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# Fasciculation anxiety syndrome in clinicians: FASICS

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It is the phone call that every neurologist dreads. A colleague, diagnosed with motor neurone disease (MND), looking for a confirmatory opinion. From personal experience over the last 25 years, these calls have become all too regular. My early reactions were fear and apprehension. How could I possibly confirm such a life-changing diagnosis for a friend or fellow clinician and remain positive when we both know that the disease is universally fatal?

In 1970, WB Mathews opined in his medical classic *Practical Neurology*, that delivering a diagnosis of MND while maintaining a healthy level of pragmatism was the true test of a neurologist.<sup>1</sup> According to those who knew Mathews, this approach summed up his wisdom and humanity.<sup>2</sup> So, it was with some macabre relief that I began to recognise a pattern in these MND cases among colleagues and friends. It slowly became apparent that the cases shared a common trait. Not only were they self-diagnosed, but in almost every instance, the diagnosis was just plain wrong.

Life as a physician brings many rewards, particularly in terms of learning about the human existence. And although we are physicians, we simultaneously are human beings, going about our daily routines. While consciously observing the rhythm of our patients' lives, as physicians we are also subject to our own periods of turbulence, be they personal or professional. In this issue of the journal, French neurologist Dr Laurent Vercueil describes such a period—when he experienced severe fasciculations that developed in the context of work-related stresses.<sup>3</sup> His heavy workload, which included his clinical activities, outpatient reviews and reporting of investigations, coincided with the preparation of a case presentation where the diagnosis would become apparent

only through postmortem assessment. In that environment, his fasciculations progressed to the point where he developed insomnia. Convinced that he had developed MND, he did not seek help, but instead withdrew.

Eventually, following discussions with a colleague, Dr Vercueil addressed his sleep problems. With time, his symptoms resolved completely. On subsequently reading the literature, Dr Vercueil realised that his clinical presentation was consistent with fasciculation anxiety syndrome in clinicians (FASICS).<sup>4</sup> We initially conceived this condition after a significant number of self-referrals from medical colleagues, some very close friends, who had developed fasciculations.

My initial phone calls and conversations with these colleagues worried about their fasciculations, led me to believe that perhaps they had indeed developed MND. At this juncture, the role of the clinical neurological examination is never more critical. Demonstrating normal power in a physician worried about MND is always reassuring.<sup>5</sup> Separately, time is helpful—even just the quiet time spent undertaking nerve conduction studies and electromyography (EMG). It is an advantage to be able to perform these neurophysiological investigations personally, as an extension of the neurological examination. In the case of a diagnosis of FASICS, the morphology of a normal 'benign' fasciculation is easily delineated from the more complex or 'malignant' fasciculations observed in amyotrophic lateral sclerosis.<sup>4</sup> Simply showing the normal fasciculation waveforms to the physician patient can help to reassure. In addition, the absence of denervation, with the identification of normal motor units on EMG, further assists in firming a diagnosis of FASICS. In contrast to the difficulties associated with conveying an MND diagnosis, as



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highlighted by Mathews, the ability to exclude this condition, especially in a friend or physician colleague, is a welcome relief for all involved.

The task of excluding a diagnosis of MND in a physician is often not complete on the first review. Some colleagues need longer periods of observation, and sometimes a repeat EMG. With time, most develop insight into the connections between their stresses and their symptoms.

Following the publication of our original FASICS series, I received communication from clinicians worldwide, describing their own experiences. Even in retrospect, several were pleased to read the FASICS series, some still concerned that they were on the path to MND.

So what does it all mean? Fasciculations are common—we all experience muscle twitching. Fasciculations can be easy to provoke, and sleep deprivation, worry and introspection all serve to heighten this experience. As a postdoctoral researcher, I was interested in understanding the basis of fasciculations, to understand the process of nerve hyperexcitability. Having hyperventilated to induce fasciculations, I can confirm that this precipitant, along with anything that increases central excitability, will promote an environment where fasciculations become more apparent.<sup>6 7</sup>

Physiology aside, like all clinicians, we are programmed to observe patterns. When we develop fasciculations, particularly during periods of concern and self-doubt, we may jump to the mistaken conclusion that we have developed MND. It is easy for any of us to succumb to such thoughts. Reaching out to colleagues, and if necessary undertaking clinical assessment, may help us to traverse this mortal coil, to come through periods of uncertainty, wiser and in good health.

After all, we are only human.

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