

# When the brain ‘glitches’

## Recognising and managing functional neurological disorder

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Functional neurological disorder is a common, disabling and often misunderstood cause of neurological symptoms that is seen in general practice. Recognising positive clinical signs and providing a clear, empathetic explanation to affected patients are key to management. GPs play a central role in diagnosis, co-ordination and long-term patient support.

Patients presenting with neurological symptoms that do not follow classic disease patterns are common in general practice.<sup>1</sup> These patients may experience weakness, tremor, seizures or sensory symptoms, yet investigations are often normal. For many GPs, this creates uncertainty and therapeutic frustration. Functional neurological disorder (FND) is often a cause of such presentations. This article offers practical guidance on when to consider FND, how to make the diagnosis, how to explain it effectively to patients and how to support patients in ongoing management.

### What is functional neurological disorder?

FND is a condition in which patients experience neurological symptoms because of changes in brain function rather than structural disease. Unlike conditions such as stroke or multiple sclerosis, FND is not characterised by tissue damage or visible lesions on imaging. Instead, the nervous system is functioning abnormally, often in a way that is reversible.<sup>2</sup>

Common symptoms include limb weakness, abnormal movements such as tremor or dystonia, functional seizures (which



### KEY POINTS

- Functional neurological disorder is (FND) a common and disabling condition often seen in primary care.
- Diagnosis of FND should be based on positive clinical signs and features, not made by exclusion.
- A clear and empathetic explanation is central to patient engagement and effective management of FND.
- GPs play a pivotal role in the long-term co-ordination of care for patients with FND, managing comorbidities and providing reassurance.
- Early recognition of FND and clear explanation of the disorder to patients can reduce unnecessary investigations and healthcare use.
- Referral of patients with FND is often appropriate but should be collaborative, ensuring patients feel supported rather than dismissed.

can resemble epileptic seizures but are not caused by abnormal electrical discharges), gait disturbance and sensory symptoms such as numbness or tingling. These symptoms are real and often cause significant distress and disability.<sup>3</sup> A helpful analogy for patients is: ‘Your brain hardware is intact, but the software is glitching’. Framing the condition in this way validates the symptoms and introduces the possibility of improvement.

FND is not rare. It is among the most common diagnoses in neurology outpatient clinics, and functional symptoms are seen in up to one in five presentations in primary care.<sup>1,4</sup>

### When to suspect functional neurological disorder

GPs should consider FND in any patient with neurological symptoms, particularly when symptoms have a sudden onset, appear inconsistent or fluctuate over time.<sup>5</sup> For example, a patient may have a tremor that disappears when distracted, or weakness that improves when the affected limb is used in a different context.

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Common clinical indicators for FND include:

- symptoms that change during the course of the examination
- tremors or spasms that improve with distraction
- positive signs such as Hoover's sign, where apparent weakness improves when the contralateral limb is activated.<sup>6</sup>

It is important to note that FND should not be diagnosed solely on the presence of psychological comorbidities or recent stress. It is a positive diagnosis based on characteristic clinical findings, not a diagnosis of exclusion. Even in patients with confirmed FND, clinicians should remain alert to possible coexisting conditions, including those in a prodromal stage – a patient with early Parkinson's disease may also have a functional tremor, and functional seizures can occur alongside syncope or epilepsy.<sup>7</sup>

### Making the diagnosis

Ideally, FND should be diagnosed by a neurologist with expertise in the relevant area. When a patient presents with new neurological symptoms, the GP's role is to assess for possible differential diagnoses and arrange appropriate referrals, further investigations or specialist input when needed.

The hallmark signs of FND are inconsistency and incongruity.

- **Inconsistency:** symptoms vary depending on context or attention. For example, a tremor may appear during direct observation but vanish when the patient is distracted. Or the patient may have weakness that improves when they perform a simultaneous task with the other limb.
- **Incongruity:** clinical features are absent in comparable neurological conditions or appear to defy the usual rules of anatomy, biology or physics.

Inconsistency remains a key positive sign, but incongruity can be more challenging to assess. Determining whether a symptom is incongruent with neurological disease depends largely on clinical experience and on assumptions about what is anatomically

or physiologically possible – assumptions that may change as understanding of FND continues to evolve.<sup>8</sup> Positive signs of inconsistency are valuable not only for diagnosis but also for treatment. Showing a patient that their leg becomes stronger during a specific manoeuvre can powerfully demonstrate that recovery is possible.

Sometimes additional tests may be appropriate to exclude other conditions or identify comorbidities. In such cases, patients should be informed that the likely diagnosis is FND and that the tests are being performed simply to ensure no other issues are missed, similar to ordering a scan for a patient with migraines who has mild red-flag symptoms.

The use of straightforward, nonjudgemental language is crucial. Terms such as 'psychogenic' or 'pseudoseizures' should be avoided. Instead, the term 'functional neurological disorder' can be used, and is becoming increasingly accepted by both patients and clinicians.<sup>9</sup>

### Explaining the diagnosis

The way a diagnosis of FND is explained can significantly influence a patient's understanding, acceptance and engagement in treatment, and has a major impact on subsequent treatment outcomes.<sup>10</sup> Patients with FND have often encountered dismissal or disbelief from other clinicians, so a sensitive and honest approach is essential.<sup>11</sup>

Explain that FND is common, well recognised and treatable. Use clear metaphors, such as 'a software glitch' or 'the brain not sending or processing signals correctly', to bridge the gap between technical explanation and lay understanding. Emphasise that the symptoms are real and that improvement is possible. Providing written information can help reinforce the discussion. Websites such as [www.neurosymptoms.org](http://www.neurosymptoms.org) or [fndaustralia.com.au](http://fndaustralia.com.au) offer excellent resources for patients.

### Management in general practice

Once the diagnosis is made and explained, management in general practice involves ongoing support, symptom monitoring and

co-ordination of care. The GP's role includes:

- providing reassurance and continuity of care
- managing comorbidities such as anxiety, depression or chronic pain
- supporting functional rehabilitation through physiotherapy or psychology referrals
- acting as a central point for co-ordinating specialist input.

Pharmacological treatment is not effective for FND itself but may be useful in selected cases to manage comorbidities such as mental health disorders or chronic pain.

A stepped-care model is often useful.

- **Step 1:** diagnosis and explanation. For many patients with mild to moderate symptoms, a confident diagnosis with a clear explanation and reassurance may be sufficient.<sup>12</sup> Improvement can begin simply through understanding the condition.

- **Step 2:** brief interventions. If symptoms persist, referral to allied health professionals such as physiotherapists or psychologists is appropriate. Short, structured interventions, including cognitive behavioural therapy, have shown benefit.<sup>13</sup>

- **Step 3:** specialist involvement. Patients with severe, persistent or complex symptoms may require further specialist input, multidisciplinary care or more intensive psychological therapy. Patients with FND often face barriers to accessing support because of limited public services and the cost of private care.<sup>14</sup> GPs can advocate for access to these services and help patients navigate what is often a fragmented health system in Australia.

### The role of the GP

The GP–patient relationship is pivotal in FND care. Patients may face long wait times, unclear care pathways or disbelief from healthcare providers. A proactive, validating GP can make an enormous difference to outcomes.

GPs should be informed of the FND diagnosis by the diagnosing clinician and

**CASE STUDY. A YOUNG WOMAN WITH INTERMITTENT RIGHT-SIDED WEAKNESS****Presentation**

A 32-year-old woman presents to her GP with a three-month history of intermittent right-sided weakness and tremor. She describes her leg as 'giving way' unpredictably, sometimes causing near falls. The tremor worsens when she is anxious but often disappears when she is distracted. She has attended the emergency department twice, where brain imaging and blood tests were reported as normal. She is worried that she may have multiple sclerosis or Parkinson's disease.

**Assessment in general practice**

On examination, the GP notes variable right-sided weakness that improves when the contralateral limb is activated (positive Hoover's sign). The tremor reduces significantly when the patient is engaged in conversation. Reflexes and sensation are intact. The GP acknowledges the patient's concerns, arranges a referral to a neurologist for further assessment and continues to provide supportive care.

**Neurology assessment**

The neurologist confirms the presence of positive clinical signs of functional neurological disorder and excludes possible coexisting neurological conditions. The diagnosis of functional neurological disorder is made, and the neurologist explains this clearly to the patient. The patient is reassured that her symptoms are real and potentially reversible. Written information is provided, and referrals are made to a physiotherapist experienced in functional symptoms and a psychologist for support with anxiety management.

**Ongoing management**

Back in general practice, the patient is reviewed regularly. The GP monitors her progress, addresses comorbid anxiety and provides continuity of care. A collaborative approach involving the neurologist, allied health professionals and the GP helps the patient feel supported and reduces unnecessary presentations to the emergency department. Over the next six months, her symptoms improve significantly and she regains confidence in walking.

should follow up the results of a patient's referral if no outcome has been communicated. It is also important that GPs have access to education and resources to manage FND confidently. This may include continuing professional development opportunities or access to specialist advice. In regional and rural settings, where specialist access is limited, GPs may play a more central role. Telehealth consultations with FND specialists can be an effective way to support both the GP and the patient. A case study highlighting the GP's role in the long-term care of a patient with FND is shown in the Box.

**Conclusion**

FND is a common and disabling condition, and GPs play a pivotal role in its management. The diagnosis should be made by a neurologist based on positive findings. Clear, compassionate explanation and co-ordinated support can significantly improve outcomes. GPs are not merely gatekeepers for referral but are essential to the patient's ongoing care and recovery. **MT**

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**Further reading**

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