

Retrospective Review of Treatment Outcome for 63 Patients With Trichotillomania

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Objective: The authors' goal was to assess naturalistic treatment outcome in trichotillomania. **Method:** Sixty-three patients who had been treated in a specialty clinic for trichotillomania over a period of 6 years were contacted. The patients were given paper-and-pencil instruments that assessed current severity of hairpulling, depression, anxiety, self-esteem, and psychosocial functioning. **Results:** Significant mean improvement was found on measures of hairpulling, depression, anxiety, self-esteem, and psychosocial functioning. Improvement in hairpulling was associated with greater depression at the time of their index clinic evaluation as well as more improvement in depression after treatment. **Conclusions:** State-of-the-art behavioral and pharmacological treatments offer substantial clinical benefit to patients with trichotillomania, both in hairpulling symptoms and ancillary measures of functioning.

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Trichotillomania is widely viewed as a chronic disorder that can be refractory to treatment efforts. The existing treatment literature is sparse; there are few controlled trials and meager long-term follow-up data (1). To our knowledge, there is only one clinical report that documents naturalistic treatment outcome (2); this study reported minimal benefit.

To examine treatment outcome in trichotillomania, we conducted a retrospective survey using multiple measures of functioning in a large group of patients with the disorder. We hypothesized that these patients would experience improvement in measures of hairpulling, self-esteem, and psychosocial functioning but not in measures of anxiety or depression. We also examined whether comorbid depression and anxiety, severity and impact of hairpulling at the time of their index clinic evaluation, or demographic variables were related to treatment response.

METHOD

All patients with trichotillomania treated in the Massachusetts General Hospital Trichotillomania Clinic and Research Unit between August 1990 and November 1996 were contacted by phone or letter. Surveys were completed by 63 (79%) of the 80 patients successfully reached. All subjects satisfied DSM-IV criteria for trichotillomania and provided written informed consent.

The subjects' mean age was 33.5 years (SD=9.3, range=15–60),

and their mean age at onset of trichotillomania was 12.4 years (SD=6.5, range=1–48). Fifty-eight respondents (92%) were female and five (8%) were male. Thirty subjects (48%) were married, 32 (51%) were single, and one (2%) was divorced.

Fifty-seven patients (90%) received behavioral treatment, and 46 patients (73%) received medication treatment. Forty-one patients (65%) received both medication treatment and behavioral treatment. Of those who received medication treatment, 27 (59%) were given clomipramine, 27 (59%) fluoxetine, 23 (50%) paroxetine, 11 (24%) venlafaxine, 10 (22%) sertraline, 10 (22%) fluvoxamine, and seven (15%) lithium carbonate. Other medications were used infrequently (in five or fewer patients). Seven patients (15%) participated in an open trial of paroxetine; of these, six (86%) pursued subsequent treatment. In addition, 23 (37%) of the 63 patients were treated with hypnosis, 31 (49%) were treated with psychotherapy, and 21 (33%) participated in a support group.

At questionnaire completion, 32 subjects (51%) were still in active treatment; of these, 20 subjects (62%) each were still receiving behavioral treatment or medication treatment; eight subjects (25%) were still receiving both behavioral and medication treatment. Twenty-seven subjects (43%) were no longer in active treatment. Current treatment status was unknown for four subjects (6%).

Paper-and-pencil measures of functioning included the Massachusetts General Hospital Hairpulling Scale, Beck Depression Inventory, Beck Anxiety Inventory, Trichotillomania Impact Scale, Sickness Impact Profile, and Rosenberg Self-Esteem Scale. For the Sickness Impact Profile and the Rosenberg Self-Esteem Scale, subjects were asked to assess themselves before treatment initiation retrospectively, as was done in an earlier follow-up study of obsessive-compulsive disorder (3). The Hairpulling Scale, Beck Depression Inventory, Beck Anxiety Inventory, and Trichotillomania Impact Scale scores at clinic evaluation were extracted from the medical charts. (Data on these scales were available for 43 patients, although scores were not available on each scale for every patient.) Global self-ratings of improvement in hairpulling were based on a 7-point scale on which 1=very much improved and 7=very much worse. Subjects were rated as responders if their self-ratings of improvement were 1 or 2; they were rated as nonresponders if their self-ratings of improvement were higher than 2.

The Hairpulling Scale is a seven-item self-report instrument that measures the number of hairpulling urges, the intensity of the urges, the ability of the patients to distract themselves from the urge to pull

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their hair, the number of hairpulling incidents, attempts to resist hairpulling, the ability to resist hairpulling, and feeling uncomfortable about hairpulling. Individual items are rated for severity from 0 (no symptoms) to 4 (extreme symptoms).

At the time of their index clinic evaluation (baseline), the patients' self-reports of hairpulling symptoms on the Hairpulling Scale indicated that they experienced hairpulling urges often (mean=2.31, SD=1.05), urges were moderate in intensity (mean=2.38, SD=0.94), and the patients were able to distract themselves from urges some of the time (mean=2.31, SD=0.84). They reported pulling their hair often (mean=2.10, SD=1.12), attempted to resist pulling their hair some of the time (mean=2.14, SD=0.78), and were able to resist hairpulling some of the time (mean=3.05, SD=0.94). Patients reported feeling noticeably uncomfortable about their hairpulling at baseline (mean=2.12, SD=1.13). Mean Beck Depression Inventory and Beck Anxiety Inventory scores at baseline were in the range of a mild mood disturbance (mean score=12.18, SD=8.44) and mild anxiety (mean score=10.59, SD=8.71), respectively.

Paired *t* tests were used for within-subject comparisons, and independent *t* tests were used for between-group comparisons. The significance level was set at $p=0.05$ for both one-tailed directional hypotheses and two-tailed nondirectional hypotheses.

To protect against type I error caused by multiple tests, multivariate analysis of variance (MANOVA) was used to compare treatment response groups (responder versus nonresponder) and a composite of eight dependent variables (age; age at onset of trichotillomania; baseline Beck Depression Inventory, Beck Anxiety Inventory, Hairpulling Scale, and Trichotillomania Impact Scale scores; and difference between Beck Depression Inventory and Beck Anxiety Inventory scores from baseline to questionnaire completion).

RESULTS

Significant improvement occurred from baseline to questionnaire completion in total Hairpulling Scale scores ($t=5.11$, $df=41$, $p<0.001$). Thirty-three subjects (52%) rated themselves as treatment responders, and 30 (48%) rated themselves as nonresponders.

Comparisons between current and retrospective ratings of functioning revealed significant improvement in Rosenberg Self-Esteem Scale scores ($t=6.95$, $df=51$, $p<0.001$) and Sickness Impact Profile total scale scores ($t=2.21$, $df=38$, $p=0.02$). Significant improvement in psychosocial functioning was also found, reflected in Trichotillomania Impact Scale total scores ($t=4.33$, $df=42$, $p<0.001$).

Contrary to our hypotheses, we found significant reductions in both depression and anxiety symptoms (Beck Depression Inventory: $t=3.20$, $df=36$, $p=0.003$; Beck Anxiety Inventory: $t=3.90$, $df=30$, $p=0.001$).

We computed a MANOVA for eight dependent variables comparing treatment response groups (Wilks's $\lambda=0.49$, $F=2.22$, $df=8, 17$, $p=0.08$). Baseline Beck Depression Inventory scores differed significantly between groups ($t=2.21$, $df=36$, $p=0.03$): responders had higher baseline depression scores than nonresponders. Improvement in depression scores from baseline to questionnaire completion also differed significantly between responders and nonresponders ($t=2.81$, $df=35$, $p=0.008$). On average, Beck Depression Inventory scores for responders decreased by 8.68 points, but scores for nonresponders stayed the same (mean difference=0.13). No significant group differences were found for age, age at onset of trichotillomania, baseline or difference in Beck Anxiety Inventory scores, or baseline Hairpulling Scale and Trichotillomania Impact Scale scores.

DISCUSSION

The existing treatment literature raises serious concerns as to whether health care professionals have effective treatments for trichotillomania. Treatment studies are plagued with conflicting results, a lack of large-scale controlled treatment trials, and limited long-term follow-up of patients.

Our investigation offers treatment outcome data for a large group of well-characterized subjects with trichotillomania as well as assessment with multiple measures. Our satisfactory study return rate of 79% enables us to provide a representative picture of treatment outcomes. Given that all subjects received part or all of their treatment in our specialty clinic, we can be confident that adequate trials of each treatment modality were attempted in most cases.

Our outcome data reveal clinically meaningful and significant improvement with treatment according to all of our assessment measures. These findings are paralleled by subjective ratings of hairpulling improvement. Although many of the medications prescribed for treatment of hairpulling are effective anxiolytics and antidepressants, 16 (25%) of the patients in our study had received behavioral treatment alone and 27 (43%) were not in treatment at the time of questionnaire completion. Thus, improvements in anxiety, depression, self-esteem, and psychosocial functioning may be indirect benefits of treatment for hairpulling.

Higher baseline levels of depression as well as greater reductions in depression with treatment were associated with higher patient global ratings of hairpulling improvement. Our results, however, do not allow us to comment on whether alleviation of depression precedes reductions in hairpulling or vice versa. Future longitudinal studies should prospectively follow patients with trichotillomania to identify whether reductions in depression precede or follow improvement in hairpulling.

In summary, our findings are optimistic for treatment outcome in trichotillomania and are in direct contrast to earlier reports indicating limited treatment efficacy. While clinical and research investigations into better treatments for trichotillomania continue, our results suggest that current state-of-the-art treatment methods benefit a substantial proportion of patients with trichotillomania who seek care.

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