bad way."

I left Claire's bedroom and found James with his mother, Mary, in their spacious living room, which has a sidelong view of the Hudson River. James is a fair, athletic-looking boy with a commanding voice and a restless, edgy gait. He began reading aloud a story he wrote at school called "The Mystery of My Little Sister." It involved James discovering Claire almost dead, rescuing her and forming a detective agency to track down her assailant. He read haltingly, often interrupting himself. When his mother asked a question, the roil of frustration that nearly always seethes just under James's surface, even when he is happy, sloshed over.

"If you listened on the first page, it says it!" he scolded her, then collapsed hopelessly beside the coffee table. "You don't get anything. Now I lost my place. Forget it. I give up."

He crossed his arms on the table and rested his head in them. Mary waited quietly in her chair. Sure enough, a minute or two later James began reading us a list he had concocted of 50 ways to get rich. The next time his mother spoke, he bellowed: "I wasn't talking to you! I'm not reading it now!" He threw the paper down and stalked out of the room.

The baby-sitter arrived, a 27-year-old preschool teacher whom Mary hired to come in a few hours each week and help maintain harmony when both her children were home. It wasn't easy. There was a basic rhythmic pattern to the afternoon: James reached out, craving attention and engagement, then stormed away in roaring frustration only to return, penitent and eager to connect, cuddling and hanging on to his mother in a way unusual for a boy his age.

At one point Claire appeared in the next room, and James hurled a ball at her, missing. Claire shrieked as if she'd been hit, screaming, "What did you do that for?"

"Wow, I'm scared," James said. "I'm scared, right, Claire?" He threw the ball at her again, then asked, "Want to have family time?"

"No," Claire hollered. "I want James to get away from me. Get away!"

James made a series of loud, taunting sounds, which induced more hysterical cries from Claire. "James, you're provoking," Mary said evenly. "Claire, you're overreacting."

Claire rode out of the room in her wagon. James sat with his stockinged feet in his mother's lap and played his Nintendo DS, though it rarely held his attention for more than a few minutes.

"The therapist says that Claire is in crisis," Mary told me, referring to a social worker the family sees twice each week. "James is feeling better, James is feeling happier, so Claire, who has always been easy, is letting it all out now."

James has never been easy. Like many children whose emotional problems are being diagnosed as bipolar disorder, his main symptoms are aggression and explosive rage (known in clinical parlance as "irritability"), and those traits have been visible in James from the time he was a toddler. Fifteen years ago his condition would probably not have been called bipolar disorder, and some doctors might hesitate to diagnose it in him even now, preferring other labels that more directly address James's rage and aggression: Oppositional Defiant Disorder (O.D.D.) or Attention Deficit Hyperactivity Disorder (A.D.H.D.) — both of which have been applied to James as well. But since the mid-1990s,

a revolution has occurred in the field of child psychiatry, and a mental illness characterized by episodes of mania and depression (bipolar disorder used to be called “manic depression”), which once was believed not to exist before late adolescence, is now being ascribed rather freely to children with mood problems, sometimes at very young ages.

The Diagnostic and Statistical Manual of Mental Disorders (the current edition is referred to as D.S.M.-IV) describes bipolar disorder as a condition whose average age of onset is 20, but virtually all the leaders in the field now say they believe it exists in children too. What they don't agree on is what, exactly, characterizes the disease in kids, or how prevalent it is; some call it rare, while others say it is common. Many clinicians say the illness looks significantly different in children than in adults, but the question of *how* it differs, or what diagnostic terms like “grandiosity,” “elevated mood” or “flight of ideas” (all potential symptoms of adult bipolar disorder) even mean when you're talking about kids, leaves room for interpretation. For example, it's normal for children to pretend that they are superheroes, or believe that they can run faster than cars, whereas in an adult, these convictions would be signs of grandiosity. Equally unclear is whether a child who is identified as having a bipolar disorder will grow up to be a bipolar adult. Work on the D.S.M.-V is under way, and discussions have begun on how to address the issue of bipolar children.

As Ellen Leibenluft, who runs the pediatric bipolar-research program at the National Institute of Mental Health, told me, “There definitely will be — and needs to be — more description of what bipolar disorder looks like in children, how one diagnoses it and some of the challenges.”

According to Mary, James was excessively cranky and active from babyhood (except where otherwise noted, the names of patients and their families used in this story are middle names). “By 7:30 every morning, I'd be in the playground with him,” she said. “If it was over 20 degrees I was out the door, because if he was inside, he would rage.” Still, James seemed at first to thrive in preschool. “I said: ‘O.K., this is my problem, not his problem. This is my parenting skills, my lack of discipline, my lack of structure.’” However, when I would pick him up from school he would scream and cry and rant and rage, sometimes remove his clothes, it would take me half an hour to get him out of the vestibule. I'd have to literally tie him in the stroller. He was 3. People were absolutely horrified.”

When James was 4 and Claire was a newborn, his pre-school contacted Mary in the fall and told her that her son seemed hyperactive and aggressive. After three days of testing, a developmental pediatrician diagnosed his condition as Oppositional Defiant Disorder, and prescribed Zoloft, an antidepressant. “We refused to give a 4 1/2-year-old Zoloft,” Mary said. They limped through the rest of the year, but in order for James to remain at the school for another year, they had to promise to hire a “shadow” — someone to be with James full time in the classroom — at a cost of \$20,000 a year. Mary and her husband are affluent enough to afford this (her husband, Frank, has his own business; Mary hasn’t worked since James was born); otherwise, James would have had to leave the school.

Meanwhile, life at home was devolving into a nightmare. “James used to wake up every morning violently angry,” Mary said. “I used to wake up at 4:30 and heat his milk in his sippy cup so that when he woke up at 5:00 it would be exactly the right temperature. If it was too hot or too cold, he would take one sip from the cup, hurl it across the room and rage so loudly that it would wake Claire up, so that at three minutes after 5:00, I would be crying, Claire would be crying and my husband would be crying.”

She and her husband took James to a pediatric psychopharmacologist, who prescribed Risperdal, one of a new generation of antipsychotic drugs that have become popular for treating children with rage and aggression because it can blunt their anger and calm them down. These so-called atypical antipsychotics are less likely to cause abnormal movements and muscle stiffness than the earlier antipsychotics, but they can still prompt enormous weight gain and put children at risk for diabetes. Since James was underweight and oblivious to food, Mary and her husband were willing to take the risk.

“So we give him the Risperdal drops before bed, and he wakes up the next morning and he says: ‘Good morning, Mommy. I’m hungry. Could I have something to eat?’ I wake my husband and I say: ‘James is different. The medication is working.’ That day at noon, the Risperdal wore off, and he became angry, miserable, mean, frightening — everything he was before.”

But even with Risperdal and a shadow, James struggled in his second year of pre-K; with his anger under control, his attention problems became more visible. “He could not stay on tasks,” Mary said. “He couldn’t stick with anything. He’d go to the drawing table and make one scribble. . . . He was hopping around.” James’s condition was diagnosed as Attention Deficit Hyperactivity Disorder, a problem that is said to afflict between 3 and 7 percent of American schoolchildren. Normally A.D.H.D. is treated with stimulants like

Ritalin, which can temporarily improve focus, but the two stimulants his doctor tried made James nasty and angrier, and he couldn't stay on them. In first grade he moved to a school for children with special learning needs, but by second grade he was having trouble even there. "He would cry every morning, and cry and cry and cry," Mary said. "I now realize that that was depression."

Home life was almost unbearable. "I couldn't bring them to a playground together, because if he got behind Claire on the slide, he would push her down. If she walked by, he put out his leg to trip her. If they were watching TV and he became overstimulated, he would kick and punch her. . . . There's never been a dinner hour; he'd push her plate. He didn't like the way she was chewing. He'd rage. We never had any family meals. No family trips. Ever."

As often happens with children on psychotropic drugs, James's behavior began to "break through" the medication, requiring more and eventually different combinations of drugs to contain it. Along with the Risperdal, he eventually went on Depakote, one of several antiseizure drugs that are also used as mood stabilizers. Depakote was ultimately replaced with Lamictal, another antiseizure drug, and the Risperdal gave way to Abilify, another antipsychotic.

In spring of third grade, Mary was walking James and Claire home from James's school when he demanded a lottery ticket. She refused to buy him one. "He started to scream and yell and rant and rave on a busy corner. We were crossing the street and the light was changing. Coming down 75th Street I saw this big white Hummer. James said to me as we were crossing the street, 'If you won't buy me a lottery ticket, I don't want to live.' He stood in the middle of the street and he faced the Hummer down. And the Hummer pulls over and the guy gets out and starts screaming." At the psychiatrist's office the next day, "James is speaking really fast and he's mounting my leg like he's in sexual overdrive," Mary recalled. Pressured speech and hypersexuality are symptoms of mania. Shortly thereafter, when James was 8, his condition was diagnosed as bipolar disorder.

Later on the April afternoon I spent in their apartment, Claire was on the family computer visiting her favorite Web site, JibJab, when James came over and stood beside her. "Can I start it over, please?" he said.

"That's nice asking, James," Mary said. Claire replayed the video, and the children laughed, watching it together. A few minutes later, Claire came to her mother on the couch and put her arms around Mary's neck. James followed, draping himself across his

mother's legs. Mary mentioned that she was concerned about some of the language she'd just heard on the video and mused aloud over whether to adjust the Internet filter to block JibJab out. "Mommy, please keep that one," Claire implored. "That's the only one James and I watch." When Mary relented, the children cheered, seizing each other's hands in a rare show of unity. A moment later, Claire, still giggling, said, "Ow." James had pushed or hurt her somehow. "Ow, ow!" she cried, in real pain now.

"That hurts her, James," Mary said.

"Get away," Claire screamed. "Now!"

The children began to roar at each other. Mary took charge: "Don't hit. Let's separate our bodies." Then, almost with surprise, she said, "We were having a nice moment."

Last fall, James started fifth grade at a school designed to accommodate emotional as well as learning issues. It has a contract with the New York City Department of Education, which means that city children attend free as long as the D.O.E. deems them in need of its services. The first parent conference, last fall, was sobering for Mary and her husband; the combination of A.D.H.D. and anger was making it hard for James to function even in this new school. "He can't start, he can't stop," she paraphrased. "He can't sit in his seat. He can't stop interrupting. He's constantly provoking his classmates. He's basically barely teachable. . . . It was like someone punched me in the side of the jaw." Mary went to James's psychiatrist for help. "I thought I was finally going to walk away with Ritalin," she said. "Instead, we walked out of that office with lithium."

Lithium is one of the oldest and most reliable mood stabilizers, but it's a serious and potentially toxic drug, requiring regular blood draws to make sure that it isn't becoming too concentrated. It can have unpleasant side effects: tremors, weight gain, acne and thyroid problems in the short term; kidney damage in the long run. But Mary and her husband felt they had little choice. And the lithium, which James took along with his other medication, helped. James settled down in his new school and began to learn, and even to make friends. He was happier. At which point Claire, perhaps in a delayed reaction to trauma dating back to when she was small, became hysterically intolerant of her brother. "The latest edict from the therapist is that Claire's allowed to take her food and go in the TV room and eat by herself," Mary said. "And now she's eating three meals a day in there."

James's psychiatrist was planning to raise his lithium dose until he was fully stable, and

then to try adding a stimulant to help with his A.D.H.D., so he could concentrate better in school. Mary's hopes were riding heavily on this plan; lately, James's psychiatrist had been floating the idea of a residential school for James as a possible solution to his learning issues and conflicts with Claire. Mary and her husband badly wanted to keep him at home.

"I used to cry five times a day, and now maybe I only cry once or twice," she told me, her usual upbeat practicality briefly giving way to emotion. "So it's better, you know? It's better now that I don't pick him up at school, and he doesn't rage at me in front of all the other parents. He can rage when he bursts in the door, so no one sees how awful it is. It's like a dirty little secret. It's like having a husband who beats you, only it's a kid. It's your own."

A study last fall measured a fortyfold increase in the number of doctor visits between 1994 and 2003 by children and adolescents said to have bipolar disorder, and the number has likely risen further. Most doctors I spoke with found the "fortyfold increase" misleading, since the number of bipolar kids at the beginning of the study was virtually zero and by the end of the study amounted to fewer than 7 percent of all mental-health disorders identified in children. Many also said that because bipolar children are often severely ill, they can proportionately account for more doctors' visits than children with other psychiatric complaints, like A.D.H.D. or Anxiety Disorder. Still, nearly every clinician I spoke to said that bipolar illness is being overdiagnosed in kids. In Leibenluft's studies at the National Institute of Mental Health, only 20 percent of children identified with bipolar disorder are found to meet the strict criteria for the disease. Breck Borcharding, a pediatric psychiatrist in private practice in the Washington area, said: "Every time one of my kids goes into the hospital, they come out with a bipolar diagnosis. It's very frustrating."

There are many possible reasons for the sudden frenzy of pediatric bipolar diagnoses. First, a critical shortage of child psychiatrists, especially in rural areas, means that many children are being seen by adult psychiatrists or — more often — by family doctors, who may lack expertise in child psychiatry. Managed care usually pays for a single, brief psychiatric evaluation (and it strictly limits the number of therapy appointments a year) — not nearly enough time, many say, to accurately diagnose a condition in a mentally ill child.

Then there is "The Bipolar Child," a successful book published by the psychiatrist Demetri

Papolos and his wife, Janice, in 1999, and referred to by more than one parent I spoke to as a “bible.” The Papoloses’ description of pediatric bipolar disorder was amassed partly by using responses to an online questionnaire filled out by hundreds of parents on an electronic mailing list, who said they believed their children were bipolar (and who often had strong family histories of the disease). The Papoloses’ diagnostic criteria include some idiosyncratic items — a severe craving for carbohydrates, for example — that are found nowhere in D.S.M.-IV. Nevertheless, many parents walk into doctors’ offices having already read “The Bipolar Child” and concluded that their children are bipolar. Because doctors rely heavily on parental reports when diagnosing disorders in children, these “prediagnoses” may have an impact on the outcome.

And of course, there are pressures and blandishments from the pharmaceutical industry, which stands to profit mightily from the expensive drugs — often used in combination — that are prescribed for bipolar illness, despite the fact that very few of these drugs have been approved for use in children.

For all the possible overdiagnosing of pediatric bipolar disorder, however, many in the field also say that a lot of truly bipolar children who could benefit from therapy are falling through the cracks. This is a critical issue; studies clearly show that the longer bipolar disorder goes untreated, the worse a person’s long-term prognosis. Between 10 and 15 percent of those suffering from bipolar disorder end up committing suicide.

Some studies suggest that bipolar disorder may actually be on the rise among young people. One intriguing hypothesis involves a genetic phenomenon known as “anticipation,” in which genes become more concentrated over generations, bringing a stronger form and earlier onset of an illness with each successive generation. Another theory is “assortative mating,” in which a more mobile and fluid society, like ours, enables the coupling of people whose mutual attraction might be partly due to a shared genetic disposition to something like bipolar disorder, thus concentrating the genetic load in their offspring.

Given these uncertainties, how does a doctor go about diagnosing bipolar disorder in a child? To understand that process, I spent several days at the Child and Adolescent Bipolar Services Clinic at the Western Psychiatric Institute and Clinic of the University of Pittsburgh Medical Center, the largest clinic in America devoted specifically to treating and studying children with bipolar disorder. It has about 260 active patients, most of them from Pennsylvania, eastern Ohio and West Virginia, and it evaluates between one

and five new cases each week. It accepts managed care, meaning it operates at a loss, which is absorbed by the medical center. (Many child psychiatrists in private practice, who charge as much as \$400 an hour in New York, accept no insurance; families who can afford to lay out these sums must collect what they can from their insurers after the fact.)

The three evaluations I watched consisted of what are called semistructured interviews of parents and children, separately and together, by an experienced nurse or social worker, to collect the child's psychiatric history and determine which symptoms of mania or depression are present (parents are prescreened by phone to rule out cases that are clearly not bipolar, a process that eliminates roughly 50 percent of callers). Parents and child then have a lengthy meeting with either Boris Birmaher, who founded the clinic 10 years ago, David Axelson, its current director, or one of two other psychiatrists.

The first two evaluations I saw were of teenagers, a boy and a girl; the doctors felt they seemed depressed, not bipolar, and directed them to a clinic in the same building that caters to depressed teenagers. The third evaluation was of a 7-year-old boy named Joe (his first name): a burly, sweet-faced kid with long eyelashes and dark curls. He appeared quite depressed, leaning his head on the armrest of his chair and answering yes or no in a mournful monotone. His mother and grandmother described a child who sounded a lot like James — restless and overactive from birth, impulsive, requiring constant attention, but above all, wildly, explosively angry. His mother recalled tantrums lasting hours; a recent one, which took place in Wal-Mart when she refused to buy him a video game, resulted in her having to sit on Joe in an aisle until store employees could help her wrestle him into the car. Like James's, Joe's condition was diagnosed as O.D.D. and A.D.H.D. and he had taken various medications since age 4, including stimulants and antipsychotics, none of which really helped. A recent rampage at school concluded with a 20-minute physical fight with a police officer; Joe was suspended, and if his mother hadn't been able to get there and calm him down, he probably would have landed in a psychiatric hospital.

His mother, who had Joe at 19 and is single, working the overnight shift at a group home for the mentally disabled, spoke through a frequent rattling cough. "He tells me he hates me every day," she said. "He says he hates himself, and he wants to die. I don't enjoy being around him. When I'm restraining him, he kicks me, punches me and spits in my face, bites me. Sometimes I don't ride in the car with him, because I just don't know what he's going to do: if he's gonna open the door, if he's gonna reach around and punch me, grab the wheel."

After several hours of interviews, Axelson told Joe's mother and grandmother: "What is clear is that Joe is having mood difficulties. Whether that's related to a depressive disorder or a bipolar disorder is hard to tell. I know that's frustrating."

What Axelson wasn't seeing in Joe was clear evidence of *mania*, defined in D.S.M.-IV as a distinct period of an abnormally elevated (meaning euphoric) or irritable mood, accompanied by at least three out of seven other symptoms (four symptoms, if the mood is irritable rather than elevated). Those seven symptoms are captured with the mnemonic Digfast: distractibility, indiscretion ("excessive involvement in pleasurable activities" in D.S.M.), grandiosity, flight of ideas, activity increase, sleep deficit ("decreased need for sleep") and talkativeness ("pressured speech").

"I'm not seeing clear patterns of distinct periods of being accelerated and talking and moving and thinking with an intensity of mood that just overflows and then goes back to his usual state," Axelson said. "The intense anger outbursts can happen in kids with bipolar disorder, but they can happen with other mood disorders, or with A.D.H.D. and severe oppositional behavior. He's only 7 years old. This could be the very early signs of bipolar, and it may not be until two, three, four, five years from now that we'd have a clear idea. That doesn't mean that he doesn't need intensive treatment — he really does." (Joe is currently in treatment at the Western Psychiatric Institute and Clinic, but the right medication has proved elusive.)

It's possible that a different doctor might have identified Joe as bipolar. In an influential 1995 paper that began the paradigm shift toward bipolar disorder within child psychiatry, Janet Wozniak — the director of the pediatric bipolar-disorder program at Massachusetts General Hospital and co-author of "Is Your Child Bipolar?" — working with the chief of pediatric psychopharmacology, Joseph Biederman, revealed that 16 percent of the children who came to the clinic met the D.S.M. criteria for mania. This was shocking news; it was widely believed until then that mania in children was extremely rare. Wozniak reported that the children's mania most often took the form of an *irritable* mood rather than an elevated one, and that the mood was often chronic: the norm, rather than the exception. All but one of the manic children in the study also suffered from A.D.H.D.

Wozniak told me that the discovery of mania in so many of the kids she was treating came as a shock to her too. "It was like I opened up my eyes: Oh, my goodness, these children have bipolar disorder," she said. "And I realized that what I'd been treating them for

hadn't been working well. I was often treating them for bad A.D.H.D., using different stimulant medicines or higher doses. I was often treating them for their depression and not getting anywhere. In those days, the teaching was that we had a group of medicines that could be used for 'aggression' in children. What's interesting is that these were the anti-manic agents; they were lithium and antiseizure medicines." In other words, many of the children in Wozniak's clinic went unrecognized as bipolar, but they were inadvertently being *treated* for bipolar.

The tricky part, diagnostically, is that out of those seven symptoms, three — distractibility, activity increase and talkativeness — are also symptoms of A.D.H.D. Which means that a severely irritable child who has A.D.H.D. could be, theoretically, only one symptom away from a bipolar diagnosis.

Does it even matter whether or not we call Joe or James bipolar, since the drugs used to treat irritable, aggressive children are often the same as those used for bipolar disorder? Critics of the more widespread use of a pediatric bipolar diagnosis say it does. For one thing, being bipolar makes certain medications extremely risky to use; stimulants can intensify a manic episode, and antidepressants like Zoloft or Prozac can make bipolar patients not just manic but psychotic, even suicidal. In fact, some clinicians say that a number of young patients who become suicidal while on antidepressants — occasioning the "black box" warning currently mandated for drugs like Prozac — in fact suffer from undiagnosed bipolar disorder.

Gabrielle Carlson, the director of child and adolescent psychiatry at the Stony Brook University School of Medicine, has studied childhood mania for many years and says bipolar disorder is uncommon in children under 10, revealing itself in the same discrete episodes of mania and depression that we see in bipolar adults — *not* in chronic irritability. According to Carlson, a large group of aggressive and explosive children, who in fact are "diagnostically homeless," are being relabeled as bipolar, which is a development she says is unhelpful both to the children and the field. "Diagnostically it ends up being a very important consideration of what the kid really has," she told me. "If he really has A.D.H.D. and it's not mania, then you give him medication for his A.D.H.D. You also give him behavior modification." One patient she saw that day, who was thought to have bipolar disorder, actually had autism, she said. "If you say, 'Hey, his problem is bipolar disorder,' then you're not going to treat his language disorder, you're not going to give the social-skills treatment he needs," she said. Problematic conditions in a child's home life are also less likely to be addressed if the child's behavioral issues are attributed

to bipolar disorder, Carlson said. "Many people, when they hear bipolar disorder, their brain slams shut."

Afternoons at the Pittsburgh bipolar clinic are the time when ongoing patients come in for shorter appointments to assess the impact of their medication regimes on their mood and check for side effects. On my visit in March, Axelson's last appointment of the day was with a pair of bipolar siblings: Phia, 9, and Lucas, 6, both of whom he had been treating for the last year and a half. They were a dynamic and appealing pair, if slightly overcharged; there was constant climbing and prowling in the small office. Phia, who wore a pink sweater, black cords and red wool-lined Crocs, had begun taking lithium just a few weeks before, after two different antipsychotic drugs produced an uncomfortable muscular sensation in her legs called akathisia. Now that she was on lithium and a lower dose of one of the antipsychotics, the akathisia had stopped, and both Phia (a family nickname) and her mother, Marie, agreed she was doing well. On the other hand, Lucas, a vigorous, bullet-headed boy who that day wore camouflage pants, was behaving oddly, Marie said. "Throughout the course of a day, there's a shift from a whole lot of bravado to limp," she told Axelson.

"Tell me what Lucas is like at the bravado times," he said.

"We went to church, and what he had strong feelings about wearing was a glittery lamé vest on top of a striped shirt and a top hat."

Axelson leaned toward Lucas in amazement. "A top hat!" he said. "Do you normally wear a top hat to church?"

The nurse found a pretext to take the children out of the room so that Axelson could question Marie further. "Is he talking differently when he's in the top-hat kind of mood?"

"There's no inhibition," she said. "He'll just run up to people on the street or in stores, go right up and start talking to them. He'll say, 'Hi,' and tell them something that went on in his life in the morning; it could be his breakfast, it could be his Webkin. They may not even be paying attention to him, but he'll persist."

"Is he physically moving around more when he's in that kind of mood?" Axelson asked.

"Yes, like touching the stove top, touching everything. But in a reckless way, where things are getting pushed off the counter and dropping and breaking. He thinks that he doesn't need to wear a shirt outside. You obviously tell him, 'You have to wear a coat, it's 32

degrees,' and he'll have a fit. I end up carrying him upstairs to try to get him in a timeout to calm him, and I'll hold him. And after that, it's like the bottom drops. He gets limp. He'll say: 'I'm sad. It's the kind of sad that isn't for a reason.' Or he'll say, 'Things aren't right.' ”

Axelson decided to increase Lucas's Abilify dose but warned Marie that he wouldn't be able to go much higher. If the manic symptoms persisted, they might need to consider lithium — not ideal for a child so young and something both Axelson and Marie said they hoped to avoid.

Later I asked Axelson what struck him as manic about the behavior Marie described in Lucas. “What would mania look like in a 6-year-old?” he asked. “They can't have sex with strangers, max out their credit card or start new business ventures. But he can dress outlandishly, talk to strangers.” Lucas's behavior also harked back to some of his premedication symptoms, which included grabbing strangers' cellphones out of their pockets and trying to touch the guns of police officers. He'd slathered shaving cream on the furniture and drawn all over the walls. Then there were days when Marie couldn't get him off the couch. He had difficulty connecting to other children; after two years of preschool he had never been invited on a play date.

Axelson's diagnoses of Lucas's and Phia's disorders were abetted by the fact that Marie and her husband are both bipolar, too. There is clear evidence that the disorder runs in families; a recent study shows that children with even one bipolar parent are 13 times as likely to develop the disease. Marie, an artist, learned she was bipolar only recently, having been treated for many years for depression. Once her children were successfully in treatment, she told me, she was able to perceive how mentally uncomfortable she herself was. A psychiatrist, looking carefully at her history, determined that in her 20s, which Marie had thought were simply “awash in bad judgment,” she actually suffered from bouts of mania. The new diagnosis had prompted different medications, which she said had helped her enormously.

Marie's history illustrates a trend toward a more inclusive definition of *adult* bipolar illness; little noted in the study that reported on the fortyfold increase in child and adolescent bipolar doctor visits was the fact that the number of adult visits had roughly doubled during the same period. This increase jibes with a recent population survey estimating the prevalence of bipolar disorder among American adults, long thought to be around 1 percent, at slightly more than 2 percent. The survey also projected that another

2.4 percent of Americans have a “subthreshold” form of bipolar disorder — less severe but still impairing. The author of the study, Kathleen Merikangas, a senior investigator at the Intramural Research Program of the National Institute of Mental Health, says that she does not feel that the number of bipolar adults is rising but that greater public awareness and diagnostic inclusiveness account for the jump. Still, that comes to nearly 10 million American adults with some form of bipolar disorder, only a small percentage of whom, the study found, were receiving appropriate treatment.

It was Phia whom Axelson first identified with bipolar disorder, and he described her case as “pretty clear cut.” Like James, Phia was overstimulated almost from birth. Marie couldn’t take her for a walk without Phia becoming hysterical in response to the sights and sounds they encountered. Marie couldn’t wear colored shirts; Phia couldn’t attend a play group. At times Phia seemed bizarrely overconfident for a toddler, pursuing men and flirting with them, showing no sign of fear or remorse when her grandfather, an imposing man, yelled at her. Marie began taking her daughter to a psychologist when she was 4. “I felt like I was doing something wrong,” she told me. Despite troubles with reading and an anxious habit of rubbing the soles of her feet against the bottoms of her shoes until blisters formed, Phia was able to function in public school. But from the moment she stepped off the school bus at the end of the day, it was bedlam.

“Everything set her off,” Marie recalled. “That wasn’t the snack that she wanted. She doesn’t want a snack. She’d want to be pushed on the swing, and it would be too high, or not enough, so I would push her a little bit more. There would be this screaming fit, kicking her legs, flailing on the swing. ‘I hate this, that’s not what I wanted!’ I’d be like, That’s it. We’re done on the swings. Then that would precipitate a fit.” It was impossible to keep Phia in a timeout; she would burst from her room laughing. Marie attached a lock to the outside of her door and cleared the room of things that might hurt her daughter as she raged.

Phia also had “silly” moods that quickly spiraled out of control, resulting in injuries: she broke her collarbone while diving over her bed in a silly fit; flailing, she would smack her arms inadvertently against the wall; she fell down the stairs repeatedly; she cracked her teeth on the edge of a swimming pool. Play dates were impossible; once, upset that a friend was about to leave, Phia told the girl that her father was beating her. She tormented Lucas; screaming at him, pushing and kicking him, once whipping him with a wand so hard that she raised welts through his shirt. And Phia herself was in agony. “She was asking for medicine for at least a year or so,” Marie said. “Isn’t there anything they

can give me to help me calm down?’ ”

Much of Phia’s extreme behavior has eased with medication. When I visited the family at their two-story suburban home on the last day of March, a couple of weeks after their appointment with Axelson, there was an atmosphere of renewal: Marie was painting the kitchen cupboards; her husband (an engineer who works long hours; we never met) had replastered some damaged walls. Nowadays Phia has a best friend and goes to birthday parties. With her mind calmer, she told me, she loves to read and is fond of the American Girl mystery series. She and Lucas are lucky in that they seem not to have any other disorders, or “comorbidities,” like A.D.H.D., on top of their bipolar disorder. Both are doing well in public school.

I sat with Marie and Phia at a round outdoor table facing the backyard. Lucas was using a remote control to send an electric car roaring over the grass. Marie, a calm, gentle woman who chooses her words with care, told me that Lucas had improved on his higher Abilify dose. But Phia — surprisingly — had struggled since the appointment I was present for. After a blood draw, Axelson increased her lithium dose.

“My feelings weren’t really going that well,” Phia told me when I asked her about the previous weekend. “It was like all of a sudden, horribleish. Unexplainable mad, sad horrible feelings inside.” She blamed the several days of standardized tests she recently took at school, saying they made her anxious.

When Phia went inside, Marie told me she offered, the previous week, to take her daughter to the hospital. “She becomes fitful,” she said. “You have to physically hold her down, and that’s getting harder and harder to do. She’ll bang her head against the wall, she’ll bite herself. I brought up the hospital because she said: ‘I can’t take it anymore. I don’t want to be me. I don’t want to feel anymore. Why aren’t you doing anything about this?’ ”

As he played with his car, Lucas kept looking up, waiting for a little boy who lives around the block to appear on the other side of the wire fence that separates his yard from Lucas’s. Marie had repeatedly invited this boy over to play, but his parents always declined — she wondered if the mayhem they’d heard coming from her house before her children were medicated might be the reason. Toy cars and trucks were positioned along the fence from the boys’ prior meetings there. Sure enough, the neighbor soon appeared, calling Lucas’s name, and Lucas greeted him joyfully. Lucas hauled a supply of pirate weapons over to the fence and the boys divvied them up and began to play through the

wire. Phia joined them, but when Lucas came over to ask his mother for another sword, his sister chased him down, upset; apparently, the neighbor boy asked who I was, and Lucas made some mention of meeting me at his doctor's office.

"Don't!" Phia implored her brother. "That's our privacy. We don't want them to know that we're bipolar, that's not their beeswax. That's our secret thing, O.K.? That's our family secret." Only her good friends know that Phia takes medicine. "They don't know what it's about," she told me. "They have no clue I'm bipolar." She worries that if they knew, they would feel differently about her.

Lucas was reluctant to leave his friend for dinner; he waved and bellowed to him through the open window as he wolfed down his ravioli and salad. For dessert, Marie had placed small portions of leftover Easter candy inside Ziploc snack bags: one for each child. She was concerned about their weight, which had increased since they began taking medications — Phia's especially. She wasn't overweight, but her body had changed from slender to average, and her clothing size had increased from a 6X to a 12/14. "With all the emphasis on childhood obesity, it's a daily worry," Marie said. She dreaded comments about her children's sizes from family members at a coming reunion; Marie says her parents and siblings don't believe that her children are bipolar and disapprove of the medication. The school also has doubts. All these things make Marie question the diagnosis and medication.

"Their diagnoses are largely based on the history as I see it," she told me. "And that feels like an incredible responsibility — how accurate am I?"

Eventually the children prepared to go upstairs for baths and bed. On the kitchen counter were four sectional pill containers, one for each member of the family. Marie put each child's pills into a spoon and squirted a dollop of whipped cream on top to help them go down. Like any kid, Phia grabbed the whipped-cream canister before Marie could catch her and sprayed some into her mouth.

The next time I visited James and his family, a rainy day in May, things had taken a turn for the worse. The stimulant, which James's psychiatrist had been planning to add for months when his lithium level was high enough, had made James manic — sleepless, talking incessantly, banging on radiators — and the school had immediately called and asked Mary to take him off it. This was a huge blow; both school and parents were counting on the stimulant to help James concentrate. Each year he has trouble in May ("Manic May," Mary had dubbed it), and his hostility had reached new extremes; he

wouldn't shower or brush his teeth or do his homework without a fight.

One morning, when Mary's husband was out of town, James stood on his bed and threatened her with a huge stick. "He said, 'You'd better back down or I'm going to smash your face in,'" she said. "He was really beside himself. I looked at the base of the stick, and I thought, These are things you read about: he's going to break my nose. And I knew I couldn't show how petrified I was. So I stared him down, and he put the stick down, eventually."

Another morning, James told Mary, in front of Claire: "I'm going to kill you. I'm going to slice you open with a knife." Later, he apologized, distraught. But, for his mother, something shifted when she heard those words. "I always wondered what my breaking point would be," she told me. "I thought maybe it would be if he accidentally hurt Claire, but the look on his face when he told me he was going to kill me, that was it."

James's dose of Abilify had been increased, which was helping somewhat. But Mary had also put in applications to three therapeutic boarding schools, where James might start sixth grade in the fall. The classes would be even smaller, and she said she hoped living at the school would help James with his behavioral issues. All three schools were out of state, and the family would initially have to pay room, board and tuition out of pocket — the prices ranged from \$93,000 to \$125,000 a year — and sue for reimbursement from New York City. Such costs would of course be prohibitive for most families, creating a terrible bind for those who can't receive approval for in-state residential schooling yet are unable to handle their children at home. In some cases, these children end up becoming wards of the state.

James hadn't yet returned from school when I arrived, but Frank, his father, was at home; he is a courtly man with reddish curly hair whose posture sagged visibly as we discussed the possibility of his son going away. Two of the schools had already expressed interest, and the third called while I was there; it, too, had a possible spot for James. This last was Mary's favorite, based on its Web site: rural, all-boy; James could ride horses. She made an appointment to visit the school with Frank the following Thursday.

"Next Thursday!" he said, taken aback. "Oh, it's moving fast."

His biggest fear was that James would perceive boarding school as a punishment for behavior he can't control. "He's 10 years old, almost 11, and he still holds my hand when we walk on the sidewalk together," Frank said. "So when he comes out with guns blazing

and eyes popping out of his head, I know that this poor kid has a demon that's just blasting its way out of him. I think what it's like when I wake up on the wrong side of the bed and I feel angry for no particular reason, and I realize that this is James's life moment to moment, every day."

Shortly after James arrived home, cheerful and wearing a silky black track suit, Frank lay down for a nap. Mary asked her son to take his 4 p.m. Abilify pill; he refused. He politely asked to borrow my microphone and used his iPod to record himself singing. Then the sound of Claire laughing in the next room set him off. "Be quiet," he suddenly shouted.

"Don't talk to your sister that way," Mary said.

"Be quiet!" he yelled at her.

"Hey," she said, "you need to walk away. Now, it's after 4 o'clock — "

"I'm not taking it now."

"Then you can go into your room — "

James covered his ears and began to chant: "Sorry, sorry, nope can't hear you, can't hear you, sorry, can't hear you."

"It's time for you to take your pill."

"I'll smack your face," he said, brandishing his iPod earphones.

"Don't threaten me with that or you'll never see it again. Take your pill."

James took the pill. Then he closed the door to block out the sound of his sister. "You open this door, Claire, I'll pull out something really sharp on you," he said.

"Calm down," his mother said. "And no more talk about sharp things."

"Sharp things!" James retorted.

He tried to play his iPod recording for us, but the speakers wouldn't work. He became enraged and crashed out of the room, emitting animal yells that Mary had to translate for me: "I hate it! Never again! Never again!" A moment later he was back, whimpering, "I want Daddy."

“Sweetheart, Daddy’s sleeping. Do you want him to help you with the machinery?”

“No! I want him! How stupid are you?”

“James, you’re being so rude. Are you hungry?”

“No, I’m not!” he howled, apoplectic. “I just ate raspberries. Why am I [expletive] hungry — frigging hungry?”

He threw himself onto a chair and began to play his Nintendo DS. A few minutes later, he curled, all 105 pounds of him, in his mother’s lap, his arms around her neck, head on her shoulder.

Later, when James was out of the room, Frank, now awake, spoke wistfully of a sense that he was growing apart from his son. They used to go to a diner together on Sunday mornings, just the two of them, but James rarely wanted to anymore. “He’s restless, but he doesn’t know what to do,” Frank said. “And anything you suggest is of no real interest to him.”

James came into the room and draped himself across his mother’s knees. “Sweetie pie, are you hungry?” Mary asked James. “Would you like Daddy to take you out for something to eat?”

James raised his arm, his head still buried in his mother’s lap. “Is that the thumbs up?” Mary asked.

“Mm-hmm.”

Frank looked startled, pleased. “O.K., I’m going to strike while the iron’s hot,” he said, rising from his chair. “Come, my little man.”

I felt an agonizing quiver of dread as father and son gathered jackets and wallet and shoes. Would James become angry? Would he change his mind? Would they actually get out the door without an explosion? When they did, it seemed miraculous.

In the abruptly quiet apartment, Mary and I talked about her son’s future. “It’s not that we even dream that James goes to college,” she told me. “We just want him to graduate from high school and be a functioning, contributing-to-society individual. Maybe he’ll meet a nice girl from Cape Cod and become a carpenter there. My biggest fear is that he’s going to become a loose cannon when he’s 18.” James’s psychiatrist reassured Mary that

he would settle down after adolescence. “But she’s also the person who told me these were early-childhood issues and he’d be off Risperdal by the time he was 7 or 8,” Mary said. There was a long pause.

“It just keeps opening up like an inverted triangle,” she said finally. “The scope of his difficulties just gets broader and broader the older he gets.”

The most basic question about bipolar kids remains a mystery: Will they grow up to be bipolar adults? Because diagnosing the condition in children is still relatively new, no studies have yet followed a large number of them fully into adulthood. One fact is suggestive: bipolar kids are predominantly male, while the adult bipolar population skews slightly toward the female. The likelihood is that many of these kids will grow up to have mental-health issues of some kind, but which issues, and how chronic or severe they will be, no one really knows. A long-term study in Pittsburgh overseen by Axelson and Birmaher suggests that as children grow, the severity of their disorders can change; bipolar II, the less severe form of the disease, can convert to bipolar I, the more severe form. Nearly a third of subthreshold bipolar cases (BP-N.O.S., or Not Otherwise Specified, in D.S.M.) convert to the more serious forms.

Intriguingly, though, some of the bipolar children in the study appear to have gotten well. Roy Boorady, the director of psychopharmacology services at the New York University Child Study Center, told me: “Now that I’ve worked with kids long enough, you see some that had this mood instability or irregularity and were diagnosed as bipolar. But then you see them as they’re older, and they’re off in college and not having these labile mood swings anymore. You really wonder, What was it?”

Most clinicians say they believe that there will eventually be clear “biological markers” of bipolar disorder: ways to see and measure the disease as we can seizures, cancer or hypertension. Scientists are working to identify the genes (there appear to be many) involved in creating a predisposition for bipolar disorder. Brain imaging, still in its infancy, can already detect broad differences of size, shape and function among different brains. The hope is to know early on who is at risk so their condition can be diagnosed and treated as early as possible. Mental illness wreaks brutal damage on a life, crippling decision-making, competence and self-esteem to the point where digging out from under years of it can be next to impossible. And there is also a biological theory for why going untreated might worsen a bipolar person’s long-term prognosis. Epilepsy researchers have found that by electrically triggering seizures in the brains of animals, they can

prompt spontaneous seizures, a phenomenon known as “kindling.” Simply *having* seizures — even artificially generated ones — seems to alter the brain in such a way that it develops an organic seizure disorder. Some scientists say that a kindling process may happen with mania, too — that simply experiencing a manic episode could make it more likely that a particular brain will continue to do so. They say this explains why, once a person has had a manic episode, there is a 90 percent chance that he will have another.

Kiki Chang, director of the pediatric bipolar-disorders program at Stanford, has embraced the kindling theory. “We are interested in looking at medication not just to treat and prevent future episodes, but also to get in early and — this is the controversial part — to prevent the manic episode,” he told me. “Once you’ve had a manic episode, you’ve already crossed the threshold, you’ve jumped off the bridge: it’s done. The chances that you’re going to have another episode are extremely high.”

Along with medication, Chang is exploring family therapy and other forms of stress reduction that might help fortify a child against a genetic proclivity for bipolar disorder. “If we wait too long, they will probably need chronic medication treatment,” he told me. “But if we can get in early enough, they may not need to stay on medication. So we’re hoping to get in and get out, and not subject them to the long-term side effects.” (As for short-term side effects, Chang says medications like lithium may actually be “neuroprotective” — i.e., might actually *help* a developing brain.) And while it is wildly unclear whether this picture of prevention will ever become a reality, Chang says he is a believer, and his hope is infectious.

Whatever the case, a synthesis is likely to emerge in the coming years. “There’s contention about lots of major scientific issues,” Leibenluft of the National Institute of Mental Health said. “People do the research and gradually, the data speak.”

Shortly after my last visit with James (who has begun boarding school and is doing well), I went back to Pittsburgh to meet Phia and Lucas at an appointment with Axelson. It was a beautiful day at the end of May, and the children were noticeably calmer than during my last visit to their doctor; Lucas sat quietly, making sketches of scenes from “Speed Racer” and “Star Wars” with a marker. Phia also made a sketch: two wavy lines, a pink one labeled “Am Now” and a purple line entitled “Should Be.” It was a mood chart. The lines were nearly superimposed.

Lucas, Phia and Marie all agreed that the two children were doing wonderfully. Phia had kept her cool even when she forgot to bring the music for a violin concert she was

performing in. Lucas described a school project involving spring trees and talked fondly about his friend across the fence. Marie looked different; in the two months since I'd seen her, she had braces put on her teeth, updated her eyeglass prescription and had her first haircut in three years.

"We haven't been to this spot before," Marie said. "I have a hopefulness that there will be more to come."

She and her husband bought a small grill, she told me, something they had never been able to do because the kids were too impulsive. And they hired an evening baby-sitter — another first — to go out on their anniversary.

"This is the goal, where we'd like to be," Axelson said, shaking everyone's hands as they left the office. "Hopefully we'll be able to stay with this."

Three months later, in mid-August, I heard from Marie that after more symptoms of mania in Lucas (which included opening the car door while it was moving), and increases in his Abilify, Axelson had finally recommended a move to lithium. Lucas had begun with a small dose — less than half what Phia was taking — but Marie had a feeling it would be gradually raised, as Phia's had been since that first appointment I was present for in March.

She wrote to me in an e-mail message: "I re-experience some mourning or grieving for the kids with each medicine change. The unknowns are so daunting and somehow I feel so guilty for taking such risks. Putting them to bed at night seems to be the worst time for these feelings. I suppose because at that time they seem to be their youngest and most trusting and vulnerable. I pray for them under my breath."

Jennifer Egan is a frequent contributor and novelist. Her most recent book is "The Keep."