Eur Arch Psychiatry Clin Neurosci (1997) 247 : 234–236

ORIGINAL PAPER

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Use of the selective serotonin reuptake inhibitor citalopram in treatment of trichotillomania

Received: 8 February 1996 / Accepted: 3 March 1997

Abstract Previous trials of selective serotonin reuptake inhibitors (SSRIs) in the treatment of trichotillomania have provided conflicting data. Furthermore, the efficacy of citalopram, the most selective of the SSRIs, in trichotillomania has not previously been documented. Citalopram was used on an open-label naturalistic basis in 14 (1 male and 13 females) patients who presented with chronic hair-pulling and met DSM-IV criteria for trichotillomania. Ratings were completed every 2 weeks for 12 weeks, during which time dosage was increased to a maximum of 60 mg daily (mean dose 36.2 ± 13.9 mg). One patient was unable to tolerate citalopram. In completers, ratings on each of the scales employed were significantly improved after treatment. Of completers 38.5% were responders (Clinical Global Impressions score of 2 or less) at week 12. Citalopram appears to be safe in trichotillomania, and it may be effective in a subset of patients. Given the relatively low response rate, however, a controlled trial is needed before this agent can be said to be more effective than placebo. The pharmacotherapy of trichotillomania deserves further study.

Key words Trichotillomania · Selective serotonin reuptake inhibitor · Citalopram

Introduction

Although trichotillomania has long been described as a clinical entity [1], its high prevalence has only recently been recognized [2, 3]. Pharmacological research on the disorder has, however, been encouraged by advances in the treatment of obsessive-compulsive disorder (OCD), a disorder with which compulsive hair pulling may have some overlap [4, 5]. Indeed, a pioneering study demonstrated that trichotillomania, like OCD, responded to clomipramine, a serotonin reuptake inhibitor, but not to desipramine, a noradrenaline reuptake inhibitor [6].

Subsequent research on the use of selective serotonin reuptake inhibitors (SSRIs) for trichotillomania has, however, yielded conflicting data. Several open trials of fluoxetine found efficacy for this agent [7–10], but in two controlled studies fluoxetine was not significantly different from placebo [11, 12]. Furthermore, although clomipramine maintained efficacy in long-term treatment [13], case reports have suggested that trichotillomania symptoms may return despite initial response during ongoing management with a serotonin reuptake inhibitor [14].

Citalopram appears to be the most selective of the currently available SSRIs [15]. The agent has been shown to be effective and safe in studies of depression, at doses of both 20 and 40 mg daily for 4–6 weeks [16]. A small study of six patients indicated that citalopram may also be useful in OCD [17], and we confirmed this finding in a larger open 12-week trial with doses ranging up to 60 mg daily [18]. Nevertheless, there is limited data on citalopram in the treatment of trichotillomania. Herein we report an open naturalistic 12-week trial of citalopram, with doses ranging up to 60 mg daily, in this disorder.

Methods

Fourteen adult patients were recruited for the study from new patients who presented for treatment of hair-pulling symptoms at the OCD Research Clinic of our teaching hospital. Patients were recruited, diagnosed and treated by an experienced research psychiatrist (D.J.S.). All patients met DSM-IV criteria for trichotillomania [19]. All patients were interviewed with the Structured Clinical Interview for the Diagnosis of Axis-I Disorders (SCID-I) to ascertain co-morbid psychiatric diagnoses [20].

The study design was naturalistic, insofar as we included only patients who were not currently receiving a serotonin reuptake inhibitor, or who were not responding to a current adequate trial of a serotonin reuptake inhibitor. In fact, none of the patients were on a trial of medication at the time of interview, and only 1 patient had previously received treatment with a serotonin reuptake inhibitor (clomipramine some years previously). Similarly, although the need for concomitant medication, such as a benzodiazepine, was not an exclusion criteria, it turned out that none of the patients required additional medication during the trial.

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Co-morbid depression was not an exclusion criteria, but none of the patients in fact met diagnostic criteria for major depression. However, 3 of the patients had current dysthymia and 6 had a history of a major depressive episode. Only 1 patient had previously received formal cognitive–behavioral psychotherapy, but patients were asked not to begin such therapy during the trial.

All patients were evaluated on two occasions, at least 1 week apart, prior to beginning medication in order to ensure constancy of pre-treatment ratings. Citalopram was ordinarily initiated at 20 mg daily. However, where there was a known history of sensitivity to SSRIs or a history of panic disorder (1 patient), citalopram was initiated at 10 mg daily. Dosage was titrated upward by 20 mg every 2 weeks if side effects were assessed to be tolerated and if clinical response was assessed to be inadequate, to a maximum of 60 mg daily.

At the 2 weekly visits patients were assessed for side effects and symptoms were rated by the treating clinician. Side effects were elicited by open-ended questioning. Hair-pulling was rated using the compulsion subscale of the Yale-Brown Obsessive-Compulsive scale (Y-BOCS) [21], the National Institute of Mental Health Obsessive–Compulsive Rating scale (NIMH-OCS) [22] modified for trichotillomania, and the Clinical Global Impressions (CGI) scale. Depressive symptoms were rated with the Montgomery-Asberg Depression Rating scale (MADRS).

Results

One patient failed to complete the study. The patient dropped out 1 week after beginning medication, complaining of intolerable side effects (increased agitation, tremor and chills).

Mean age of completers (1 male and 12 females) was 32.7 ± 8.2 years (range 20–45 years). Mean duration of hair pulling was 20.7 ± 7.9 years. Seven of these patients pulled hair exclusively from the scalp, 4 from a combination of the scalp and one other area, and 2 exclusively from eyebrows or eyelashes.

Ratings on the Y-BOCS, NIMH-OCS and MADRS were tabulated (Table 1). At 12 weeks, 5 patients were rated as much improved (CGI = 2), 4 patients had minimal improvement (CGI = 3) and there was no change in 4 patients (CGI = 4). Thus, with a CGI score of 2 or less used to indicate a positive response, 38.5% of patients were responders.

Table 1 Mean scores (± SD) on rating scales of hair pulling and depressive symptoms (*Y-BOCS* Yale-Brown Obsessive–Compulsive Rating scale; *NIMH-OCS* National Institute of Mental Health Obsessive–Compulsive scale; *MADRS* Montgomery-Asberg Depression Rating scale)

Week	Y-BOCS	NIMH-OC	MADRS
0	9.5 ± 1.6	8.2 ± 0.8	8.2 ± 5.6
2	6.8 ± 4.3	6.8 ± 2.2	5.7 ± 5.5
4	6.8 ± 2.3	6.8 ± 1.8	4.5 ± 3.1
6	7.4 ± 2.3	7.2 ± 1.6	5.0 ± 5.3
8	7.2 ± 1.8	6.9 ± 1.7	4.3 ± 3.0
10	7.4 ± 1.6	7.2 ± 1.4	4.2 ± 2.3
12	6.8 ± 2.0	6.8 ± 1.4	3.9 ± 2.2

NOTE: All scores differed significantly from week 0 on paired *t*-testing ($P < 0.05$)

Table 2 Side effects reported to be possibly secondary to citalopram

	During treatment ($n = 12$)	At 12 weeks ($n = 12$)
Headache	6	2
Diminished sexual desire	5	4
Lassitude/sleepiness/sedation	5	3
Tension/inner unrest	4	0
Ejaculatory/orgastic dysfunction	3	3
Decreased salivation	3	2
Nausea/vomiting	3	1
Reduced duration of sleep	3	1
Paraesthesia	2	2
Increased tendency to sweating	2	1
Tremor	2	0
Weight gain	2	0
Constipation	1	1
Weight loss	1	1
Orthostatic dizziness	1	0
Palpitations/tachycardia	1	0
Increased yawning	1	1

Paired *t*-tests revealed a significant difference between week 0 and week 2 in scores on the Y-BOCS ($t = 2.5$, $P = 0.03$), NIMH-OCS ($t = 2.4$, $P = 0.03$) and MADRS ($t = 2.5$, $P = 0.03$). Significant differences from week 0 continued for the remainder of the study; at week 12 there were significant differences on the Y-BOCS ($t = 4.1$, $P = 0.002$), NIMH-OCS ($t = 3.5$, $P = 0.004$) and MADRS ($t = 3.7$, $P = 0.003$).

Mean citalopram dose at week 12 was 36.2 ± 13.9 mg. Side effects during the trial were tabulated (Table 2). Side effects at 12 weeks were, however, few (Table 2) and were described as minimal in severity.

Discussion

Citalopram appears safe in the treatment of trichotillomania, and it may be effective in a subset of patients. Nevertheless, the relatively low response rate found here is somewhat unpromising given the open design of the data collection, the relatively short-term duration of treatment and the fact that hair-pulling is a symptom that often waxes and wanes over time. A controlled trial is needed before we can conclude that citalopram is more effective than placebo in trichotillomania.

Although citalopram response in trichotillomania and OCD are not directly compared herein, our initial impression is that in hair pulling a response is seen sooner, at a lower dose and less frequently. Whereas the timing of the response to medication in trichotillomania responders is perhaps consistent with a placebo effect, it may also reflect phenomenological and neurobiological differences from OCD. For example, it has been suggested that trichotillomania lies more towards the impulsive pole of the OCD spectrum of disorders [5].

Certainly, the finding that dopamine blockers may be useful in the augmentation of SSRIs in trichotillomania is consistent with the hypothesis that neurochemical systems other than serotonin are involved in this disorder [23]. This finding is redolent of that seen in patients with OCD and tics [24], and in patients with Tourette's syndrome and obsessive–compulsive symptoms [25]. However, none of the patients in this study had a history of tics, nor were other differences between responders and non-responders (e.g. in severity of trichotillomania or depressive symptoms) apparent to us.

Additional research is clearly necessary in order to determine the best approach to the pharmacotherapy of trichotillomania. Although there is some evidence that the Yale-Brown Obsessive–Compulsive scale is a useful measure of symptom change in trichotillomania [26], more recent scales developed for this disorder [27, 28] may ultimately allow more reliable data to emerge from clinical trials. Direct comparison of clomipramine with an SSRI may be useful in clarifying whether extent of serotonergic selectivity is important in determining treatment response. Dose-finding studies of the SSRIs are needed to clarify optimal dosage. Evidence that psychotropics other than antidepressants may be useful for hair pulling requires confirmation [29]. Finally, the combination of SSRIs with newer and possibly safer dopaminergic agents, such as risperidone, needs to be tested in this disorder.

Acknowledgement D. J. Stein is supported by a grant from the South African Medical and Dental Council.

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