Naltrexone for the Treatment of Trichotillomania: A Case Report

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Editors:
Despite the continued DSM-IV classification of trichotillomania as an impulse control disorder, its nosologic status remains controversial. Like obsessive-compulsive disorder (OCD), serotonin selective reuptake inhibiting antidepressants (SSRIs) have shown some efficacy in treating trichotillomania, [1-3] but the self-injurious nature of the core behavior and the pleasure that patients report to be associated with the behavior [4] serve to distinguish it from typical OCD.

The tension-relieving and pleasurable attributes of the self-injurious hair-pulling behavior are features that trichotillomania shares with the self-injurious behavior described in many patients diagnosed with borderline personality disorder. [5] The reported lack of pain after self-injury in both conditions suggests involvement of the endogenous opiate system. We report here the case of a patient diagnosed with trichotillomania and comorbid OCD in which naltrexone significantly augmented an initial partial response to fluoxetine.

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Case Report
A 45-year-old black woman presented to the outpatient clinic at the University of Pennsylvania reporting a 33-year history of compulsive hair pulling, regularly twice a day and restricted to the scalp, eyebrows, and eyelashes. She denied any other self-injurious behavior. Other ritualistic behavior included excessive cleaning, rereading, and rewriting of sufficient severity and disability to qualify her for a comorbid diagnosis of OCD. The patient's physical appearance was notable for total alopecia, disguised by a wig, and the lack of eyebrows and eyelashes, disguised by make-up.

Fluoxetine was administered, open label, in a daily dose of 60 mg for 12 weeks together with once-weekly psychotherapy sessions that focused on interpersonal issues. On the 13th week, naltrexone was added in a daily dose of 50 mg and was continued for an additional 8 weeks.

The patient's clinical status and its change with treatment were assessed both in terms of the patient's OCD and in terms of her hair pulling. The Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) [6,7] was used to measure the severity of overall obsessive-compulsive behavior. Clinical components of the hair-pulling behavior were rated on three 6-point global severity scales (0, not present, to 5, very severe): (1) global compulsivity rated the strength of the urge to hair pull; (2) global impulsivity rated the degree of lack of control over the urge to hair pull; and (3) global pleasure rated the intensity of the enjoyment derived from hair pulling.

(Table 1) summarizes the clinical measures during the 16-week course of treatment. As can be seen, fluoxetine monotherapy resulted in a moderate improvement in the patient's compulsivity and impulsivity global scores. A decrease of 8 points in the YBOCS was attained with fluoxetine-naltrexone combination therapy. The addition of naltrexone to the fluoxetine also resulted in improvement...
in the global trichotillomania measures, especially pleasure and impulsivity. The patient reported that she might initiate a hair-pulling episode, but reported experiencing little pleasure from it, and found it easy to stop. As a result, her hair began to grow in the affected areas for the first time in 15 years. The new hair growth appeared to be attributable, not to a reduction in frequency, but to a significant reduction in the duration and intensity of individual hair-pulling episodes.

The effect of the naltrexone was maintained during 8 subsequent weeks of treatment. At 4-month follow-up, there was continued hair growth and a sustained reduction in hair-pulling episodes at a rate of one to two per week, with minimal hair pulled during each episode. The combination of naltrexone and fluoxetine was well tolerated throughout, with no adverse effects noted and no abnormalities in liver function tests.

**Discussion**

Initial fluoxetine treatment helped reduce the obsessions and the compulsions with which the patient presented, as evidenced by improvement in the Y-BOCS score. The number of episodes of hair pulling was also improved with fluoxetine treatment. The addition of naltrexone to the treatment regimen reduced the patient's impulsivity and decreased the degree of pleasure the patient derived from hair pulling.

Why should an opiate receptor blocker such as naltrexone have any efficacy in compulsive self-injurious behavior such as trichotillomania-related hair pulling? A review of the animal literature suggests significant efficacy for naltrexone in conditions characterized by stereotypic self-injurious behavior. [8, 9] Treatment with naltrexone has also been used in humans exhibiting both self-injurious and repetitive, stereotyped behaviors, with variable results. [10, 11] It is also conceivable that the addition of naltrexone might have increased the level of fluoxetine in plasma, although there is no published literature that documents such a drug interaction. Furthermore, there is not good evidence for a good correlation between drug level in plasma and clinical response for fluoxetine.

In conclusion, the results of this case report suggest that opiate receptor antagonists such as naltrexone, either alone or in combination with an SSRI, may have a therapeutic role to play in the treatment of trichotillomania, especially affecting the impulsivity, pleasure, and tension-relief associated with the core clinical feature of hair pulling. The potential benefits, though, of combined naltrexone-SSRI therapy will need to be confirmed by double-blind, controlled trials.


**REFERENCES**


