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## Secondary Social Anxiety Disorder in Huntington's Disease

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**H**untington's disease (HD) is an inherited autosomal dominant neurodegenerative disorder caused by a polymorphic CAG (cytosine-adenine-guanine) trinucleotide repeat expansion in the exon-1 of the gene encoding for huntingtin protein.<sup>1</sup> HD prevalence varies throughout the world, with an average prevalence of 9.71:100,000 in populations of European ancestry.<sup>2</sup> HD is a progressive disorder of motor, cognitive, and behavioral disturbances.<sup>3</sup> Psychiatric symptoms are common in HD patients, with an incidence as high as 73%–98% having been described.<sup>4,5</sup> These psychiatric symptoms often precede motor symptoms and include depressed mood, anxiety, apathy, suicidality, irritability, and psychosis.<sup>4,5</sup> Prevalence rates of anxiety in HD vary widely between 13% and 71%.<sup>6</sup> The most frequent anxiety disorders in HD patients are generalized anxiety disorder and panic disorder.<sup>6</sup> We report a case of social anxiety disorder in a man recently diagnosed with HD.

### Case Report

This is the case of a 33-year-old male patient with no previous history of psychiatric illness. His father had a genetically confirmed HD diagnosis. The patient's mother noticed discrete, involuntary choreiform movements at 28 years of age, along with suppressible vocal and motor tics, which were not bothersome. These signs were documented by a neurologist.

One year later, the patient began to manifest anxiety, with fear toward social activities, group conversations, shopping, and in anticipation of any possible social interactions. He described dread of being criticized, overrating others' awareness of his involuntary movements. He feared looking ridiculous or feeling humiliated, which led him to avoid situations of possible scrutiny, with social withdrawal and disturbed daily functioning. He started consuming alcohol excessively to cope with these symptoms.

HD diagnosis was genetically confirmed at the age of 32 years. A couple of months after the diagnosis, the patient initiated psychiatric follow-up, and a diagnosis of social anxiety disorder (*DSM-5* criteria)<sup>7</sup> was established. He was started on sertraline, which was progressively titrated to 150 mg/d. After 1.5 months of follow-up, progressive and substantial improvement of social anxiety was achieved, with concomitant alcohol abstinence and functional recovery, which has been maintained to date (almost 2 years of follow-up; treatment with sertraline 150 mg/d).

### Discussion

In this case, a patient with no previous psychiatric disorder developed social anxiety after subtle motor manifestations of HD, fulfilling *DSM-5* criteria for social anxiety disorder.<sup>7</sup> Even considering that anxiety was somehow related to motor symptoms, it was the fear of appearing ridiculous that underlined the patient's anxiety. He feared the scrutiny and a possible negative evaluation from others. Moreover, the patient acknowledged the motor symptoms were extremely rare and subtle. Excessive alcohol consumption was not surprising since substance abuse commonly develops in patients coping with social anxiety disorder.<sup>8</sup>

The close temporal relation between manifest HD symptoms and onset of social anxiety disorder suggests that both are related. We argue that the social anxiety in our patient was secondary to the HD, more specifically to the start of HD motor symptoms. Stuttering<sup>9</sup> and several movement disorders (essential tremor,<sup>9,10</sup> Parkinson's disease,<sup>11</sup> hemifacial spasm,<sup>9</sup> spasmodic torticollis,<sup>12</sup> and cervical dystonia<sup>9</sup>) have been associated with secondary social anxiety.<sup>9</sup> In secondary social anxiety disorder, the primary disease manifestations (eg, motor symptoms in HD) may compromise social interaction due to fear of being negatively evaluated or humiliated by others.<sup>9,11</sup> The patient's age when social anxiety started also points to a secondary social anxiety disorder, since most "primary" cases have an early onset beginning in childhood or adolescence.<sup>13</sup>

There is a lack of studies concerning social anxiety disorder in HD, limited to a few small sample studies.<sup>14–16</sup> In these studies, it is not possible to conclude if social anxiety was secondary to HD.

No descriptive case reports of social anxiety disorder in HD, to the best of our knowledge, have been previously published. This case adds to the existing literature, illustrating the occurrence of diverse psychiatric symptoms and disorders in HD. Clinicians should be alert for social anxiety disorder manifestations in HD.

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