

Brief Report

REVERSAL OF TRICHOTILLOMANIA WITH ARIPIPRAZOLE

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Trichotillomania (TTM) is a common psychiatric illness with marked chronicity and comorbidity that significantly impacts on psychosocial functioning and physical features of the sufferer. Treatment studies, to date, using behavioral and pharmacological interventions alone or simultaneously, are equivocal with few showing a sustained cessation of hair-plucking. In this report of a single patient with treatment resistant TTM, the sole use of the atypical neuroleptic Aripiprazole resulted in a cessation of hair-plucking maintained, at the time of reporting, for a period of 24 months. This finding, a first with Aripiprazole, warrants further investigation of this drug in the treatment of TTM. Depression and Anxiety 25:E37–E40, 2008. © 2008 Wiley-Liss, Inc.

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INTRODUCTION

Trichotillomania (TTM) is an impulse control disorder characterized by a recurrent and persistent urge to pluck one's hair resulting in noticeable hair loss. The urge is preceded by tension with pleasure, gratification, and relief experienced while plucking. The illness, for most, causes clinically significant distress and/or impairment (DSM-IV-TRTM 2000). Sites of plucking include the scalp, eyelashes, eyebrows, and pubic area with plucking occurring from two sites as the norm. Plucking occurs in secrecy, is often denied, and the alopecia invariably concealed. TTM affects 3.4% of women and 1.5% of men, pubescent onset is the norm, and the course often unremitting [Christenson et al., 1991a,c].

Psychiatric comorbidity is common with 82% having one or more lifetime psychiatric diagnoses, 37–65% have major depression, and 55–60% have an anxiety disorder [Christenson, 1995; Cohen et al., 1995; Hand et al., 1996; Mansueto, 1990; Schlosser et al., 1994]. Psychosocial morbidity also co-occurs in those with TTM, many feel alone, unattractive, and experience lowered self-esteem [Casati et al., 2000; Diefenbach et al., 2005; Soriano et al., 1996; Stemberger et al., 2000]. It was reported recently that 40% avoid social events, 36% avoid group activities, 20% avoid taking vacations, 23% report daily interference with employment, 15%

declined job advancements, and 4% resigned from their employment specifically because of their TTM [Woods et al., 2006].

Treatment studies of TTM have focused on behavioral therapy that emphasizes on habit reversal and pharmacotherapy, which has been influenced by TTM being conceptualized as a member of the obsessive-compulsive spectrum disorders (OCSs). The OCSs have shared features with obsessive-compulsive disorder (OCD) that include ritualistic features, age of onset, clinical course, comorbidity, and, from a neurobiological perspective, a dysregulation of cortical and subcortical circuits [Hollander and Benzaquen, 1997; Hollander et al., 2005; Stanley and Cohen, 1999].

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Behavioral therapy has been shown, in a limited number of studies, to reduce or stop hair-plucking in the short term with only moderate treatment gains in the long term [Keijsers et al., 2006; Mansueto et al., 1997; Mouton and Stanley, 1996; Rothbaum, 1992].

The results of pharmacological treatment studies of TTM—single case, open-label, and placebo-controlled studies, using either the tricyclic antidepressant Clomipramine that inhibits uptake of serotonin and noradrenaline, the selective serotonin reuptake inhibitors and Venlafaxine (serotonin noradrenaline reuptake inhibitor)—have been equivocal in outcome and conducted over short time periods [Bhatia and Sapra, 2004; Christenson et al., 1991b; Figgitt and McClellan, 2000; Gadde et al., 2007; Ninan et al., 1998, 2000; Pollard et al., 1991; Ravindran et al., 1999; Stanley et al., 1991, 1997; Stein et al., 1997; Streichenwein and Thornby, 1995; Swedo et al., 1989; Takei, 2000; Winchel et al., 1992]. Augmentation, however, with the typical and atypical neuroleptics has been shown to enhance treatment outcome [Ashton, 2001; Epperson et al., 1999; Gabriel, 2001; Lorenzo and Koo, 2004; Pathak et al., 2004; Potenza et al., 1998; Senturk and Tanriverdi, 2002; Srivastava et al., 2005; Stein and Hollander, 1992]. Moreover, in limited studies, the atypical neuroleptics alone can lead to a cessation of hair-plucking implying that the atypical neuroleptics may be an effective monotherapy in the treatment of TTM [Gupta and Gupta, 2000; Khouzam et al., 2002; Stewart and Nejtek, 2003].

CASE HISTORY

Mary presented at the age of 32 years with a, then, 19-year history of TTM. Her plucking was preceded by a specific sensation and was not preceded by an obsessional thought, impulse, or image. She reported relief and gratification while plucking. She was aware of her plucking but unable to resist the urge. At onset, her TTM was restricted to the scalp, plucking later occurred from her eyebrows, eyelashes, and pubic area. Mary was ridiculed because of her alopecia during adolescence at which time her hair was cut short in the hope of a cure, an act that exacerbated her embarrassment. She later grew her hair long and styled to camouflage her alopecia, a style worn until recently. Mary plucked up to 200 hairs per day; the plucking had a diurnal course, most occurring in the morning and evening. Trichophagia was denied, occasionally, the plucked hairs were placed between her lips before disposal.

A scalp examination showed significant alopecia 15 mm in circumference interspersed with stunted hair growth, which was curly and gray/white in colour, in contrast to her natural straight black hair. The alopecia caused her to avoid leaving home on windy days, swimming, going to the hairdresser's, and blow drying her hair while others were present. At the initial

presentation, Mary was married with one child, had a second during treatment, then later divorced, and chose to remain single due to her TTM. Comorbidity included major depression and mild/moderate OCD manifested in checking and organizing rituals with a Yale-Brown Obsessive Compulsive Scale score of 16.

Mary's treatment history included hypnosis and behavioral therapy that emphasized response prevention, treatments that were without any effect. Pharmacotherapy included the use of tricyclic antidepressants, Amitriptyline and Clomipramine, the selective serotonin reuptake inhibitors, Fluvoxamine, Fluoxetine, Paroxetine, Citalopram, and Sertraline, the serotonin noradrenaline reuptake inhibitor, Venlafaxine, and the noradrenaline reuptake inhibitor Mirtazapine. These pharmacological interventions were effective on her depression but not on her hair-plucking and TTM morbidity. Mary was also treated with a course of Escitalopram augmented with the atypical neuroleptic Quetiapine, a drug combination discontinued due to sedation.

Before commencing augmentation with Aripiprazole, Mary had been treated with Reboxetine (16 mg) for 3 months that saw her depression remit but not her TTM. On augmentation with Aripiprazole (15 mg), a marked reduction in hair-plucking occurred by day 10 and cessation of hair-plucking at day 21. This outcome has been maintained for 24 months in the absence of Reboxetine, which was discontinued after 8 months of the combined therapy as Mary considered herself no longer depressed. Aripiprazole, thus, sustained the cessation of hair-plucking in the absence of Reboxetine, a result that saw a marked improvement in Mary's self-esteem and a reduction in avoidance behaviours specific to her TTM. She is now in an intimate relationship. There was, however, no significant hair regrowth following cessation of plucking. She recently underwent a hair transplant on her crown. Her depression did reoccur but not her TTM. She is presently taking Sertraline (150 mg).

DISCUSSION

To our knowledge, this is the first case report to show that the atypical neuroleptic Aripiprazole, which has agonist effects at the presynaptic D₂ autoreceptors and antagonist effects at the postsynaptic D₂ receptors as well as antagonist effects at the 5-hydroxytryptamine_{1A} (5-HT_{1A}) receptor and partial agonist effects at the 5-HT_{1A} receptor, may be associated with rapid and sustained cessation of hair-plucking [Rivas-Vazquez, 2003]. This outcome saw a significant reduction in TTM associated psychosocial morbidity. Aripiprazole, however, was without effect on comorbid depression. Our clinical observations here are consistent with similar preliminary findings elsewhere [Gupta and Gupta, 2000; Khouzam et al., 2002; Stewart and Nejtek, 2003] that the atypical neuroleptics alone might lead to a cessation of hair-plucking in selective patients.

The encouraging result in this individual justifies the initiation of a large open-label study in the use of Aripiprazole in the treatment of TTM.

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