Chapter 3
Child and Adolescent Headaches

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A multidisciplinary approach—a balance of medication with therapy and lifestyle changes—is the most helpful for children with severe headaches to help them return to normal functioning in home, school, and social life.

Headache is a common complaint among children and adolescents. The prevalence of migraine in those with headache varies by age and gender throughout childhood and adolescence. Migraine begins earlier in boys than in girls and, until the age of 7, migraine occurs slightly more often among boys. By menarche, the prevalence of migraine in boys and girls is roughly equal. However, after menarche, migraine begins to predominate among females and this gender separation increases even further in late adolescence.

Headaches, especially migraines, have a significant impact on the lives of young people. Approximately 65–80 % of children with migraine headaches will experience disruption of their normal daily activities at home, in school, and other social settings. The burden of migraine may also result in the development or worsening of anxiety or depression. Because of the quality of life issues, early recognition and management of headaches in children and adolescents is crucial.

Headache disorders can be categorized as either primary or secondary. As with adults, the vast majority of headaches in children and adolescents are primary headache disorders: migraine (with or without aura), tension-type headache, and chronic daily headache.

Secondary headache disorders, although much less common, may be due to various organic etiologies which can range from the relatively benign to the serious. Such underlying organic conditions include:

- Bacterial causes: acute febrile illness, rhinosinusitis, dental abscess, intracranial and extracranial infections;
- Systemic illness: hypertension, diabetic ketoacidosis;
- Miscellaneous: head or neck trauma, vascular malformations, subarachnoid hemorrhage, intracranial mass lesions, etc.

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Diagnostic Approach

Although headache can be a presenting symptom of underlying organic pathology, accurate information from the patient and family is often enough to identify or rule out the most serious etiologies. The overwhelming majority of headache disorders are diagnosed by a thorough history and physical examination. A complete medical and psychiatric history, family history, medication history (including prescription, over-the-counter, and vitamins/herbs), allergy history, and social history should also be obtained.

Migraine tends to be underdiagnosed; patients and their parents often attribute headaches and nausea to "the flu" or dismiss them as "sinus headaches." Careful attention must be paid to the patient's description of headache onset, timing, frequency, duration, severity, quality, location, precipitating factors, and aggravating or alleviating factors. Associated symptoms—especially nausea, vomiting, photophobia, and phonophobia—are often the key to an accurate diagnosis of migraine.

Potential indicators of organic pathology can include severe vomiting, a headache which awakens a child from sleep, and the absence of a family history of migraine. Also, progressive, unremitting daily pain, neurologic symptoms, and fevers are important. If any of these red flags are present, the appropriate laboratory and imaging investigations should be performed.

In a patient with an unremarkable history, where a primary headache disorder is suspected, laboratory investigation is usually not warranted beyond baseline laboratories. These usually include, but are not limited to, a complete blood count and metabolic panel.

Neuroimaging studies are usually not indicated in children with a normal neurologic examination and a history consistent with a primary headache disorder, especially migraine or tension-type headache. These children will not usually have significantly abnormal findings on head computed tomography (CT) scans or intracranial magnetic resonance imaging (MRI). A small percentage may have incidental and/or unrelated findings, but routine neuroimaging is not absolutely indicated in children with typical primary headaches.

MRI is the preferred test of the brain; usually it does not need to be done with contrast. MRI is important for those with new onset headaches, atypical head pain, or abnormal neuro symptoms or signs.

Usually, electroencephalography (EEG) is not helpful in the routine diagnostic assessment of pediatric headache patients. However, an EEG should be performed on patients with an atypical migraine aura, episodic loss of consciousness, or symptoms suggestive of a seizure disorder. Background slowing may be seen during some migraine attacks, but the EEG results are usually normal.

Lumbar puncture (LP) is indicated if meningitis, encephalitis, subarachnoid hemorrhage, or high–low pressure syndromes are suspected. Cerebrospinal fluid and pressure measurement should also be performed. In those patients where increased intracranial pressure is suspected—or in those with focal neurologic deficits—a head CT scan or similar neurologic imaging modality should be performed prior to an LP . We attempt to avoid the LP unless absolutely indicated. However,

if meningitis or encephalitis is suspected in a toxic-appearing patient, treatment should not be delayed in order to perform the head CT scan first.

Biopsychosocial Approach

For those with more severe or frequent headaches, a comprehensive biopsychosocial approach is needed. This approach requires the collaboration of medical and behavioral specialists working together to improve a patient's overall functioning and the quality of life. The combination of both pharmacologic and nonpharmacologic treatments is ideal for those with frequent headaches. Nonpharmacologic treatments are particularly important as they are typically more effective in children and help to minimize medications and side effects.

Nonpharmacologic Treatments

Nonpharmacologic modalities consist of patient education, lifestyle strategies, behavioral interventions, physical therapy, etc. Patient education should be the first step taken. Legitimizing the headache as a physiological disorder is of primary importance. It helps to say "…Migraines are a genetic medical condition, like asthma or diabetes…"

Children and their parents usually want to hear three things from the physician: (1) the cause of the headache (including triggers), (2) the treatment and prognosis, and (3) reassurance that a primary headache disorder is not serious. It is important that realistic goals and expectations are set. Children and their parents should understand that there are no miracle cures for headaches.

It is usually helpful to introduce the use of a headache diary as a means to identify specific triggers. Of course, some triggers (e.g., weather changes, stress, hormonal influences) cannot be avoided, but certainly many—such as missing meals, bright lights/sunlight, undersleeping/ oversleeping, foods, perfume, cigarette smoke, and certain types of physical exertion—can be managed. Headache diaries should record the frequency and severity of headaches as well as document the efficacy and side effects of treatments. Using a diary will improve the patient's or parents' recall of the headaches and make office visits more productive. They can also help persuade children and adolescents of the need for lifestyle changes.

Lifestyle strategies should include an emphasis on proper diet, exercise, and sleep habits. Headache patients do better with regular schedules, eating three or more meals per day, and going to bed and awakening at the same time every day, including weekends. Daily exercise can be particularly helpful; patients should strive for at least 30 min of exercise per day. Generally, headache patients do better with low-impact exercises such as swimming, walking, biking, and yoga.

Behavioral interventions—such as psychotherapy, counseling, and relaxation techniques—may be helpful for many adolescents who experience significant stress in their lives. Overscheduling adds to the usual adolescent stressors. The incidence

of hard-driving perfectionistic behavior and depression is increased in adolescents with severe headache. Children and adolescents who miss substantial blocks of time in school or social activities need to be assessed for depression, school phobia, and secondary gains. Counseling for children, as well as family-centered therapy for children and their parents, is often helpful in promoting active coping and is an indispensable augmentation to medical therapy.

Relaxation techniques such as biofeedback, deep breathing, and imaging should be encouraged. Most adolescents can learn relaxation techniques from books or audiovisual aids that are readily available. However, seeing a therapist who teaches biofeedback is much more effective. Most children under the age of 10 cannot learn and apply biofeedback, but some as young as seven can learn simple breathing and imaging techniques.

Pharmacologic Treatment

There are two types of pharmacologic treatments for headaches: abortive and preventive. Decisions on medication depend upon the frequency and severity of the headaches and how much they bother the patient. Some children are not overly bothered by their daily headaches and tend to ignore them. Others may be incapacitated and miss an entire year of school.

As with adult headaches, abortive medication is used in the overwhelming majority of cases without daily preventive medication. Patients should be encouraged to use their abortive medication early, while their headaches are mild. Early intervention is a key step in successful use of migraine abortives. See Table 3.1 for a list of first-line abortive medications.

It is always reasonable to try biofeedback together with simple abortive medications as the first step and attempt to avoid daily preventive medication, if possible. However, with frequent migraines, or for moderate to severe daily headaches, daily preventive medication may be necessary. In order to minimize medications, start at a low dose of a daily preventive and slowly titrate up to reasonable efficacy. Table 3.2 has a more complete list of criteria for the use of preventive medication. Table 3.3 lists first-line preventive medications.

Realistic goals and expectations for medications need to be discussed. For abortive medications, the goal is to achieve significant relief (>70%) as quickly as possible. When preventive medications are used, the goal is to reduce headache frequency and severity by 30% or more and to improve functioning. Patients may note that the efficacy of their abortive medications improves with the use of a daily preventive.

When preventive medications are used in children and adolescents, it is prudent to periodically attempt to discontinue the daily preventive in an effort to minimize medications. In choosing a preventive, comorbidities (anxiety, depression, gastrointestinal (GI) problems, etc.) "drive" where we go with which medication. As with adults, the idea is to see if the patient may return to simply using abortive medication. However, if an adolescent has had headaches for a number of years and has found a preventive that works, the usual practice is to continue it long term.

Table 3.1 First line abortive medications for migraine and tension-type headaches in children and adolescents

Under 12 years of age
1. Ibuprofen: Effective, and available as a liquid, but GI upset is relatively common. A small amount of caffeine may enhance the efficacy
2. Acetaminophen: Well tolerated, safe, but not as effective as ibuprofen. Chewable tablets and liquid are available. Due to its relative safety, acetaminophen is the usual primary abortive used in young children. Adding a small amount of caffeine may enhance efficacy
3. Naproxen (Naprosyn, Aleve): Effective abortive that is nonsedating and is available as a liquid. However, GI side effects are common. (Aleve = OTC = 220 mg)
4. Midrin (generic available) or Prodrin: Midrin capsules: (acetaminophen 325 mg/dichloralphenazone 100 mg/isometheptene 65 mg): ½ or 1 capsule PO q 4 h prn. At younger ages we usually use only ½ at a time. These are very large capsules, but may be taken apart and sprinkled into applesauce or juice. Sedation is common, as is lightheadedness. GI upset, although not common, occurs at times
Prodrin is very similar to Midrin, but without the sedative (no dichloralphenazone), and with a small amount (20 mg) of caffeine. Prodrin tablets may be split in half
5. Caffeine: Used by either itself or with an analgesic, caffeine is useful for tension and migraine headache. In children, soft drinks containing caffeine are helpful. Side effects are minimal when caffeine is used in very limited amounts
6. Triptans: Rizatriptan (Maxalt) is indicated for age 6 and above. Maxalt is available in 5 and 10 mg, in tabs or MLT lozenges. The usual dose would be 5 mg, ½ to start, and increasing dose with advancing age. There is a very low dose sumatriptan nasal spray available (5 mg). I usually begin using the triptans at age 9 or 10
7. (Last resort) Butalbital or other pain medications: Phrenilin (generic available) is butalbital plus acetaminophen, while Fioricet/Esgic adds in caffeine. These should be used in low doses(usually ½ tablet) and not more than 1 day per week
Over 12 years of age (includes the above plus the following)
8. Triptans: Almotriptan (Axert tablets) is FDA-indicated in adolescents. We usually begin with ½ tablet. Maxalt is FDA-indicated age 6 and above. Zomig nasal spray is available in a low dose, 2.5 mg, form (the usual dose in adults is 5 mg). Triptans are generally more effective than analgesics. Contraindicated in complicated migraine and in those with cardiovascular risk factors. Potential side effects include flushing, chest tightness, paresthesias, nausea, and somnolence. More effective when taken early. May be combined with NSAIDs (ibuprofen, naproxen)
9. Prodrin: Acetaminophen, isometheptene, caffeine. Similar to Midrin, but nonsedating. These may be cut in ½, and taken with an NSAID
10. NSAIDs or Cambia: Most NSAIDs may be used with or without caffeine. Cambia is FDA-indicated above age 18, but has been used off-label in adolescents. Cambia is 50 mg, in powdered form, of diclofenac potassium. Cambia may be used with water or apple juice, and the usual dose is ½ or 1 packet every 4 h as needed
11. (Last resort) Butalbital or other pain medications. See above

GI gastrointestinal, *OTC* over the counter, *FDA* Food and Drug Administration, *NSAID* nonsteroidal anti-inflammatory drug

Table 3.2 Criteria for the use of prevention medication

1. The headaches interfere significantly with the child's functioning socially or at school. The extent of how much the headaches bother the child is a major consideration
2. Failure of nonpharmacological approaches (watching triggers, biofeedback, etc.)
3. The child's and parent's willingness to utilize daily medication with possible side effects
4. Willingness of the child and parents to change medication, if necessary
5. Failure of abortive medication to effectively treat the headaches; continued frequency of headaches, daily or near-daily
6. In choosing preventives, comorbidities (psychiatric, medical, GI) drive where we go

GI gastrointestinal

Table 3.3 First-line preventive medications for migraine, tension-type, and chronic daily headaches in children and adolescents

Under 12 years of age
1. Cyproheptadine: Safe, but efficacy is questionable. It is usually well tolerated but fatigue and weight gain may be a problem. Not as useful in children over the age of 11. It may be dosed once a day and is available in liquid form
2. NSAIDs (Ibuprofen, naproxen): Ibuprofen and naproxen may be utilized as daily preventives or as abortive for both tension and migraine headaches. The lack of sedation renders these very helpful for daily use. GI side effects are relatively common, and when these are used on a long-term basis, regular blood tests for hepatic enzymes and renal function need to be done
3. Petadolex. (Age 9+): A form of the herb butterbur. Good evidence for efficacy in migraine. Widely used in Europe; available for over 35 years and regarded as safe. One tablet (50 mg) daily; may increase to two. Occasional mild GI upset. May be ordered through www.petadolex.com, 1-888-301-1084, or through Amazon.com. Due to carcinogenic concerns (in animal studies, although Petadolex takes off the molecule that is of concern, from the parent compound butterbur), we recommend rotating off of Petadolex for at least 1 month periodically
4. Magnesium oxide or citrate: Available OTC as tablets or powder. Mild, but effective for some. Safe in this age range. Usual dose is 100–200 mg a day
5. Feverfew (natural, herbal) is sometimes effective
6. Topiramate or divalproex: see below: we attempt to avoid these drugs in younger children, but occasionally they are utilized, in low doses
7. Botox: Off-label under age 18. Botox is the most effective chronic migraine preventive; occasionally Botox has been used under age 12, in low doses
12 years and older
1. NSAIDs: occasionally effective for prevention, without the sedative/weight gain side effects of many drugs
2. Petadolex: See above. Magnesium also is used at all ages
3. Topiramate: Useful for both migraine and chronic daily headache (CDH), lower doses (e.g., 25–50 mg qHS) are often effective; may be pushed to 100–150 mg daily. Potential side effects include cognitive slowing, paresthesias, decreased appetite/weight loss, and rarely acute glaucoma, renal stones, and acidosis. Cognitive side effects often limit use
4. Divalproex: Useful for both migraine and CDH, lower doses (e.g., 250 mg) are usually used with some efficacy. May be pushed to 750–1000 mg daily. Potential side effects include GI upset, sedation, weight gain, tremor, dizziness, and alopecia. Blood tests should be performed periodically for hepatic enzymes

Table 3.3 (continued)

5. Gabapentin: Useful for both migraine and CDH, lower doses (e.g., 100–300 mg BID to TID) are often effective. Potential side effects include dizziness and weight gain, although it is usually very well tolerated by most people, especially at the lower doses recommended
6. Tricyclic antidepressants: Effective for migraine and CDH. Nortriptyline and amitriptyline are commonly used. Usually well tolerated in low doses and safe for long-term use. Cognitive side effects, dry mouth, drowsiness, dizziness, and weight gain are common. Usual dose of amitriptyline is 10–50 mg daily. Protriptyline does not cause weight gain, but is somewhat less effective. Blood tests should be performed periodically for hepatic enzymes and renal function
7. Propranolol: Generally well tolerated. Fatigue and decreased exercise tolerance may be a problem. Usual dose is 20–80 mg daily. With doses less than 60 mg qd, BID dosing is required which is inconvenient for children
8. Verapamil: A calcium channel blocker that is effective for migraine and occasionally CDH. Generally well tolerated, with constipation common. Convenient once per day dosing with the sustained release formulations. Usual dose ranges from 80 mg once a day up to 240 mg ER q day
9. Botox: Off-label under age 18; botox is only officially indicated for chronic migraine, 18 and above. Botox has been studied in this age range, and is generally regarded as safe and effective. Despite being off-label, Botox has been widely utilized in the 12–18-year age range. The official (age 18 and above) doses are 155 units, given as 31 injections about the head. For younger patients we often use much lower doses, with fewer injections

NSAID nonsteroidal anti-inflammatory drug, GI gastrointestinal, OTC over the counter

Conclusion

Many children and adolescents have episodic migraines that respond easily to abortive medications. The challenge is in dealing with those who have frequent and debilitating headaches. A multidisciplinary approach is the most helpful for patients with severe headaches: a balance of medication with therapy and lifestyle changes. Management of headache disorders is a trial and error process; there is no "cookie cutter" approach. Although decreasing the frequency and severity of headaches is important, success is also measured by how much we help the child return to normal functioning in home, school, and social life. Note this is an updated version of an article that was originally in *Practical Pain Management*, Vol. 10, Jan. 2010.

The Homebound Adolescent Headache Patient

Each adolescent with refractory headaches is unique, and requires an individualized approach. This involves the parents, siblings, school, and health-care villagers (physicians and therapists) working together with the goal to decrease pain and increase function.

I have an adolescent headache center north of Chicago. Years ago, I would take a simplistic, tough love approach: "…My job is to come to work; yours is to go to school, no excuses." I have evolved toward a more nuanced approach, individualized to each child's situation.

In the case of chronic refractory headache patients, we are not simply treating one child in isolation; we are also dealing with the parents, siblings, and the school. Long-term outcomes with these children somewhat depend upon the psychiatric health of the parent. The primary "caretaker" parent (usually the mother) can range from psychiatrically normal to those with a severe personality disorder (PD). The child's psychiatric status is also a crucial variable. It "takes a village" to raise some of these children, and we recruit "other villagers." These include psychotherapists, physical therapists, biofeedback specialists, etc.

Role of Therapist Is Key

Adolescent psychotherapists are invaluable in treating these patients. They often provide the most useful treatment for the child. Many therapists will take a family therapy approach. Family dynamics play a crucial role in perpetuating refractory headaches. Also, the patient's severe headaches adversely affect the rest of the family. Many of the kids are not ready for high school, and have tremendous fears and anxieties. After a number of sessions, the therapist often has a good grasp on why the child has severe headaches, along with school avoidance. For some kids, the long-term relationship with the psychotherapist may be the most important element of treatment.

Mental Health of Parent Is Important

The psychiatric health of the parent (usually mom) is also important. The most difficult case is when the mother has a PD, most often borderline PD (BPD), and the child has a PD. Except in severe cases, we reserve diagnosing an adolescent as having a PD until their later teens or early 20s. With plasticity of the brain, children diagnosed with BPD may significantly improve by age 25 or 30. I have followed a number of patients into their 20s, and when both mother and child are psychiatrically ill, the result is not good. These patients often underfunction as young adults, never leaving home or finishing school.

When mom has a BPD, she may perpetuate a mild factitious disorder by proxy (FDP; Munchausen by proxy). I published an article on this situation, where we evolved into taking a dialectical approach with both mom and adolescent [7]. Dialectical therapy is used with BPD, and with these mothers I call it "dialectical by proxy." Basically, this means we are nonconfrontational, "go with the flow," trying to minimize medical interventions, and maximize psychotherapy. Confronting the BPD parent leads to an angry scene, with the parent (and child in tow) stomping out of the office, never to be seen again. With the milder approach, I have had several children actually separate from the mother after high school, and do reasonably well. Separation is vital if the child is to mature into a relatively healthy adult.

Ease into a School Program

Many children need a tough love approach and must be pushed to go to school. Others do best with home schooling or when homebound, online education, modified school (limited hours in class), or a hybrid. Homeschooled kids may do reasonably well academically, but they risk ending up being socially isolated. Homebound-schooled adolescents often experience severe anxiety, and not attending school may help alleviate their social anxiety. Each child's needs differ. Not all schools are flexible, and alternative programs may not be available.

When a homebound child returns to school, it is helpful to ease back into school. I will usually write letters recommending late starts, early release, no gym, etc.—whatever helps. If the adolescent is at least willing to go back to school part-time, I will do my part and help facilitate the return to school. This works for some of the children.

The idea is to go from point A (Ninth grade) to point B (graduating high school). Some children accomplish this by taking the general educational development (GED) exam. It may take part homeschooling, part regular high school, going for two classes in summer—whatever works. If we can help these children progress through high school, and separate them from mom, they usually function better into their late teens and 20s.

Somatizing Disorders

Many children with refractory headaches are somatizers—that is, patients with frequent physical complaints for which no organic basis is found. They tend to visit multiple physicians and other providers. I minimize testing with these patients, and almost never hospitalize them. It is important to move away from the medications and medical establishment, and help these children see themselves as healthy, not chronically ill.

As with adults, active coping (taking responsibility for one's illness) is key. Pain level itself is not the only predictor of disability in these children. Other predictors include catastrophizing (thinking illness is worse than it actually is), fear of pain, passive (vs. active) coping, depression, and anxiety [3–5]. We can work on "dialing down the volume" on catastrophizing, both in the child and parent. I see "catastrophizing by proxy," where a parent may say: "These headaches are the worst anybody has ever had. They are a 12 on a scale of 1–10. It is a nightmare. You have to cure them!" Encouraging active coping is a major challenge. We need to have the parent, teacher, therapist, etc., on the same page. If the parent (and child) state: "When you give enough drugs to stop the pain, then he will go back to school," that never works out well.

Summary

My approach to the refractory headache patient has evolved over the years toward a flexible case-by-case approach. I encourage active coping and always minimize use of medications. I attempt to work with other health-care providers ("villagers"), particularly psychotherapists. One goal, outside of helping to decrease the pain, is to gently facilitate a separation of adolescent from parent. Each adolescent with refractory headaches is unique, and requires an individualized approach. Note this is an updated version of an article that originally appeared in *Practical Pain Management*, Vol. 13, April 2013.

Factitious Disorder in an Adolescent with Headaches

A Case of Mild Factitious Disorder by Proxy

History Jason is a 14-year-old boy who presents with multiple pain disorders, dating to age 7. Medical history includes previous diagnoses of chronic Lyme disease, chronic migraine, fibromyalgia, chronic fatigue syndrome, and irritable bowel syndrome. Jason missed most of eighth grade this past year, but has done well with homebound education. Oddly, Jason's records do not corroborate his stated diagnoses.

Jason's mother (Ellen) and father accompany him to his first visit, and Ellen does almost all of the talking. His father is very quiet and defers to his wife. Jason has one older sibling, who still lives in the home while commuting to college.

Ellen appears very excited when telling us about Jason's various medications, doctors, and tests. Jason is on two antidepressants "for pain," an anticonvulsant, nonsteroidal anti-inflammatory drugs (NSAIDs), and muscle relaxants. He has physicians in three states, and averages two doctor visits a week.

On the surface, Ellen is very friendly and courteous. She tells us about an upcoming sleep study in which Jason will be participating, as she is convinced her son has a sleep disorder, "…but the doctors missed it on the first sleep study." Overall, she is very dissatisfied with his medical care. When we suggest that Jason see a psychotherapist, or have psychological testing, Ellen agrees, stating he will go, "as soon as he is finished with all his other tests."

Introduction

There are a number of warning signs in this case that point to a factitious disorder: multiple diagnoses lacking solid medical evidence; multiple patient visits to a number of physicians in various locations; repeated medical tests; and a caretaker re-

questing more tests, doctors, and diagnoses. The mother's demeanor and affect are typical of parents in the mild FDP situation: very friendly, overly interested, excited and involved, and dissatisfied with the medical care.

The caretakers, usually the mother, often have PDs themselves, with narcissistic tendencies. If they are confronted, anger and splitting can ensue. Confrontation and honesty may work with healthy parents, but not with very psychiatrically ill parents.

Our goal is to gently nudge Jason and his family toward psychotherapy, and to minimize medications and tests. We want to ensure Jason is able to go from freshman year of high school through his senior year. We eventually want to separate Jason from his mother with his departure for college. It takes a unified effort to help a child and family in this situation, and we must recruit others, particularly mental health professionals.

Diagnosis

This case represents mild FDP, as well as pediatric condition falsification (PCF) [1, 2, 6, 8–10].

Treatment

There are two treatment approaches that can be considered.

Approach 1 We establish a therapeutic relationship, and determine that Jason is not being poisoned or seriously harmed, other than psychologically, by the mother. Then, at a later date, we confront Jason's parents with our true thoughts.

Approach 2 We pursue a low key, nonconfrontational approach to both the parents and children. Dialectical therapy, using acceptance, mindfulness, validation, and cognitive-behavioral techniques, among other tools, is currently our favored approach. After years of failure following confrontations with parents, I have used this laid-back "dialectical by proxy" approach with two young patients and their mothers, with reasonable success. One young woman currently is doing well in college, having physically separated from her parents. If our goal is to continue a therapeutic relationship, and ease the young person away from home, I believe that this approach may be best.

Long-Term Follow-Up

Over the 25 years I have been in practice, I have seen ten patients with mild FDP/PCF. Five patients have been lost to follow up (usually after we confronted the parent). Two patients have done well into their 20s, and are not considered to have

PDs. One young woman was diagnosed with BPD, and has done poorly. Another young woman is doing well in college, and a 15-year-old has improved, and is attending high school part-time. My impression is that, after the vitally important separation from parents, many victims may do well as adults, as long as they themselves do not have a PD.

Discussion

The sample case represents a mild form of FDP, mild PCF, and possibly mild medical child abuse (MCA). FDP is primarily a psychiatric diagnosis that relates to the caregiver who exaggerates or completely fabricates the child's symptomatology. PCF relates more to the child/victim, who has had symptoms falsified. MCA relates to the health-care providers, who may prescribe unnecessary and possibly harmful treatments, including drugs. The MCA diagnosis recognizes the role of health-care providers in the abuse of the child.

The incidence of FDP is not entirely known, but is relatively rare. The incidence has been quoted as ranging from 0.4 to 2 cases per 100,000 (among parents of children younger than 16 years of age). Boys and girls appear to be equally affected, and, typically, younger children are involved. However, with mild FDP presenting as headaches, we have witnessed most cases occurring in early adolescence. The incidence of the milder forms of these conditions is unknown.

The Participants

The three participants are the child/victim, the parent/perpetrator, and the health-care team. The child (or adolescent) often is passive, deferring to the caretaker, who, regardless of the age of the patient, does almost all of the talking. Older children may collude with the parent. The adolescent often is dependent and immature, with separation anxiety.

The perpetrator parent, 90% of whom are the mothers, often is very attentive, knowledgeable, overly friendly, and comfortable in the medical setting. The vast majority of these parents have moderate to severe psychopathology, often some form of PD. Some of the mothers display hypochondriacal traits, and occasionally have been involved in factitious disorders themselves. The caretakers that we have encountered with mild FDP are essentially "doctor addicts," and are not actively inducing physical symptoms in the children. They seek various types of secondary gain, including sympathy, attention, and social interaction with the medical staff, and relief from their usual chores or work, and so on.

The role of the Internet has grown over the years. Parents can obtain a great deal of medical knowledge without being part of a health-care environment. Many of the perpetrators display a wealth of knowledge about the various conditions, although it tends to be superficial. Also, angry parents may use the Internet to post negative statements about health-care providers.

The health-care team is the third participant. Often, the primary provider is a subspecialist, eager to help with an unusual diagnosis. Health-care providers have widely different levels of psychiatric acumen, and often ignore or miss obvious signs of FDP. In moderate or severe cases, it is more obvious as to the correct course, with psychiatric intervention, as well as legal notification of Child Protective Services. However, with mild cases, the correct means of intervention are not as clear.

Treatment

Management of these conditions varies from case to case. It "takes a village" to help these families, and we need other "villagers." These often include psychotherapists, psychiatrists, social workers, the pediatrician, and so on. With moderate and severe cases, legal intervention is important. However, with the milder cases that I have seen over the years, the correct course is unclear. In the majority of the first seven cases I encountered, confrontation usually led to an angry scene, with the parent stalking out of the office, never to return. In three more recent situations, I have taken a more subtle "dialectical" approach, which has been much more successful. One case was that of a 15-year-old girl with severe daily headaches and multiple diagnoses; she was not in school for 2 years. We gently guided her into individual and family therapy, with little confrontation, and she is now off to college and doing well. Most of the time, however, the parents will resist or refuse psychotherapy. It is apparent that the correct approach to mild FDP/PCF is not known, and we need research and studies on this milder form. Note this is an updated version of an article that was published in *Practical Pain Management*, Vol. 11, Oct. 2011.

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