INTRODUCTION
This article focuses on pediatric patients whose difficult medical presentation includes both physical and psychological components. These patients do not have a known psychiatric diagnosis and often have had previous hospitalizations for presumed organic illness. Results of diagnostic testing are generally uninformative, and management is time-intensive, involving multiple health care providers and significant medical resources. Antagonism in the relationship between the physician and parent frequently develops. Although diverse in presentation and outcome, conceptualization of these “med-psych” cases into general categories may result in early recognition of these patients, decreased hospital length of stay and expense, improved quality of the physician–parent relationship, and increased treatment effectiveness. We describe 2 different types of cases, outline effective and ineffective interventions, and discuss unresolved difficulties with management. Due to a paucity of relevant research, this article is based primarily on clinical experience.

CASE 1: CHILD FOCUSED
A 15-year-old male was hospitalized after 3 weeks of tachycardia, syncope, tingling in his hands, and subjective fevers. Medical history included an irregular heartbeat. His mother also has mitral valve prolapse and panic attacks. The family initially did not report school or behavioral difficulties. He and his parents indicated significant fear about something “being seriously wrong with him.” After results of initial diagnostic testing were unrevealing, further interviews elicited that the patient had recently been expelled from school due to a fight. He was assigned to an alternative school, which limited his school-related activities and eliminated contact with previous classmates. He also expressed sadness regarding the death of his grandmother—18 months prior. His affect was generally flat, he cried easily when talking about his grandmother, and he had lost interest in previously satisfying activities.

This case is typical of pediatric patients who present with medically unexplained somatic complaints such as fatigue, abdominal pain, musculoskeletal pain, syncope, and/or headache. Nausea and vomiting are frequently present. There may be problems with mobility or unusual sensations such as tingling in their extremities. When formulating the initial differential diagnoses, we always include a psychological etiology, such as depression, anxiety, or somatization, in addition to ruling out organic illness. It is preferable to discuss possible psychological diagnoses in the initial differential because parents may react negatively when these are presented as diagnoses of exclusion or as last resort. Introducing this idea early often results in parents providing psychosocial information that they had
not previously reported. In this case, an extensive cardiac evaluation was uninformative, but a differential diagnosis of depression had been presented initially.

Careful history taking, including both physical and psychological information about the child and family, as well as listening to fears and beliefs about physical or psychological causes of the symptoms, are critical. Historically, pathologic stressors, such as sexual abuse or trauma, have been emphasized in the case of functional somatic complaints. We find less frequently elicited stressors, including negative parenting behaviors, bullying, learning disorders, ongoing parental conflict, peer relationship problems, and parental overprotectiveness, to be more salient. In support of this observation, negative parenting behaviors were found to be significantly correlated with somatization in patients who have irritable bowel syndrome, whereas abuse experiences were not. Parental overprotection predicted the development of functional somatic symptoms in adolescents, and negative parenting behaviors were associated with development of younger children’s somatic complaints. There is often no clear temporal relationship between stressors and the child’s development of somatic complaints. The onset may be insidious and reflect a culmination of stressors or relational issues. In the present case, it seemed that both acute and chronic stressors were associated with the adolescent’s symptoms.

Parent and child characteristics, as well as the parent–child interaction, play an important role in the development and maintenance of the child’s somatic complaints. Parents frequently report similar somatic complaints for themselves, and parental somatic complaints have been correlated with parent-reported child somatic complaints. Child characteristics, including poor emotional awareness and frequent negative affect, correlate with child-reported somatic symptoms. Pediatric patients may lack awareness of emotions; instead of perceiving that they are anxious, they perceive that their stomach hurts. This is most notable in patients with recurrent abdominal pain, whereas patients with other somatic complaints, such as fatigue, musculoskeletal pain, or headache, are more emotionally aware and report symptoms associated with depression and anxiety. The most pervasive psychological symptoms involve anxiety, even when not perceived by the child, and depressed mood. In our example case, the patient experienced panic attacks, passive suicidal ideation, and complicated grief. In addition, the adolescent had interrupted scholastic and sports-related activities, a factor that has been noted by other authors.

During hospitalization, our multidisciplinary team uses a rehabilitation approach. Physical therapy and child life services focus on increased mobility and out-of-bed activities. Psychological interventions include relaxation techniques (deep breathing and visualization), cognitive therapy (changing beliefs about pain or symptoms), and distractions to improve coping skills. When parents have had similar somatic complaints, the parents themselves may be effective in talking with the child about strategies that have been personally helpful for them in coping with pain or distress. Due to lost school time, hospital school teachers connect with the child’s school to assess options regarding missed homework, tutoring, or modifications in the school load. In the present case, intervention began with educating the patient and his family about the connection between stressors and his symptoms. The patient received education about panic attacks and the use of deep breathing techniques. Visualization and cognitive interventions seemed to decrease his anxiety.

An overriding principle is to keep hospitalization length brief because prolonged hospitalization reinforces somatic symptoms and parental anxiety, as well as delays outpatient psychological interventions. The family was referred to outpatient therapy at discharge. The hospitalist, along with the primary care physician, assisted with this referral. A discussion with the primary care provider was critical in securing support for the family to follow through with this resource. In the present case, we started pharmacologic antidepressant therapy. An outpatient referral was made for therapy in the patient’s local community.

**CASE 2: PARENT FOCUSED**

A second and more difficult type of case involves pediatric patients with somatic complaints who often have a medical diagnosis but whose presenting symptoms do not align with the severity of concern expressed by the parent. Illustration of our second case involves a 13-year-old male with a medical history of food allergies and severe abdominal pain as an infant. He was seen in the gastroenterology clinic for the complaint of severe epigastric pain and had negative results on evaluation, which included colonoscopy, endoscopy, upper gastrointestinal series, and workups for *Helicobacter pylori* and celiac disease. The gastroenterologist diagnosed him with functional abdominal pain.
The most striking feature of this type of case is parental hypervigilance and concern about severe medical conditions despite repeated negative diagnostic findings. In the present case, the adolescent had re-presented to the emergency department 3 days later, the parents implying that he had chronic disease based on the recent clinic visit. They insisted on admission for management of severe abdominal pain. A computed tomography scan of the abdomen obtained at parental request showed only evidence of stool burden. The child was discharged but had 3 subsequent readmissions for the complaint of abdominal pain. Each time, the mother insisted that the pain was worsening, and further studies and consultations were obtained at the parent’s insistence. Ultimately, 3 subspecialty consultations, 7 imaging modalities (invasive and non-invasive), and multiple blood tests were obtained. The tests resulted in increasing pharmacologic and nonpharmacologic interventions, with little success in alleviating his symptoms (18 interventions in toto). Negative results did not comfort the parent; indeed, these negative results often resulted in the demand for further testing.

Often the parent is knowledgeable about medical conditions and talks in “medical terms.” There may be disdain for the health care provider and a belief that the provider does not understand the seriousness of the situation. Often, the family has made visits to multiple medical centers. In the present case, the mother carried a thick binder of information concerning the providers that they had seen regarding their son. She demonstrated hypervigilance about something “being seriously wrong with him.” After discharge from the hospital, the patient complained of episodes of dizziness and passing out. He was evaluated at another institution and diagnosed with postural orthostatic tachycardia syndrome. His mother subsequently insisted on referral to a vascular surgeon. All studies were normal and resulted in a final referral for complementary and alternative medicine consultation, which the parents did not pursue.

In terms of child characteristics, the child/adolescent is usually compliant, anxious to please, and described in perfectionist terms. Reports of behavioral difficulties are infrequent. The child tends to be friendly and cooperative, with less pain and symptoms reported when the parent is absent. In this case, the parents reported 7 weeks of unremitting debilitating abdominal pain; however, to all medical staff, the patient slept comfortably and tolerated a regular diet. Although the information is not initially reported, it is common for the child to have missed an excessive number of days from school and have decreased academic performance. In the present case, the child had changed schools twice in the past year, reportedly secondary to the bullying of his brother who had been diagnosed with an autism spectrum disorder. He started home-schooling before the onset of his pain but was not following the curriculum on his computer. His pain prevented him from doing any school-related activities; however, he continued to be able to play video games at all times.

In this type of case, there is usually a strong resistance to discussing psychological factors that may contribute to the child’s clinical presentation, and the parent is convinced there are no psychosocial issues involved. Studies indicate that these beliefs are associated with poor outcome for the child. The family environment is described as “perfect” and often important psychosocial details are left out. The family history often includes the presence of a life-threatening condition, undiagnosed conditions, or a family death from similar symptoms. In the present case, both parents eventually revealed problems with anxiety. The mother had been continuously searching for a medical explanation for her own symptoms for 3 years before the adolescent’s presentation. She expressed anger and resentment toward medical providers over not being able to offer a diagnosis for her.

During hospitalization, organic causes or exacerbations of organic disease are usually ruled out. As in the first case, a multidisciplinary approach is attempted; however, the families often refuse to see providers whose training is in social work, psychology, or psychiatry. Frequently, the parent perceives that the child is not able to participate in physical therapy, child life, or school activities. In the present case, multidisciplinary services were declined, and it was difficult to convince the family that there were no further medical interventions that would be helpful to the child. Discharge was resisted until, in the parent’s words “we can find out what is wrong.”

**DISCUSSION**

The first type of case (child focused) typically responds well to a multidisciplinary approach (Fig 1), which combines physical therapy, psychological interventions, pharmacologic therapies when appropriate, and reintegration with school and social activities. Although there may be an initial reluctance to accept the role of psychological factors in the child’s physical complaints, listening to the parent,
supporting their concerns, ruling out significant pathologic conditions, and educating about the role of stress on physical functioning are generally effective. Offering a psychological explanation early in the diagnostic process results in quicker engagement in treatment, which is similar to outcome findings in children with nonepileptic seizures.\(^7\) Further medical investigations may be counterproductive and reverse any gains made by the family in therapy.

In contrast, this approach was unsuccessful for our treatment team in the second type of case (parent focused). This case type often results in a negative outcome both for the family and the providers. Multiple subspecialists may be involved with an escalating spiral of expectations for further testing. Testing is often performed simply for resolving the antagonism between parents and medical providers. This action, however, raises ethical issues associated with unnecessary testing and the impact of hospitalization on the child’s quality of life. Health care providers will experience moral distress when pushed to perform these activities, asking “Why are we doing these studies if we expect them to be negative?”

Of greater concern is the possibility of medical child abuse (MCA), defined as “a child receiving unnecessary and harmful or potentially harmful medical care at the instigation of a caretaker.”\(^8\) A referral to a child abuse pediatrician may be necessary to determine if there is significant evidence suggesting MCA. However, physicians are often reluctant to pursue MCA due to fear of missing a core organic cause for the complaint.\(^9\) This is particularly intensified when the child has a diagnosed existing condition. It is critical that subspecialists collaborate and communicate with each other as well as with the general pediatric team. Our greatest dilemma is what to do when subspecialists disagree or do not perceive that the child is being harmed by unnecessary procedures or tests.

Obtaining information from other sources (primary care pediatrician or other institutions) to confirm the parents’ report of symptoms can be informative. Directly observing perplexing symptoms can be helpful, especially when it is unclear whether the symptoms have been exaggerated or do not fit the clinical picture. In all cases, reassuring the parent concerning the child’s health status with a focus on decreasing their anxiety is necessary. In some cases, reassurance is effective; however, in other cases, the parent is not open to this intervention. There is often splitting of the professionals by the parent, and parental personality characteristics make it difficult to develop positive physician–patient rapport. In the absence of a well-established therapeutic relationship, there is a tendency for frustration, annoyance, and an over-reliance on diagnostic testing, all of which blunt clinical reasoning.

It is important not to minimize the possibility that subtle or unknown illness processes modulate some of these presentations. We believe that there is a need to think about these patients in a manner that puts equal emphasis on both the psychological and medical issues. When we continue to search solely for medical solutions, we may miss important, effective psychological interventions that could improve the quality of life for the family and patient. In this manner of thinking, the psychological issues surrounding these patients would become of greater, not lesser, interest; for example, the medical interview should elicit in-depth information about both child and parental psychiatric history.

In search of answers of how to best intervene with the second type of these patients and families (ie, parent...
focused), we believe that bringing together the experiences of hospitalists and multidisciplinary personnel would be helpful. This might be through feedback in publications, a consensus panel, or national conferences. Research is needed concerning follow-up posthospitalization with these patients and their families to determine long-term outcomes and effective interventions.

REFERENCES