Nonepileptic seizures (NES) are one of the most common functional (medically unexplained) symptoms seen by neurologists. Although most experts consider psychotherapy the treatment of choice, few therapeutic approaches have been described in detail. Given that NES occur in the context of many different psychopathologies, it remains uncertain whether there is 1 intervention that can benefit all comers or whether it is necessary to offer individualized psychotherapy. This article describes an approach grounded in psychodynamic interpersonal therapy but augmented with elements of cognitive–behavioral therapy, somatic trauma therapy, and the involvement of caregivers and family members. The approach was developed in the setting of a specialist psychotherapy service for patients with functional neurological disorders presenting to British hospital-based neurologists. The authors have previously shown that it is associated with significant improvements in psychological functioning, health-related functioning, and a symptom count. Three case reports illustrate how the treatment can be adapted to meet different patients’ needs.

Keywords: nonepileptic seizures, neurology, psychotherapy, psychodynamic interpersonal therapy, trauma

Nonepileptic seizures (NES) are episodes of altered movement, sensation, or experience resembling epileptic seizures but not associated with ictal (during the course of a seizure) electrical discharges in the brain. They can be defined positively as episodes of loss of control that occur in response to distressing situations, sensations, emotions, conflicts, or memories when alternative coping mechanisms are inadequate or have been overwhelmed. The overwhelming majority of NES are considered as beyond patients’ voluntary control (Gates, 1998; LaFrance & Devin-sky, 2002; Reuber, 2008). NES are classed as “conversion disorder with seizures or convulsions” (Axis I, 300.11) in the Diagnostic and Statistical Manual of Mental Disorders (4th ed., or DSM–IV; American Psychiatric Association, 1994) and appear as “dissociative convulsions” (F44.4) in the International Classification of Diseases 10th Edition Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines (ICD-10; World Health Organization, 1992), although it is recognized that NES can also occur in malingering and factitious disorders. The discrepant classification illustrates the difficulties that exist with this particular area of current psychiatric nosology.
(Mayou, Kirmayer, Simon, Kroenke, & Sharpe, 2005). Using the current multiaxial nosologic approach, more than 90% of patients with NES have psychiatric comorbidity, although in many cases it could be argued that NES are actually most easily understood as a manifestation of another psychiatric disorder. Patients most commonly fulfill the current diagnostic criteria for other somatoform (22%–84%), other dissociative (22%–91%), posttraumatic stress (35%–49%), depressive (57%–85%), or anxiety (11%–50%) disorders. What is more, it has been reported that 25%–67% of patients with NES fulfill the DSM–IV criteria for personality disorder. Psychometric tests reveal a range of abnormal personality profiles in the majority of patients. In most studies, the largest group of NES patients have features of borderline personality disorder (Lacey, Cook, & Salzberg, 2007; Reuber, 2008). Many questions about the etiology of NES remain unanswered. However, only a small minority of patients (perhaps 1 in 20) seem to have seizures without any other psychiatric symptoms and in the absence of personal or social circumstances that could explain a dissociative or conversion process (Moore & Baker, 1997; Reuber, Howlett, Khan, & Grünewald, 2007). A history of trauma or the presence of current conflicts or dilemmas are particularly common features (Bowman, 1993; Fiszman, Alves-Leon, Nunes, D’Andrea, & Figuera, 2004; Fleisher et al., 2002; Reuber et al., 2007; Van et al., 2004). Other relevant factors include psychological features (like a predominantly avoidant coping style, marked emotional dysregulation, alexithymia, and the tendency to express psychological distress in a somatic fashion or to dissociate), social factors (like a disturbed family environment or financial insecurity), and “neurologic” comorbidity (like head injuries or intellectual disability). About 5%–10% of patients with NES have additional epileptic seizures, which almost always precede the onset of NES (Lesser, Lueders, & Dinner, 1983). The prevalence of NES has been estimated as 2 to 33 in 100,000 (Benbadis, Allen, & Hauser, 2000). This makes NES one of the most common medically unexplained symptoms encountered by neurologists (Reuber, Mitchell, Howlett, Crimlisk, & Grünewald, 2005). The authors of one study, which reportedly captured all patients with a blackout first presenting to a neurologist, emergency room, or primary care physician, thought that 57.4% had epilepsy, 22.3% had fainted, and 18.0% had NES (Kotsopoulos et al., 2003). About three fourths of NES patients are women (Reuber, 2008).

The visible manifestations of NES are similar to those of epileptic seizures. The most common semiology involves excessive movement of limbs, trunk, and head. Seizures with stiffening and tremor or seizures with atonia are less frequent. NES are typically diagnosed when attacks involve impairment of consciousness. Although the ICD-10 states that in NES—or dissociative seizures—“loss of consciousness is absent and replaced by a state of stupor or trance” (World Health Organization, 1992, p. 159), most patients will claim to be completely out for at least one part of their seizures (Schwabe, Howell, & Reuber, 2007). Occasionally, neurologists also apply the diagnosis to purely motor, sensory, or experiential attacks akin to simple partial epileptic seizures involving no impairment of consciousness (Lesser, 1996).

Although NES can start abruptly, seizure onset is more commonly gradual than in epilepsy. Many patients describe physical symptoms of panic or hyperventilation during their seizures, often without being aware that they are anxious. Phases of vigorous and less vigorous motor activity can come and go. Pelvic thrusting occurs in epileptic seizures but is more commonly seen in NES. Ophisthotonus (arc de cercle) may be seen. The head may shake from side to side. Eyes and mouth are much more likely to be closed than in epileptic seizures. Ictal crying or verbal communication may be observed. Eye opening may be resisted. Purposeful movements or signs of reactivity may be observed while patients appear unresponsive (Reuber, 2008). More than one quarter of patients with NES give a history of ictal incontinence of urine. Fecal incontinence is also reported (Reuber, Pukrop, Mitchell, Bauer, & Elger, 2003). Cyanosis (bluish discoloration of the skin) is unusual (James, Marshall, & Carew-McColl, 1991). NES typically last longer than epileptic seizures. One study found that generalized tonic clonic seizures lasted from 50 to 92 s, whereas NES lasted 20 to 805 s. Many NES went on for more than 2 min (Gates, Ramani, Whalen, & Loewenson, 1985). Prolonged NES treated as status epilepticus (repeated epileptic seizures without recovery of consciousness) occur in about one third of NES patients, and more than one quarter of patients diagnosed with NES at an
epilepsy center have received intensive care treatment for presumed status epilepticus at least once (Reuber et al., 2003).

Given the superficial similarities with epilepsy and the often dramatic seizure presentations, it is perhaps not surprising that most patients are initially diagnosed as having epilepsy and carry this incorrect label for several years. Three quarters of patients with NES (and no additional epilepsy) have received (ineffective) treatment with antiepileptic drugs by the time the diagnosis is made (de Timary et al., 2002; Reuber, Fernández, Bauer, Helmstaedter, & Elger, 2002).

In view of this, the process of communicating the diagnosis of NES often involves the removal of a previous diagnosis of epilepsy. Many patients are left confused or angry by this experience (Carton, Thompson, & Duncan, 2003; Green, Payne, & Barnitt, 2004), and this is the point at which most neurologists refer patients for some sort of psychological intervention (LaFrance, Rusch, & Machan, 2008).

Although there are no high-quality studies proving the effectiveness of psychological intervention (Baker, Brooks, Goodfellow, Bodde, & Aldenkamp, 2007; Reuber, Howlett, & Kemp, 2005), most experts consider psychotherapy the treatment of choice (Devinsky, 1998; Gates, 1998; LaFrance & Barry, 2005; Lesser, 2003; Rusch, Morris, Allen, & Lathrop, 2001). Despite this endorsement, very few therapeutic approaches have been described in detail. One notable exception is a pilot study that used cognitive–behavioral therapy to focus on anxiety and avoidance (Goldstein, Deale, Mitchell-O’Malley, Toone, & Mellers, 2004). A detailed account of a psychodynamic approach to NES also exists. This approach places much emphasis on alleviating the effects of traumatization but is not structured in a way that would allow easy replication (Kalogjera-Sackella, 2004). Most other reports of psychotherapeutic interventions lack detail or are based on the treatment of a small number of cases (Reuber et al., 2005).

Antidepressant and antianxiety medications are commonly used for the symptomatic treatment of comorbid disorders, and there is some evidence for the effectiveness of diazepam (Ataoglu, Özçetin, Icmeli, & Özbulut, 2003). The use of antidepressant drugs has not been studied in patients with NES, although they can be effective in patients with other medically unexplained symptoms (O’Malley et al., 1999). Clinical experience has suggested that pharmaceutical treatment can be a helpful adjunct to therapy for some patients, giving them the resilience to engage in treatment, whereas for others the numbing of emotions that can occur with antidepressants makes emotional processing more difficult.

One fundamental question about the psychological treatment of patients with NES is whether it is possible to devise an intervention that could be of benefit to all comers or whether it is necessary to offer individual patients very different psychotherapeutic approaches. Some clinically distinct subgroups have been described, such as older patients (Duncan, Oto, Martin, & Pelosi, 2006), men (Oto, Conway, McGonigal, Russel, & Duncan, 2005), and individuals with learning disabilities (Duncan & Oto, 2008), but there is only limited understanding of psychodynamic subgroups that probably also exist. The complex etiology of NES means that therapists face an almost unlimited number of possible combinations of predisposing, precipitating, and perpetuating factors; psychiatric comorbidities; and family and social problems (Bowman & Markand, 1996; Reuber et al., 2007). Although psychotherapy may help in most common scenarios, the existing evidence about the effectiveness of psychotherapy would suggest that different forms of treatment would be most appropriate for the range of different patient populations who may present with NES (Roth & Fonagy, 2005).

Previous approaches to patients with NES have either focused on a remediable feature (such as avoidance) that is very common regardless of the particular etiology of NES (Goldstein et al., 2004) or channeled patients to the approach that appeared most suitable for their problem (Rusch et al., 2001). This report describes a third way of tailoring a common approach to individual patients depending on the nature of contributing etiological factors. This approach was developed in the setting of a specialist psychotherapy service for patients with functional neurological disorders in two British hospitals since January 2003 and has now been used with more than 200 patients. We have previously demonstrated that this approach is associated with significant improvements in three patient-reported outcome measures (the Clinical Outcomes in Routine Evaluation Outcome Measure, Short Form–36 Health Survey, and Patient Health Questionnaire–15). The improvements were maintained 6 months after the end of treatment.
About 50% of patients showed improvements in at least one of the measures. We have also demonstrated that these improvements may be achieved at the modest cost of £5,328 ($10,483) per quality-adjusted life year (Reuber, Burness, Howlett, Brazier, & Grünwald, 2007). Here we offer a more detailed description of our approach. Three case reports demonstrate how the treatment is adapted to different patients.

Therapeutic Models

Our therapeutic approach is an adaptation of the model of brief psychodynamic interpersonal therapy developed by Hobson (1985). The original model was found to have effects equivalent to those of cognitive–behavioral therapy for the treatment of depression (D. A. Shapiro & Firth, 1987), and an adapted model for functional somatic disorders, on which our therapy is based, was shown to be helpful and cost effective in the treatment of functional bowel disorders (Creed et al., 2003; Guthrie, Creed, Dawson, & Tomeson, 1991). The therapy uses an accessible, empathic approach, inviting correction and collaboration with the patient. Key features include (a) the assumption that the patient’s problems arise from or are exacerbated by disturbances of significant personal relationships, with dysfunctional interpersonal patterns usually originating earlier in their lives, and the explicit linking of this to the patient’s symptoms, and (b) a tentative, encouraging, supportive approach from the therapist, using the terms I and we to emphasize the collaborative nature of the work. Understanding hypotheses are used to develop awareness of the patient’s current feelings (e.g., “I guess you might be feeling quite angry when you remember that”). Linking hypotheses are introduced to make connections between current feelings and other feelings both inside and outside therapy (e.g., “You say you’re feeling small and frightened now—I wonder if that’s a bit like how you felt as a child when your parents used to fight?”). Explanatory hypotheses look for possible underlying reasons for a patient’s behavior, particularly a repeated pattern of behavior (e.g., “When you try so hard not to get upset here with me, maybe it’s because your dad used to beat you more if you cried, so you came to feel that showing your feelings was bad and dangerous. Maybe it even feels as if it might make me angry”). The key mechanisms for therapeutic progress are seen as the identification and change of unhelpful patterns of interpersonal relationships and the more effective processing of emotions both regarding current issues and in relation to painful memories or areas of patients’ lives that may not have been dealt with previously. Because of the florid, easily triggered symptomatology and level of psychological traumatization of many patients with NES, this approach was combined with concepts and techniques from a model of somatic trauma therapy, which includes techniques to control autonomic arousal, to track somatic symptoms and link them with emotional triggers, and to process traumatic memories without retraumatizing potentially fragile patients (Rothschild, 2000).

Structure of the Therapy

Treatment consists of a 2-hr initial semistructured interview that is followed by up to nineteen 50-min therapy sessions (with a flexibly enforced upper limit) at weekly or fortnightly intervals. Table 1 provides an overview of key treatment aims and interventions, presented roughly in the order in which they are likely to occur in therapy, although this is applied flexibly according to the therapist’s assessment of each patient.

First Session

Initial engagement. The difficulties in engaging patients with functional somatic symptoms in psychological therapy are well recognized (Guthrie, 1996; House, 1995; Sharpe, Peveler, & Mayou, 1992). In our recent study (Howlett, Grünwald, Khan, & Reuber, 2007), only 48.4% of the patients initially referred were considered suitable, and only 66.6% of those starting therapy completed treatment. The causes of drop out include anger, often focused on how patients were told that their symptoms did not have a physical cause, and confusion, particularly when they have been previously diagnosed with and treated for epilepsy (Carton et al., 2003; Thompson, 2007). Patients may feel that the diagnosing doctor is accusing them of imagining or faking their symptoms or feel stigmatized by the referral for psychological therapy, which they associate with weakness or insanity. These factors make the
formation of a therapeutic alliance particularly difficult.

The first task of the initial session is therefore to elicit and address any ambivalence. The therapist might open the session by asking, “I wonder how you felt about coming to see me today?” often followed by “I wonder whether it made any sense to you when Dr X suggested you come to see me?” This provides an opportunity for the patient to express anxiety, anger, or confusion about how his or her symptoms might be linked to emotional factors and what therapy might entail. The therapist accepts these feelings empathically, gives everyday examples of how emotions can affect people’s physical functioning (e.g., blushing and anxiety), and explains that NES often seem to be linked to feelings and experiences, currently or in the past, that have been too painful to deal with. The therapist explains the task of the first session as being to talk about the patient’s symptoms and life, to see if the therapist and patient together can identify any stress that may be related to the symptoms.

**Developing a formulation.** In view of the heterogeneous nature of the clinical problems, the targeting and adaptation of the therapeutic approach are based on a personalized assessment of each patient in the first session. The therapist starts this process by obtaining a full description and history of the symptoms, including the impact of the seizures on the patient’s life and relationships, any events of emotional significance that might have occurred in the year before the onset of symptoms, and any factors that act as symptom triggers. This helps to engage the patient, reassuring him or her that the physical symptoms are being taken seriously, and starts to identify potential precipitating factors, illness perceptions, reliance on health services, and areas of avoidance. The therapist also takes a full life history, exploring interpersonal patterns in childhood and adulthood, traumatic events, bereavements, and illnesses experienced by the patient or other family members, eliciting the emotional impact and coping styles adopted. The patient’s current life is also explored, with an emphasis on the quality of interpersonal relationships.

Toward the end of the session, the therapist attempts to draw together a tentative formulation to share with the patient, linking the patient’s symptoms with problematic emotional and interpersonal patterns and unprocessed or unresolved trauma or loss. If possible, this is framed in terms of predisposing, precipitating, and perpetuating factors, precipitating factors, and perpetuating factors, and seizure triggers; EFT = emotional freedom technique; EMDR = eye movement desensitization and reprocessing.

<table>
<thead>
<tr>
<th>Key aims</th>
<th>Interventions</th>
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<tbody>
<tr>
<td>Initial engagement</td>
<td>Address negative feelings about therapy, reinforce diagnosis and mind–body link, negotiate willingness to engage, and agree to limited number of sessions with defined targets (treatment contract)</td>
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<tr>
<td>Develop formulation</td>
<td>Development of individualized PPPT model based on symptom history (somatic, emotional, past, and present including illness perceptions), life chronology (including traumas, dilemmas, and history of physical illness), interpersonal relationships (past and present), current life pressures (including physical comorbidity), coping resources (home environment, personal strategies, emotional expressiveness, avoidance, self-care, and dependence)</td>
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<tr>
<td>Changing illness perceptions</td>
<td>Examples of links of psychological and physical processes, offer psychological formulation (PPPT), symptoms–emotions diary</td>
</tr>
<tr>
<td>Symptom control</td>
<td>Breathing, sensory focusing, EFT, relaxation, EMDR</td>
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<tr>
<td>Increasing independence</td>
<td>Goal setting, anxiety self-management, enlisting family support (reducing dependence), encouraging separation, and self-care</td>
</tr>
<tr>
<td>Encouraging self-care</td>
<td>Recognizing and setting limits, assertiveness, and self-nurturing</td>
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<tr>
<td>Enlistment of carers and other health care professionals</td>
<td>Communication with involved parties, joint sessions with patient and carer(s), written materials for carers</td>
</tr>
<tr>
<td>Improvement of emotional processing</td>
<td>Exploration of painful issues, emotional diary, exploring emotions during therapy sessions, encouraging emotional communication with significant others, linking somatic symptoms and emotional processes</td>
</tr>
<tr>
<td>Processing trauma</td>
<td>Exposure, linking memories with emotions and symptoms, symptom control techniques, EFT, EMDR</td>
</tr>
</tbody>
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**Note.** PPPT = predisposing factors, precipitating factors, perpetuating factors, and seizure triggers; EFT = emotional freedom technique; EMDR = eye movement desensitization and reprocessing.
factors and symptom triggers (Howlett et al., 2007). If the patient agrees with the formulation, goals for therapy based on it are discussed. If a formulation cannot be made at this stage, the goal of therapy might be to continue exploration of the patient’s symptoms. A verbal contract for therapy is agreed on, which includes an initial number of sessions (usually six or eight), which may be reviewed and revised, and the target areas for therapy based on the formulation. Symptoms–emotions diary keeping is often introduced at this stage to identify possible triggers and reinforce the mind–body link.

Changing illness perceptions. The lack of understanding (or denial) of the possible adverse effects of negative life events on emotional health may be an important etiological factor for NES. It has been shown that patients with NES are less willing to consider stress as a cause of seizures than are patients with epilepsy, although NES patients report a higher number of adverse life events (Binzer, Stone, & Sharpe, 2004; Stone, Binzer, & Sharpe, 2004). Many NES patients also have an unhelpful, strictly dualistic understanding of illness (Green et al., 2004; Thompson, 2007). Patients who fail to accept the relevance of environmental stresses and the effects of their own avoidant coping strategies are likely to remain ambivalent about embracing psychological therapy and may continue to exhibit inappropriate health care utilization behavior, perceive themselves as sick and dependent, withdraw from employment and social activities, and rely on health-related benefits. Changing illness perceptions and developing greater understanding of the link between physical symptoms and psychological factors is therefore necessary for the patient to engage with therapy as well as being a key goal of therapy in its own right. Starting in the first session, this task often needs to be continued and reinforced as therapy continues. Ways of achieving this include the everyday examples of physical manifestation of emotions described above and the individual formulation, particularly emphasizing chronological links between life events and symptom onset or exacerbations.

Symptom control. We have found that patients are often able to ward off threatened NES with a sensory grounding approach devised for this purpose (see Figure 1). This can work if patients have a seizure warning. Stress reduction techniques (e.g., abdominal breathing or relaxation techniques; Borkovec & Costello, 1993) can help when seizures are linked to high levels of autonomic arousal. Patients suffering from panic attacks or traumatic flashbacks can also be shown techniques to exert some control over these symptoms (Rothschild, 2000). These tech-

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**Helpful procedure for dealing with threatened seizures or panic attacks**

It is a good idea to practice this regularly when you are feeling OK so that when you really need it you will remember exactly what to do. Then as soon as you get a seizure warning or start to panic:

- Feel something, preferably something rough or textured, with your fingers and thumbs. Really focus on what this feels like. As you do this also put your feet flat on the floor and be aware of the ground solid under your feet. If you are sitting down be aware of the chair solid underneath you.
- Look around you and really focus on the things you can see. Describe them to yourself in detail.
- Listen and see what sounds you can hear, e.g., people talking, birds singing, traffic noise etc
- Remind yourself where you are, what day of the week it is, what year it is, who you are with etc.
- Remind yourself that you are safe.

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**FIGURE 1. Sensory grounding approach.**
niques are introduced toward the end of the first session, to demonstrate some concrete benefits from therapy at this stage and so that the patient can benefit even if he or she withdraws from therapy. Work on symptom control may continue in later sessions, with the aim of improving the patient’s quality of life and sense of control. Effective symptom control can also reduce anxiety and increase the patient’s tolerance when the therapy begins to tackle avoidance and the processing of trauma. In fact, some patients with frequent seizures can only benefit from the therapy sessions once the frequent disruptions caused by the seizures have been minimized through the use of symptom control techniques.

**Subsequent Sessions**

Thereafter, therapy is tailored to the needs of individual patients, based on the formulation developed in the first session. The areas addressed in the first session may need to be reinforced at intervals during the course of therapy. Additional key aims and interventions are discussed in the following paragraphs.

*Increasing independence.* Patients with NES often show a marked preference for the use of avoidant coping strategies (Frances, Baker, & Appleton, 1999; Goldstein et al., 2004). This is often out of proportion to the likely risks, leading to an increasingly restricted lifestyle and dependence on family and caregivers. What is more, patients and caregivers fail to perceive the risks associated with a persistent avoidance of places or activities of perceived danger (such as dependence, isolation, and loss of self-esteem). Encouragement is given to tackling avoidance and changing interpersonal patterns to encourage separation and self-care and increase independence, with the help of agreed-on between-session goals and the symptom control techniques described earlier.

*Encouraging self-care.* Clinical experience suggests that a significant subgroup of patients with NES tend to overlook or deny their own needs for a balanced life with a healthy diet, adequate rest and relaxation, and love and support from others. Such patients may work extremely long hours, devote a disproportionate amount of their life to caring for others, neglect their own diet, consume large amounts of caffeine or alcohol, and take no time for their own enjoyment, often not recognizing or feeling able to tackle the stress they are under. Encouragement is given to setting limits, assertiveness in resisting pressures, delegating to others, and self-nurturing, using a goal-setting approach.

*Enlisting family, caregivers, and other health care professionals.* The attitudes and behavior of family members and caregivers can have a profound impact on whether a patient accepts the diagnosis of NES and thereafter engages with and makes use of psychological treatment. For this reason, they are routinely invited to accompany the patient for one session to reinforce the diagnosis, discuss symptom management, explain the treatment approach, and enlist their support for some of the therapeutic goals.

There is frequently an element of confusion among different health care professionals involved with the patient concerning the nature of the diagnosis, particularly when the patient has been investigated by several different medical specialists and has frequent hospital admissions to a number of different hospitals. In this case, clear communication concerning the diagnosis and treatment approach and a reduction of the number of health practitioners involved in offering medical advice can avoid inappropriate treatment and investigations and the reinforcement of incorrect illness perceptions.

*Improving emotional processing.* Given the high rate of alexithymia in patients with NES (Bewley, Murphy, Mallows, & Baker, 2005; Stone et al., 2004) and also evidence of health benefits of the disclosure of information, thoughts, and feelings about personal and meaningful topics (Frataroli, 2006; Pennebaker & Seagal, 1999), attention is given to improving patients’ understanding of their own emotional functioning. Emotional communication and disclosure are encouraged both in the context of the therapy and in their interpersonal relationships. This is seen as a way of improving symptoms and preventing relapse by changing long-term emotional, cognitive, and behavioral patterns. A key aspect of the therapy is “staying with” feelings (emotions and bodily responses) that arise in therapy, to explore, understand, and learn to tolerate them. The therapist might say, “I guess you may be feeling a bit upset now. Let’s try to stay with those feelings and see what’s happening.”

*Processing trauma.* A high prevalence of severe trauma has been linked to NES and other functional neurologic symptoms (Binzer et al., 2004; Bowman, 1993; Bowman & Markand,
Where this is identified, trauma-processing techniques are used to resolve trauma-related symptoms such as dissociation and flashbacks, autonomic hyperarousal, and intense emotional and other psychosomatic reactions. Techniques used include imaginal exposure, somatic trauma therapy (linking imaginal exposure to current somatic and emotional reactions), and the Emotional Freedom Technique (Wells, Polglase, & Andrews, 2003). We have not used eye movement desensitization and reprocessing, but it is an evidence-based treatment that could be useful in this context (National Institute of Clinical Excellence, 2005; F. Shapiro, 1995).

Care is taken to process trauma gently, only with the patient’s agreement, to avoid retraumatization and the provocation of seizures in the session. Where there is severe complex multiple trauma, processing of traumatic memories may not be safe in this relatively brief therapy.

**Chronology of Interventions**

The individualized nature of the therapy entails a level of flexibility with the chronology of interventions. A number of the tasks from the first session may need to be revisited later in the therapy. Session 2 reviews the patient’s somatic and emotional reaction to the first session and current understanding of physical–emotional links. The diary is reviewed, as well as the use and effectiveness of symptom control measures. Perpetuating factors are explored and initial goals for tackling these agreed on.

Family and caregivers are often invited to the third session (with the patient’s agreement) to explain the therapeutic approach and enlist their support. In subsequent sessions, the therapist continues to monitor somatic symptoms and reinforce the somatic–psychological–interpersonal link. Generally, areas that help to build confidence and independence—such as symptom control, tackling avoidance, and encouraging self-care—are addressed earlier. More difficult areas such as bereavement or trauma processing are undertaken later in the therapy, once the therapeutic relationship is more established.

Because loss is often an issue, the approaching end of therapy is referred to at intervals throughout the treatment. In the final session, the ending is acknowledged and the patient’s feelings about it explored. Symptoms are reviewed, and progress made in therapy discussed. Therapeutic work that needs to be reinforced and continued after therapy to prevent relapse is outlined. The content of the discharge letter is agreed on, in particular the detail in which sensitive personal information should be included. For some patients, a follow-up session is scheduled for 2 or 3 months ahead in cases in which this seems helpful.

**Application in Practice**

We illustrate the scope and limitations of the approach with three case vignettes. The cases show how the model is applied to different patients in practice. We describe Case A in some detail to illustrate specific interventions by the therapist and how decisions might be made as to the order of interventions in a complex case. A verbatim transcript was not available, but the case has been reconstructed from contemporaneous and postsession notes. We present Cases B and C in summary form.

**Case A**

Initial session. A., a 34-year-old woman claiming disability benefits, was brought to the first session by her partner (also her registered caregiver). Both were angry and upset about the diagnosis of NES and had written a letter of complaint to the referring neurologist. The early part of this session was spent with both of them, addressing these feelings before A. was willing to engage with the rest of the session alone.

A. described frequent attacks of sudden onset, often resembling sleep but sometimes involving violent jerking of arms and legs and arching of her back. She experienced volatile mood swings and violent outbursts, particularly after intercourse, and had once attacked her partner with a knife. She viewed herself as disabled and needing constant care and was extremely dependent on her partner and teenage stepsons. She never went out alone and considered herself incapable of helping around the house. She also suffered from bulimia nervosa, including a compulsion to steal other people’s food. Infantilization in her interpersonal relationships emerged in this first session as she began to whimper and reverted to childlike speech when mentioning the deaths of her grandparents some years before.

Therapist: I guess you’re feeling quite little as you talk about them. (understanding hypothesis)
A.: I was the youngest in the family, and they really looked after me and did everything for me. They always called me the bairn [local term for baby] even after I’d grown up.

Therapist: I guess that sounds a bit like how things are now at home with C [her partner] and the boys looking after you all the time. (linking hypothesis).

A.: Yes, C puts me on the sofa with a blanket when I have a fit and says, “It’s OK, Daddy’s here.”

The metaphor of the bairn and themes of growing up and taking responsibility for herself became a key focus for the therapy. The urge to take other people’s food was also linked to this dependence and inability to feed herself.

Formulation

Predisposing factors: Childhood family environment that infantilized her and discouraged independence; rape by her biological father at the age of 13; unresolved grief concerning the deaths of her grandparents; traumatized by a house fire she had been in 5 years earlier.

Precipitating factor: Car crash a few months before the onset of symptoms.

Perpetuating factors: Continuing interpersonal relationships based on dependency and illness identity.

Seizures were often triggered by traumatic reminders such as sirens, flashing lights, and proximity to smoke and fire. Her presentation was consistent with DSM–IV diagnoses for conversion disorder with seizures or convulsions, bulimia nervosa, posttraumatic stress disorder, and dependent personality disorder. It was agreed that we would meet initially for 8 sessions to address these issues. In fact, this was reviewed later, and A was seen for 30 sessions of therapy in all, the normal limit of 20 sessions having been relaxed because of the complexity of her problems.

Subsequent sessions. The early sessions focused on the two themes of anxiety management and changing the pattern of dependence. Sensory grounding was introduced to help her gain control over her seizures and panic attacks, and graduated tasks for independent activity between sessions were agreed on. Her partner’s support was enlisted to encourage autonomy and relate to her in a more adult way. His subsequent refusal to respond to childlike behavior became an important impetus for change.

Once A. was feeling more self-reliant and the therapeutic relationship had consolidated, bereavement therapy concerning her grandparents was undertaken, which contributed to her letting go of the bairn role. Her self-perceptions of being ill and dependent were also addressed. Later in the therapy, it felt safe to undertake somatic trauma therapy, initially relating to the house fire and car crash. This entailed linking imaginal exposure to her somatic and emotional responses in the therapy room. Most difficult was trauma therapy concerning the very brutal rape by her father, a key episode in the therapy, after which she was able to heal. Her attacks on her partner during intercourse were identified as dissociative episodes in which she relived elements of this event.

Outcome. The number of seizures was greatly diminished by the end of therapy and at follow-up 18 months later, and A. felt that she could live with the occasional episodes she still experienced. She had become more independent and able to go most places alone. She undertook a qualification in child care with a view to a career in that field and was working with her partner raising livestock and growing vegetables on three allotments. She was emotionally more stable and rarely exhibited any bulimic behavior.

Case B

Initial session. B. was a 35-year-old hospital cleaner with a 4-year history of NES. At referral, she was experiencing 10–15 seizures a month and had missed a lot of work as a result. She had high levels of social anxiety and rarely went out alone, depending on family members to accompany her. In social situations, she would sit quietly, avoiding interacting, and rely on her husband to keep the conversation going. The embarrassment about her seizures exacerbated this avoidant tendency. She tended to push painful emotions out of her mind, not acknowledging them to herself or sharing them even with her husband.

Formulation

Predisposing factors: Difficult relationship with her mother, whom she described as critical, controlling, and demanding, and emotional patterns of low self-esteem, extreme social reticence, and emotional denial.

Precipitating factors: Loss of her much-loved grandmother and a cousin shortly before the
onset of symptoms. Characteristically, she had not engaged with her feelings or talked to anyone about these losses.

**Perpetuating factors:** Low self-esteem and social anxiety, the unresolved losses, and her difficulty in resisting her mother’s constant demands. The painful feelings relating to these issues had not been processed and were being manifested somatically through her symptoms. Her presentation met the criteria for *DSM–IV* diagnoses of conversion disorder with seizures or convulsions and generalized social phobia.

**Subsequent sessions.** The patient was seen for eight therapy sessions. A sensory grounding technique was introduced to help her gain control over her seizures and anxiety symptoms. Her pattern of social avoidance was tackled by exploring her thoughts and feelings and agreeing to do a series of social tasks, for example, going shopping alone and initiating social interactions. Focused work was undertaken on the loss of her grandmother. She was encouraged to communicate more about her feelings, particularly with her husband. In a joint session with her husband, his support was enlisted to foster this and also encourage assertiveness with her mother. The establishment of a strong therapeutic alliance early in the therapy meant that she tackled her between-session tasks and made rapid progress.

**Outcome.** She began to face things she had avoided before, for example, using public transport, taking social initiative, and so forth. She was seizure free by end of therapy and at 6 months follow-up. Her husband telephoned several months after the end of therapy to comment on the extent to which their lives had been transformed.

**Case C**

**Initial session.** C. was a 52-year-old married woman diagnosed with epilepsy when she was 28. This had been fully controlled with antiepileptic medication until she was 40. When an attempt was made to stop the medication, she had a further convulsion and subsequently developed episodes of childlike speech and behavior not associated with epileptic discharges on video electroencephalogram monitoring. At the age of 42, she began to suffer sudden collapses lasting up to 20 min. She would also enter staring, trancelike states for up to an hour, during which she would recognize her husband but not her environment. At referral, she was experiencing five or six episodes per month. She had some anxiety and panic symptoms and avoided going to busy or strange places alone. She had suffered from depression in the past and attempted an overdose 6 years before referral after some marital problems, which she claimed were now completely resolved. She was not convinced about a psychological root to her symptoms and was not keen to attend therapy.

**Formulation.** It was difficult to arrive at a helpful formulation. She described a happy, uneventful childhood. It was not possible to identify any precipitating events before the onset of seizures or seizure triggers. She claimed to be very happy with her marriage, family relationships, and current situation. Although she had been distressed by her husband’s extramarital affair, this had occurred after the onset of all types of seizures and had not been associated with an increase in seizure frequency.

As regards her interpersonal relationships, she spent much of her time with her husband, an arrangement she claimed was based on preference, not dependence. She seemed very disconnected from her emotions, demonstrated no affect or emotional insight during assessment, and indeed was not unduly distressed about her seizures. Her presentation was consistent with *DSM–IV* diagnoses for conversion disorder with seizures or convulsions and dissociative disorder not otherwise specified.

**Therapy.** C. was seen for three sessions during which it was not possible to find any agreed-on issues to work on or to establish any real treatment alliance. Although she seemed dependent on her husband and family, she was happy with her interpersonal relationships and had no wish to change them. She had no seizure warnings, making it impossible to use seizure prevention strategies. She was introduced to relaxation techniques and given a relaxation tape that she rarely used. Given the lack of agreed-on therapeutic tasks, she was discharged.

**Outcome.** At follow-up by the neurologist 18 months later, she was still experiencing attacks, with a reduced frequency of once every 2 weeks. She felt she was living better with them.
Discussion

Case B is an example of an unusually straightforward therapy. The patient was amenable to therapy from the outset and accepting of the formulation and therapeutic focus agreed on at assessment. There was no traumatization to deal with, and she had the personal resources necessary to start making changes in her interpersonal patterns early in the therapy. The key patterns and unresolved emotions were identified and worked on.

This contrasts with Case A, which exemplifies a more typical complex case, in which the current dysfunctional interpersonal patterns and behavior are superimposed on a background of developmental problems and multiple traumas that had to be addressed in turn, making for slower therapeutic progress. It was essential initially to address the hostility to therapy of both A. and her partner and to work on building a therapeutic alliance before any therapy could begin. However, once engaged, her partner’s support in refusing to respond to her infantile demands and sick role proved crucial to changing her pattern of dependency. The bereavement work and symbolic “letting go” of her grandparents, who had at times fostered her dependency, was part of this developmental work. A had experienced multiple traumas that were clearly linked to her symptoms. It only became possible to address these once she had established trust in the therapist and control over her symptoms and was taking more responsibility for her life. This was difficult, painstaking work using the techniques of somatic trauma therapy as each of the traumatic events was addressed in turn.

Case C illustrates the limitations of psychotherapy with some patients, who have, it must be remembered, sought medical help for their symptoms, not psychotherapy. Therapy requires an acceptance on the part of the patient of a possible link between symptoms and his or her emotional world and interpersonal patterns and a willingness to actively address the factors identified. In this case, it was not possible to arrive at a clear formulation. Although it might be speculated that C. derived secondary gain from her seizures, which necessitated a close dependent relationship with her husband, both seemed happy with this arrangement and had no wish to change it. Clinical experience suggests that patients whose symptoms play a key part in maintaining merged, codependent relationships are unlikely to make progress. In addition, for those patients like C. who receive disability benefits, particularly where their partner is their paid caregiver, symptom cessation has financial implications that may discourage engagement with therapy. Nonetheless, the reinforcement of the psychogenic nature of her symptoms may be advantageous in terms of reducing health care usage and minimizing future medical interventions.

In other cases, the etiologic factors may seem clearer to both patient and therapist, but the patient may choose to live with the seizures rather than make changes in his or her life or revisit the traumatic events he or she has so determinedly put behind him or her. In this case, therapy can nevertheless play a beneficial role in helping the patient to understand the origins of his or her seizures, withdraw from antiepileptic medication, manage the seizures better, and reduce health anxiety and health care seeking. This in itself may help to reduce seizure frequency, as was possibly the case with C.

The most intractable cases are those in which there is an implacable hostility to a psychological diagnosis, a strong somatic preoccupation, and a determined pursuit of alternative opinions to try to establish a medical cause for the symptoms. There is then no therapeutic alliance or genuine engagement with therapy, and little progress is generally made. It can also be difficult to make progress with the outpatient treatment approach described here in patients in whom NES are only one manifestation of a complex spectrum of (medically explained or unexplained) physical symptoms. In such cases, the patient’s life is often a constant round of medical appointments, and it is difficult to maintain a psychological focus or establish regular attendance for therapy. Therapy is also difficult when the psychological problems are very severe and the current environment is abusive or chaotic. In such cases, longer-term therapy, residential treatment, or psychiatric treatment may be required.

Conclusions

This augmented model of psychodynamic interpersonal therapy offers a structured yet flexible approach to working with NES that can be tailored to the differing needs of individual patients. The strengths of this approach include that it explicitly addresses doubts about the diagnosis and therapeutic approach, focuses on the patient’s
presenting symptoms from the outset, and allows the therapist to approach the problem in a transparent, tentative way, which makes the therapy more acceptable to somatizing patients.

Although it is an effective therapy for many people, there are some patients whom this brief outpatient psychological treatment would not help. This is particularly the case when patients reject the idea of a psychological cause completely or are unwilling to work at a psychological level, where the family finances are dependent on continuing illness, and where there are multiple physical symptoms under medical investigation, very severe psychological issues, continuing abuse, or a chaotic current environment (e.g., homelessness). Alternative treatment approaches need to be developed for these patients. The hypothesized mechanisms for change are the identification and alteration of problematic interpersonal patterns and the processing of repressed or unrecognized emotions. Research is needed to explore the interpersonal and emotional processing patterns of patients with NES and whether therapy-associated changes in these are linked to changes in symptoms.

References


