

Malingering and factitious disorder

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ABSTRACT

Although exaggeration or amplification of symptoms is common in all illness, deliberate deception is rare. In settings associated with litigation/disability evaluation, the rate of malingering may be as high as 30%, but its frequency in clinical practice is not known. We describe the main characteristics of deliberate deception (factitious disorders and malingering) and ways that neurologists might detect symptom exaggeration. The key to establishing that the extent or severity of reported symptoms does not truly represent their severity is to elicit inconsistencies in different domains, but it is not possible to determine whether the reports are intentionally inaccurate. Neurological disorders where difficulty in determining the degree of willed exaggeration is most likely include functional weakness and movement disorders, post-concussional syndrome (or mild traumatic brain injury), psychogenic non-epileptic attacks and complex regional pain syndrome type 1 (especially when there is an associated functional movement disorder). Symptom amplification or even fabrication are more likely if the patient might gain benefit of some sort, not necessarily financial. Techniques to detect deception in medicolegal settings include covert surveillance and review of social media accounts. We also briefly describe specialised psychological tests designed to elicit effort from the patient.

The thin line which divides genuine functional nerve disease and shamming is exceedingly difficult to define (Collie 1917, p 375).¹

INTRODUCTION

Most neurologists are aware that approximately one-third of outpatients have symptoms that cannot be explained on the basis of a recognised ‘organic’ disease.² These patients with ‘functional’ disorders have become the focus of considerable research among both neurologists and psychiatrists during the last 20 years,³ and there is now a patient information website (www.neurosymbols.org) as well as a patient support group (fndhope.org).

The Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) psychiatric glossary has assigned a new diagnostic label of functional neurological symptom disorder (FNSD)⁴ to replace the outmoded term conversion hysteria (see [box 1](#)).

But how can neurologists know that patients are not deliberately misreporting their experiences and abilities? There are two medical terms: factitious disorder and malingering.

- ▶ *Factitious disorder* refers to the situation where the motivation (gain) is considered internal, responding to psychological drives such as the need for attention or to reduce loneliness.
- ▶ *Malingering* is not a medical term and is not listed as a diagnosis in DSM-5. In malingering, the motivation (gain) is external such as receiving money.

These distinctions are not always easy to establish,⁵ overlap in many people and may both be present. In a civilian practice, it might seem that malingering is more likely when the patient is involved in a medicolegal process, even if the doctor is not seeing the patient in that context, whereas most other cases are likely to be factitious disorder. However, given the availability of resources to people who are disabled, even this distinction is probably false.

In this paper, we will consider the nature of the history and observations made in the diagnostic process, highlighting that:

- ▶ Any individual’s report on the nature and severity of their experiences.
 - Always shows some variation in experience.
 - Generally overestimates the nature and severity of the losses or changes experienced *as judged against*.
 - Externally observed behaviours and/or.
 - Professional expectations on the basis of known disease.
- ▶ The *processes* underlying these variations and differences are not known but are inevitably ‘psychological’.



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Box 1 Diagnostic and Statistical Manual of Mental Disorders, fifth edition definition of functional neurological symptom disorder

- A. One or more symptoms of altered voluntary motor or sensory function.
- B. Clinical findings provide evidence of incompatibility between the symptom and recognised neurological or medical conditions.
- C. The symptom or deficit is not better explained by another medical or mental disorder.
- D. The symptom or deficit causes clinically significant distress or impairment in social, occupational or other important areas of functioning or warrants medical evaluation.

- In some way cognitive and/or emotional and/or perceptual.
- ▶ The *primary cause(s)* of patients' false accounts are not known but probably involve.
 - Response to internal or external stressors and/or.
 - Gain of some sort for the patient:
 - Psychological and/or.
 - Access to a resource.
- ▶ Neurologists can
 - Detect inconsistencies, both their nature and extent.
 - Give a non-expert opinion in some cases, possibly, on: sdfsdf
 - Cause.
 - Gains.
- ▶ Healthcare professionals are not competent or trained to determine:
 - The extent of the patient's conscious awareness of the inconsistencies.
 - The extent of any conscious intent to deceive others.
 - The nature of any intention to deceive.
- ▶ The role and power of forensic investigations lies in
 - Demonstrating that inconsistencies.
 - Are greater or more frequent than is otherwise known.
 - Depend on specific contexts, such as seeing a doctor.
- ▶ We should put aside the simple diagnostic labels used (eg, in the DSM) as their validity is, at best, unproven.

We will also define factitious disorder and malingering and consider why deception is neglected in medicine. We will then use anonymised clinical vignettes to illustrate the complexities in this field and the difficulties in differentiating between functional disorders and symptom exaggeration.

Factitious disorders: epidemiology and clinical features

Approximately 1% of referrals to a psychiatric liaison service in a general hospital have factitious disorder.⁵ The clinical features remain diverse, but most patients with factitious disorders are young women with relatively stable social networks.⁶ Evidence of fabrication

Box 2 Adapted and modified from Feldman and Eisendrath p 75,⁵²

Clinical characteristics to alert a clinician to a diagnosis of factitious disorder

- ▶ The patient has sought treatment at numerous different hospitals/clinics.
- ▶ The patient is an inconsistent, selective or misleading informant; he or she resists allowing the treatment team access to outside sources of information.
- ▶ The course of the illness is atypical and does not follow the natural history of the presumed disease, for example, a wound infection that does not respond to appropriate antibiotics (self-induced skin lesions often fall into this category, when 'atypical' organisms in the wound may alert the physician).
- ▶ Some findings are discovered to have been self-induced or at least worsened through self-manipulation.
- ▶ Physical evidence of a factitious cause may be discovered during the course of treatment, for example, a concealed catheter, a ligature applied to a limb to induce oedema.
- ▶ The patient predicts deteriorations, or there are exacerbations shortly before discharge is to occur.
- ▶ The patient is non-compliant with diagnostic/treatment recommendations and/or is disruptive on the unit.
- ▶ There is evidence from laboratory or other tests that disputes information provided by the patient.
- ▶ The patient has a history of working in the field of healthcare.
- ▶ The patient engages in gratuitous, self-aggrandising lying.

can be derived from multiple sources, for example, inexplicable laboratory results, an inconsistent or implausible history, admission of an induced illness (rare), scrutiny of outside records, observed tampering with syringes, etc, and finding hidden medications. Box 2 shows some potential indicators.

Most patients enact their deceptions in general hospitals, especially in emergency departments. In a large case series, three-quarters were women, of whom two-thirds had an affiliation with health-related professions.⁶ In this study, the initial presentation of factitious disorders was typically before the age of 30 years, and there is often evidence of simulation in childhood and adolescence. Close enquiry and examination of medical records often reveal an unexpectedly large number of childhood illnesses and operations and high rates of substance abuse, mood disorder and personality disorder.⁵

It is always a good idea to set aside time to create a chronology from a longitudinal health record (see table 1). There is increasing evidence to suggest that a high proportion of patients with factitious disorders

Table 1 Chronology of 22-year-old composite female patient with factitious disorder (data anonymised for patient confidentiality); adapted from Bass and Halligan⁵

Date	Attendance or referral	Symptoms/precipitants	Tests and investigations	Outcome/plan	Key events
1996 (age 12)	Hospital A admission	<i>Right flank pain</i>	Laparoscopy—normal	? Non-specific abdominal pain	Death of father
1997 (age 13)	Hospital A admission	<i>Overdose of analgesics</i>		Referred to social worker; patient stealing money from mother	Arguments with mother
2000 (age 16)	Hospital B admission	<i>Inhaling smoke from fire after fire setting</i>	Normal blood tests	Self-discharged	Set fire to house; pregnant
2001 (age 17)	Neurology outpatients (B)	<i>Episodes of loss of consciousness and muscle twitching</i>	EEG and CT scan of head normal Blood tests normal	Diagnosed with 'pseudo seizures' Reassured no organic cause.	
2001	Emergency admission general surgery (A)	<i>Right-sided abdominal pain</i>	Normal X-ray	Admitted for observation—self-discharged against medical advice	
October 2002 (age 18)	Emergency admission (A)	<i>Overdose of paracetamol in context of excess alcohol</i>	Noted abscess on right breast	Worried about scarring on right breast. Dermatologist considered possibility of artefactual skin disorder	Grandfather ill
2003 (age 19)	ENT outpatient clinic (Hospital C)	<i>Episodes of haemoptysis</i>	Direct laryngoscopy normal	Followed up in psychiatric outpatients; ? personality disorder	
2003 (age 19)	General medicine outpatient clinic (B) Followed by admission	<i>Unexplained septicaemia</i>	Isolated blood culture of saprophytic organisms not usually associated with the cause of sepsis in the immunocompetent patient	<i>'Given these findings we feel that there has been deliberate introduction into the body of material from an environmental source'</i>	Boyfriend of 2 years has left her
2004 (age 20)	Gynaecology outpatient clinic (B)	<i>'Told me she had been sterilised'</i>	Fallopian tubes patent	<i>'When I obtained her notes and showed her this she decided to self-discharge'</i>	
2005 (age 21)	Neurology outpatient clinic (second opinion) Hospital C	Recurrent blackouts and odd movements since age 17	All investigations normal (Video telemetry)	Diagnosis of psychogenic non-epileptic seizures	
2006 (age 21)	Psychiatric outpatient clinic	Denies that emotional problems are related to emotional problems. Attends clinic with crutches.	Cognitive behavioural therapy not helping	Demands to be kept on Tegretol, despite advice to taper drug	Drinking a bottle of vodka everyday
2006 (age 22)	Emergency admission orthopaedics	Pain in right forearm after repeatedly punching wall	Significant soft tissue injury with swelling but no fracture	Currently inpatient on local psychiatric ward. Follow-up by mental health team	
2006 (age 22)	Admission orthopaedics (Hospital D)	<i>Infection right wrist. Demanding Oramorph</i>	No positive cultures. <i>'Birefringent particles found consistent with foreign material in a distribution incompatible with wound care procedures'</i>	Planned supportive confrontation. Patient self-discharged. General practitioner and psychiatry team informed	
2007	Paediatric outpatient clinic (Hospital B)	<i>Worried about 2-year-old son with 12-month history of 'shaking episodes'</i>	Investigations unable to detect any relevant organic cause	Patient requesting disability living allowance for son; asking how to hire a wheel chair for herself	Social services convened case conference at general practice surgery

Hospitals A, B, C and D represent four different hospitals. This chronology demonstrates that (1) Somatoform and factitious disorders can co-exist in the same patient; (2) behaviour suggests a severe personality disturbance and substance misuse and (3) intergenerational transmission of abnormal illness behaviour to child may occur (2007 entry).

have so-called borderline personality disorder.⁷ Recent case reports of suicide suggest that deceptive behaviour does not preclude the presence of serious psychopathology.⁸

One-third of the perpetrators of medical child abuse (Munchausen by proxy) have factitious disorder themselves,⁹ which suggests that factitious behaviour can be 'communicated' from one generation to another. For example, a high proportion of mothers who fabricate/induce illness in their children (Munchausen by

proxy) have psychogenic non-epileptic seizures.¹⁰ These mothers/perpetrators may go on to fabricate or induce similar symptoms in their children and present them to doctors with anoxic episodes, 'fits', etc.¹¹ This is an example of intergenerational transmission of abnormal illness behaviour, and neurologists should be alert to it in women with psychogenic non-epileptic seizures who have children, especially as seizures have been reported to be the most common presentations of fabricated and induced illness in children.¹²

Box 3 Constructive confrontation: preparation and process (for non-psychiatrists)

- ▶ Collect firm evidence of fabrication, for example, catheter, syringe, ligature
- ▶ Discuss with psychiatrist (or member of hospital legal team if no psychiatrist available).
- ▶ Arrange meeting to collate the facts, devise strategy and discuss with primary care doctor.
- ▶ Confrontation with the patient should be non-judgemental and non-punitive, and include:
 - Proposal of ongoing support and follow up.
- ▶ Discuss the outcome of the confrontation with the primary care doctor.
- ▶ If the patient is a healthcare worker the doctor should discuss with a member of his/her defence organisation.
- ▶ Document a full record of the meeting and its outcome in the patient record.

Management

The management of simulated disorders can be divided into two phases: the acute management in the hospital, which could be an emergency room or an inpatient ward, and the chronic process of engaging the patient in outpatient management with some form of psychotherapy.¹³ Management in both phases must focus on negotiating the diagnosis with the patient and then engaging the patient in treatment.

The initial diagnosis of factitious disorder (in hospital) is nearly always made by a non-psychiatrist, who may wish to involve a psychiatric colleague in a supportive confrontation of the patient. This process requires careful preparation (see [box 3](#))

There is no robust research evidence to support the effectiveness of any management strategy for factitious illness.¹⁴ Despite this, we recommend supportive confrontation, which should always involve at least two members of staff, with an emphasis on the patient being a sick person in need of help. For some patients, a more nuanced approach may be preferred, with non-confrontational approaches. Face saving is a key element, and it is important for the patient to be able to explain their 'recoveries' to themselves and other people, especially family members, without admitting that their original problems were psychiatric. Many examples of these approaches have been described in a fascinating new book,¹⁵ and we describe two vignettes below. Although the patient may not acknowledge the deception, the outcomes should always be documented in the notes.

Case 1: A 50-year-old woman with Crohn's disease was admitted to hospital complaining of watery stools. Physical examination was normal and investigations for specific causes of diarrhoea were all negative. Examination of stool and urine suggested ingestion of phenolphthalein-containing laxative;

evidence of laxative abuse was presented to the patient in a supportive fashion. Despite her persistent denial of laxative administration, no further diarrhoea occurred and 1 year after discharge she remained well.

Case 2: A 21-year-old female healthcare student was admitted to the orthopaedic ward with a septic ankle. Four doctors had independently confirmed that foreign bodies were being inserted into her skin, and there was a long history of medically unexplained symptoms. During a supportive confrontation carried out by a psychiatrist and infectious diseases specialist, she became angry and stormed out of the room, returning to the ward 4 hours later, and then self-discharged, denying any fabrications. Because she was a healthcare student, legal advice was sought and her registering body was contacted, which led to the termination of her studies. One year later, she was admitted to another hospital 200 miles away after inserting foreign bodies into her upper limbs.

Course and prognosis

Recovery from factitious disorder is extremely rare and very few patients agree to comply with treatment. In one series, only one in six patients acknowledged that their illness was self-induced, and a small number agreed to have psychiatric treatment, but the outcomes were not published.⁶ The enormous cost of these patients to the healthcare system has been extensively documented.¹⁶ Recent accounts by patients with factitious disorders suggests that with appropriate help some of these patients can be helped.^{15 17}

Malingering

Conceptual and definitional problems

Psychiatric glossaries have struggled to define malingering, and the shortcomings of the DSM-5 definition have been extensively criticised.¹⁸ Berry and Nelson recommend that the present text be replaced with 'feigned' psychiatric, physical or neuropsychological symptoms and graded into possible, probable or definite categories. The main problem is that DSM-5 presents malingering as a categorical condition, defined as '*the intentional production of false or grossly exaggerated physical or psychological symptoms, motivated by external incentives*'.

Much of the evidence, however, supports the view that it is a dimensional construct. An individual might, for example, be exaggerating genuine difficulties, for example, mild symptoms of multiple sclerosis may become so exaggerated that the patient may become wheelchair users. It is worth noting that malingering can present with various diverse medical and psychiatric disorders: post-traumatic stress disorder is the most commonly malingered psychiatric disorder and has been described as the great malingering challenge of our time.¹⁹

Epidemiology

A frequently cited study found that experienced neuropsychologists estimate the prevalence of malingering in patient referrals from civil (ie, personal injury cases) and criminal legal settings to be 10%–30% in those seeking compensation who report a diverse range of clinical disorders, for example, mild traumatic brain injury, whiplash neck injury and psychogenic non-epileptic seizures.²⁰ The feigning of disabling illness for the purpose of disability compensation may occur in 45%–59% of adult cases, with an estimated cost of US\$20 billion for adult mental disorder claimants.²¹

Why is malingering neglected? Is there a bias against the diagnosis?

Most people are not very good at noticing or detecting deception. Doctors often find it difficult to think about deception, as they may have been taught what William Osler reportedly said: ‘*Listen to the patient: He is telling you the diagnosis*’.²² In patients who are malingering, listening is rarely enough, which is why it is so important to ask the right questions and to have access to longitudinal health records.

As a consequence, clinicians have neglected malingering (and the more common phenomenon of symptom exaggeration) because they have been (understandably) trained to trust what patients tell them. They also assume both that malingering is rare and, at the same time, that there is a clear demarcation between malingering and the (assumed-to-be) unwilling symptoms and behaviours seen in a functional disorder. But, given that deception is common in almost all other social interaction, it is unlikely to be rare in interactions relating to health and illness.

Doctors in these situations are often constrained by the medical model²³ and use concepts borrowed from medical sociology to provide ways of understanding these disorders: key concepts such as abnormal illness behaviour, secondary gain and the sick role are germane, as is the contribution of societal and motivational factors. We shall briefly describe these constructs.

Disability following an accident or adverse life event is a socially acceptable means of entering into the *sick role*. Adoption of the sick role is to behave as if one is chronically damaged or ill and it provides an opportunity to avoid many social obligations in a way that the person cannot be blamed.

The sick role has other advantages too. The sick person may be visited more often, may be able to join social groups and networks such as disease-specific societies and of course may be able to access money or other resources. Following on from this, they may gain social status—for example, be secretary or chairman of a local patient disease-based charity organisation.

The sick role may confer benefits for the individual and lead to *abnormal illness behaviour*.²³ The key question

is does an individual have the capacity to change this behaviour? Clearly, conscious motivations mean that the individual is well aware of the secondary gain and plans to act in a way that ensures such gain. It means that they consciously deliberate on how their illness behaviour will achieve a certain desired result. In the past, and from cultural information, the individual has learnt that illness affords secondary gain. (It is important to note that the use of the term ‘secondary gain’ be limited to a description of the *context within which the assessment is taking place* and not used as a synonym for malingering.)²⁴

Illness behaviour and adoption of the sick role therefore offer a useful way to understand the reporting of chronic symptoms in a subgroup of patients.²⁵ Such people often have a history that promotes adoption of the sick role (see the Assessment section below). The opportunity usually arises in some patients by way of an accident or negative life event, and recent empirical evidence supports the presence of ‘escape from stressors’ life events before symptom onset in conversion disorder.²⁶ Neurologists should always enquire after these. The subsequent *physical* complaints (chronic pain/paralysis/weakness/dystonia) become a more socially acceptable form of disability than psychological disorder (which is stigmatised) or failure to cope with personal difficulties, such as an unwanted divorce (which is blameworthy).

Aetiological theories

Some authors conceptualise malingering as a form of ‘other- deception,’ with the intention to mislead others.²⁷ By contrast, medically unexplained symptoms contain an element of self-deception: the patient convinces himself that he suffers from pain, fatigue, memory problems, etc, because he/she has misinterpreted the symptom experience. Clinicians have long noted that ‘other- deception’ may develop into self-deception, particularly when a person is involved in a lawsuit and begins to feign symptoms intentionally but gradually, and perhaps unconsciously, assumes a worse sick role as the authenticity of the complaints is repeatedly questioned.²⁸

Symptom exaggeration may also have unexpected enduring effects. In a recent study, normal people were asked to exaggerate symptoms. After the experiment was over, they reported that they had given up exaggerating.²⁹ Nonetheless, these subjects continued to report high scores on symptom inventories, suggesting that exaggeration of symptoms has residual effects that are resistant to corrective feedback. These findings support the view that intentional symptom exaggeration may, over time, develop into a disease conviction that is typical for dissociative and somatoform conditions.³⁰

Assessment

Key components of the assessment/history-taking assessment

Assessment is a multifaceted process that requires the collection of information from several discrete sources,

including: (1) review of medical records; (2) history obtained by interviewing; (3) observation of the patient's behaviour during the assessment; (4) consideration of information from collateral sources; (5) formal psychological/neuropsychological testing; (6) symptom validity testing (if available), see below and (7) surveillance video, when available. It is important for neurologists to keep in mind that reported previous diagnoses should not be taken at face value when the current differential diagnosis includes a somatoform/functional neurological disorder, particularly if the list of past medical diagnoses is long.²⁴

After establishing that a patient has a disorder characterised by disproportionate symptoms and disability, it is important for the neurologist to consider why the person is behaving in this way now? This should lead to an enquiry about possible 'escape' factors/life events and secondary gains referred to above. An event with escape potential is one that the patient judges might allow the development of a neurological symptom such as weakness. This symptom may have the potential to reduce the consequences of a stressor such as a bullying line manager/abusive parent. Physical life events are also important, and functional neurological complaints can be precipitated by events such as epidural injections and surgical procedures.³¹

How can the neurologist establish whether a person is consciously maintaining his illness for the sake of secondary gains? There is seldom direct proof, but it is sensible to establish the consistency between the claimed disability and the observable behaviour. If there is evidence of marked inconsistency, for example, the patient complains of not being able to run his business because of severe memory loss and inability to concentrate but is observed to be chairing committee meetings and negotiating with customers on the telephone, he fails effort tests on psychological batteries (see below), he enjoys many different recreational activities, and surveillance shows him doing things he says he can not do, then this suggests that his behaviour is being overtly governed by secondary gains. In legal parlance, his behaviour calls into question his credibility.³²

The concept of tertiary gain is also relevant in this context. Tertiary gain occurs when others stand to gain from the perpetuation of the patient's symptoms. Typical examples include family members who hope to gain financially, physicians who want to recruit patients or avoid complaints and some plaintiff lawyers.³³ An example is the well meaning but solicitous behaviour of a mother whose behaviour serves to reinforce the abnormal illness behaviour of the patient with a functional neurological disorder.

Vignette: The 24-year-old female trainee solicitor had developed mild functional weakness of both legs after a fall at work. She lived with her mother, who drove her to work each day (despite the fact that she could travel by public transport), procured a wheelchair (which

she did not need) and instigated litigation against her employers (which she did not want). The medical management involved helping the mother to desist from these activities.

Asking a patient *specific questions* about what he/she can and cannot do is essential. If a patient says that they cannot use public transport, drive a motor vehicle, or carry anything in their right hand and they are subsequently shown on surveillance to be performing all of these activities, this calls into question their credibility and reliability. Surveillance evidence in personal injury litigation can sometimes provide evidence of fraudulent dishonesty, which suggests that the claimant lacks credibility. However, the neurologist must be careful not to state whether exaggeration is a conscious or unconscious process, as this is often not knowable.

Cognitive testing (effort tests)

Individuals can malingering memory and cognitive difficulties as part of a purported traumatic brain injury/concussion. Testing this relies on what are known as symptom validity tests, which are increasingly used in patients with chronic pain and other disorders such as fibromyalgia and complex regional pain syndrome type 1.

The principle of symptom validity tests is that they typically force the individual to choose from one of two proposed answers, removing the ability to provide vague or erratic answers. Their probabilistic nature means that *random* answering without thinking or trying should produce a score of 50%; thus scores below this—worse than chance—effectively indicate that the individual is intentionally *choosing* to get the answers wrong.

This voluntary endorsement of incorrect answers is taken by some as 'tantamount to confession of malingering',³⁴ but by others it is imply used to help the expert to differentiate between credible and non-credible symptom presentations.³⁰ Professional bodies and guidelines have stressed the importance of symptom validity tests.²⁴

Neuropsychologists usually administer these tests, but neurologists can use 'bedside' tests that are simple and brief to administer. One of these is 'Coin-in-the-hand test' for patients with amnesia.³⁵ The coin is shown in one hand and, after a brief distraction task (counting backwards from 10), later asked which hand it is in. Organic amnesic patients perform this task surprisingly well but malingering patients score at chance (ie, 50%). Malingering may be suggested if the patient performs at around chance level, with the usual caveats that apply to all tests of suspected malingering in neuropsychological functioning (ie tests may increase the likelihood of wilful non-cooperation, but cannot prove it).³⁶

Only about 11% of patients attending neurology clinics with medically unexplained symptoms who are not involved in litigation fail effort tests.³⁷

Whether this is via a conscious or unconscious process, however, is open to debate. There are no studies to date of rates of effort test failure in litigants with conversion symptoms.

Special investigations

Special investigations are another method of detection. Probably, the most widely encountered technique is video surveillance, which is typically undertaken by the insurance companies. Video surveillance usually provides information about the claimant's physical abilities. Marked or unexpected differences between the claimant's observed behaviours and what they claim to be unable to do can raise doubts as to the credibility of their report (see the Vignette sections below). It is important to note that in purely psychiatric claims video surveillance is usually not definitive, unless the patient has made unusually strong claims for example, 'I never go out'.

Common types of clinical presentation to the neurologist (emphasising the porous nature of the relationship between 'functional' and somatoform disorders and symptom exaggeration) are shown in the vignettes below.

Malingered cognitive impairment (post-concussional syndrome)

Alleged brain injury is common in personal injury litigation and 15%–30% of patients with mild traumatic brain injury report continuing non-specific symptoms such as distress, headache and cognitive problems, collectively described as post-concussional syndrome.³⁸

In medicolegal settings, clinical neuropsychologists have been encouraged to assess motivation and effort with use of both separate and embedded effort measures throughout an assessment of a patient with a mild traumatic brain injury. A frequent finding in the scientific literature on symptom validity tests is that patients with mild traumatic brain injury (especially those seeking compensation) do worse on these tests than do those with moderate or severe brain injury.³⁹ Miller concluded in 1961⁴⁰ that many patients' fabricated memory and other cognitive symptoms are in inverse proportion to injury severity and only resolve with receipt of compensation, but more recent studies have not confirmed his findings.⁴¹

Somatoform disorders, chronic pain and chronic regional pain syndrome 1

In medicolegal settings, the proportion of patients with a diagnosis of somatoform, dissociative or pain disorders who show negative response bias is substantial and can amount to at least a third.³⁰

Patients who present with functional weakness can, following evidence from surveillance, have the

diagnosis changed to one of malingering (see the Vignette 1 section).

Vignette 1. Malingered weakness of legs: diagnosed initially with functional neurological symptom disorder

This 28-year-old woman sustained an accident at work when she tripped over a wooden plank. Within days she reported back pain and soon developed weakness of both legs as well as problems passing urine. She became confined to a wheelchair and had an indwelling catheter. Concern about a cauda equina lesion was expressed, but all tests were normal. She began legal proceedings and was seen by a consultant neurologist who diagnosed functional neurological symptom disorder.

Examination of the medical file revealed a long history of multiple, recurrent and chronic musculoskeletal and other non-specific physical symptoms dating from childhood with evidence of persistent very high use of primary care resources (15 visits per year compared with the average of 5) as well as tertiary care services. Her medical notes were contained in four lever-arch files. There was a history of childhood adversity (neglect) and frequent changes of job. She had evidence of a prior somatoform disorder with a dependent personality. In addition to the pseudoneurological symptoms, she reported widespread pains and satisfied criteria for a DSM-5 somatic symptom disorder with persistent pain (a common somatoform disorder with a prevalence of 5%–7%). Her claim for damages was for in excess of £2 million.

Subsequent DVD surveillance was carried out after neurological and psychiatric assessment. She was observed to walk unassisted at a brisk pace in a busy shopping mall, and could cross roads on foot without assistance or aids, as well as walk 500 m on the flat. The diagnosis was revised to malingering and the compensation case settled rapidly.

Learning point: *In some patients, chronic somatoform disorders and factitious disorders can co-occur.*

Functional disorders affecting a sense organ (blindness) can also undergo revision of diagnosis after surveillance.

Vignette 2. Functional blindness

This 30-year-old man suffered a mild head injury when a microwave fell onto his head at work. Although not concussed, he suffered from headaches and blurred vision for 2 weeks before presenting with loss of vision in both eyes. He did not return to work as a painter and decorator. Within 6 months, he had instigated a compensation claim and was registered blind and acquired a white stick when out walking. He was also receiving a range of welfare benefits. All ophthalmic and mental state investigations were normal and he was assigned a diagnosis of functional blindness by both a consultant neurologist and psychiatrist.

Subsequent DVD surveillance revealed that he was able to participate in a half marathon, during which he required no assistance to follow the route and avoided traffic and other obstacles. He was also observed picking up bottles of water and other objects adroitly from the refreshment stations while running without difficulty. The diagnosis was revised to malingering.

Complex regional pain syndrome type 1

Neurologists are often requested to provide an opinion on patients with complex regional pain syndrome, especially if there is an associated movement disorder such as a dystonia.⁴² Complex regional pain syndrome is a controversial disorder, and recent reviews have questioned its validity as a diagnostic entity.⁴³ This disorder, once known as reflex sympathetic dystrophy, is often diagnosed after injury to a limb. It is diagnosed on the basis of non-specific, often subjective criteria, some of which, including skin temperature, weakness and colour differences between limbs, can be produced and maintained by short-term immobilisation and dependency of the limb.⁴⁴ The diagnosis of complex regional pain syndrome type 1 is controversial, and it has been argued that it is powerfully influenced by iatrogenic factors and tertiary gain involving doctors.⁴⁵ In a small proportion of patients, factitious illness is involved.⁴⁶

Vignette 3. Complex regional pain syndrome/dystonia

This 40-year-old woman sustained an injury to her left forearm in a road traffic accident, when her hand hit the dashboard. The pain extended to her elbow and shoulder and within 6 months the hand adopted a 'claw-like' appearance, characteristic of a dystonia. She held her elbow flexed across her chest with her wrist in a Futura splint. Episodes of severe pain were accompanied by panic and hyperventilation, which may have contributed to her 'symptom load' (with carpedal spasm). A pain clinician diagnosed her with complex regional pain syndrome type 1 and referred her for neurological assessment because of the 'dystonia', which had persisted despite a considerable amount of in-patient treatment.

Her history was characterised by recurrent episodes of panic disorder as well as functional symptoms such as recurrent irritable bowel syndrome and temporomandibular joint dysfunction. She was involved in acrimonious dispute with her employers at the time of the accident and had to attend several tribunals that did not go in her favour.

At interview she reported that she could not use her hand at all, and in particular could not use a telephone or use a knife and fork to eat. DVD surveillance revealed a completely different presentation. She was seen using a cell phone with her left hand without difficulty, and in a restaurant she could use a knife and fork as well as open a bottle of wine with her left hand in fluid and

apparently pain-free movements. She was accused of fraudulent dishonesty and the claim was dismissed.

Factitious epilepsy and unresponsiveness

In most patients, psychogenic non-epileptic seizures are an unconscious manifestation of psychosocial distress. However, a subgroup of patients consciously produce symptoms for gain (factitious epilepsy). It is not uncommon for these patients to present repeatedly with status pseudo-epilepticus, which places them at risk of iatrogenic complications and even death.⁴⁷ These patients often have personality disorders, and if not identified promptly can incur extraordinary health-care costs. In a recent case, US\$250 000 was spent, underscoring the importance of early detection.⁴⁸

Management of exaggerated symptoms (symptom validity test failure)

Patients with mild traumatic brain injury are most likely to present with symptom validity failure, exaggeration or malingering or all three, and feedback of test results has been most systematically studied in this group.⁴⁹ There is a feedback model described that involves building of rapport with the patient, exploring of the reasons for poor effort and acknowledging possible task disengagement, establishing the

Key points

- ▶ Careful assessment for evidence of inconsistencies—specifically between reported and observed function (on ward or in outpatient clinic) may suggest symptom exaggeration/amplification; frank malingering is rare.
- ▶ Symptom exaggeration more likely occurs when the patient is involved in litigation/ disability evaluation.
- ▶ Discrepancies/inconsistencies between several domains is key, (again between reported and observed function); these involve not only the clinical examination but also inconsistencies in reports of disability/functioning, for example, e.g. in Department for Work and Pensions records.
- ▶ It is not possible for anyone to state whether symptom exaggeration is a consequence of conscious or unconscious mechanisms.
- ▶ Similarly, it is not possible for anyone to state whether exaggeration occurs with the intent to convince others (of their genuineness) or with the intent to deceive them: this is a matter for the court.
- ▶ There is no sharp demarcation line between somatoform disorder and factitious disorder/ malingering; both may coexist.
- ▶ Confrontation of a patient suspected of symptom exaggeration/amplification should be supportive and never carried out alone, or without detailed recording in the patient file.
- ▶ It is not recommended to write the word 'malingering' in the medical record.

potential reasons for exaggeration and discussing other factors that can underlie symptom persistence. After confrontation, two-thirds of patients from a non-forensic sample produced valid scores on subsequent re-examination, suggesting that this intervention can help.⁵⁰

Prognosis and outcome

In a recent systematic review of the prognosis of functional neurological disorders, the authors concluded that the outcomes were 'generally unfavourable'.⁵¹ Regrettably, there are no systematic follow-up studies of patient outcome following completion of litigation. Many variables affect outcome, including the type of symptoms, comorbidity, age at onset and health-related beliefs. We do not know the prognosis for patients with functional neurological complaints in personal injury litigants, but clinical experience suggests that patients with longstanding disability, even if partly or wholly non-organic, do not always recover after settlement.⁴¹ Many patients have had symptoms for in excess of 4–5 years and have adjusted to a life of disability and invalidism, with their families making adjustments to accommodate them. Alternatively, improvement after settlement can occur for many reasons, including less stress and uncertainty in the litigant's life because they are no longer involved in an adversarial system in which their reputation is under scrutiny and they have to prove their injury.

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