J. Indian Assoc. Child Adolesc. Ment. Health 2012; 8(4):105-112

Case Report

Habit Reversal Therapy – An effective treatment modality in adolescent trichotillomania: A case report

Sujit Kumar Kar MD, Rajesh Kumar MD

Address for correspondence: Dr. Sujit Kumr Kar, Department of Psychiatry, Institute of

Human Behaviour and Allied Sciences, Delhi 110095. E-mail: skkar1981@yahoo.com

Abstract

Trichotillomania is an impulse control disorder not so commonly encountered in

psychiatric clinical practice. Usually patients visit to dermatologists for hair loss and

subsequently being referred to psychiatrists. It is characterized by impulsive hair pulling

leading to hair loss. It may follow biting the hairs and even swallowing of hairs leading to

adverse sequel like trichobezoars. In the treatment of trichotillomania, selective

serotonin reuptake inhibitors (SSRI), behaviour therapy and cognitive behaviour therapy

are found to be effective. Among the behavioural techniques, Habit Reversal Therapy

(HRT) is being proved to be highly effective. HRT is commonly tried in adult

populations in comparison to paediatric population. Among the SSRIs, fluoxetine and

paroxetine are commonly used. In this case report, unique combination of habit reversal

therapy with Escitalopram was tried in an adolescent girl with trichotillomania which was

found to be highly effective.

Key-words: Trichotillomania, SSRI, Habit Reversal Therapy

Introduction

Trichotillomania is characterised by the impulsive, self-directed, uncontrolled, chronic hair pulling which is commonly seen in females (female: male ratio being 5 to 10:1) and also considered as an obsessive-compulsive spectrum disorder [1-3]. It is one of the common causes of childhood alopecia [4]. It may exist alone or in association with other psychiatric disorders like depression, obsessive compulsive disorder or other anxiety disorders [1]. The course is benign, if the onset is before the age of six years (Childhood onset) and longer, if the onset is in adolescence or later [5]. After pulling hair, more than half of the patients use the hair in odd manner (biting the hair, touching the hair to the nostril or lips and even swallowing the hair) [4]. Swallowing of hair may lead to formation of hair balls in the intestine known as trichobezoars which can lead to intestinal ulceration, obstruction and even perforation [4].

Selective Serotonin Reuptake Inhibitors (SSRIs), tricyclic antidepressants (particularly Clomipramine) are found to be effective in treating trichotillomania [1, 2, 5]. Among non-pharmacological modalities behaviour therapies, cognitive behaviour therapy, exposure & response prevention and hypnosis are successfully tried [1 - 3, 6]. Habit Reversal Therapy (HRT) is a highly effective form of behaviour therapy recommended for patients of trichotillomania [5-8]. Maximum evidences regarding effectiveness of HRT in trichotillomania is in adult population and much evidence of effectiveness is not available in paediatric population [8]. Application of HRT in children and adolescent can be a difficult task but simplifying the structure of therapy without any alteration in the therapy principle had been successfully tried [8]. HRT has some key components like

awareness training, stimulus control, competing response training and social support which are delivered on multiple therapy sessions [8].

Case History

A 12 year old adolescent girl was brought by her parents for odd behaviour of hair pulling from head in July, 2012. She was pulling her hairs since last 6 months. She used to do it when alone or under stress. Due to repeated pulling, there was significant hair loss on her scalp which was more marked in the left side as she was a right handed child and preferred to use her left hand for pulling hairs. After pulling the hairs, she used to bite the ends of hair and at times even swallow it. For this behaviour initially she was scolded and punished by her parents. Despite of all attempts made by her parents to stop this behaviour, she continued with it when unobserved. There were few other unusual habits in the form of biting nails, tips of the pencils, rubbers and edges of books & notebooks reported by her parents. These behaviours were reported from the age of four to five years of age.

In her childhood, she suffered from pneumonia and meningitis at the age of 3 years. She belongs to a middle socioeconomic status family. Her family members (1st and 2nd degree blood relation) have no history of any psychiatric disorder. She is a shy, introvert girl student of standard 5th. She was average in studies. As per Chess & Thomas temperament assessment module she was short tempered and used to get annoyed easily; otherwise she was well adjusted to life [9].

Her physical examination did not reveal any abnormality except alopecia due to hair pulling. Her blood investigations (routine hemogram, renal function test, liver function test, serum calcium, and serum ferritin), thyroid function test, ultrasonogram of abdomen and computed tomogram of head were within normal limits.

On mental status examination, she was euthymic. She acknowledged hair pulling, nail biting and biting inedible things (rubber, pencil, papers) as abnormal. She also acknowledged that there was disfigurement of her face due to repeated, uncontrolled hair pulling. She confessed that she was scolded and punished most of the times for her hair pulling behaviour. But she did not have any premonitory urge prior to hair pulling. As in paediatric age group, premonitory urge may or may not be present [10, 11]. Assessment of intelligence on Raven's progressive matrices revealed average intellectual functioning (IQ-90).

On the basis of ICD-10, (WHO, 1993) diagnostic criteria, the diagnosis of "Trichotillomania" was made [12]. She was started on Escitalopram 5mg/day which was later gradually escalated to 15mg/day over a period of 8 weeks. She had shown partial improvement on Escitalopram. Subsequently, behaviour therapy in the form of Habit Reversal Therapy (HRT) was planned. The therapy was structured as eight therapy sessions, each lasting for 30 to 45 minutes on weekly basis. The first two sessions were introductory sessions, during which psychoeducation of caregivers and patient was done. Simultaneously, awareness training was given by making the patient realize that the behaviour of hair pulling was abnormal and identifying different situations during which she used to pull her hair. Her parents were instructed to maintain a diary to note down the time, situation, duration of hair pull by regular observation and making her more aware of it. During the next two sessions, she was trained about stimulus control. In stimulus

control sessions she was trained to avoid situations which compel her to pull hair (example- watching television alone). Also she was taught techniques (to tie a headscarf or cloth on the head) which were helpful in stopping hair pulling at high risk situations. During the session five & six, competing response training was done. She was trained with different techniques which are exactly opposite to hair pulling behaviour (example to squeeze sponge ball in left hand which she was frequently using for pulling hair). She was also suggested some other competing response techniques like sitting on her hand when alone, using gloves etc. She was asked to adopt any one of the competing response which would be convenient to her. She was encouraged to perform these techniques in front of the therapist, subsequently before her family members and later in different social situations. She was asked to do rehearsal of these techniques at home. In the seventh session, patient's patents were instructed to encourage her to practice the competing responses and appreciate her efforts. They were also informed to involve other social support groups like tutor, teacher and close friends of the patient in this. In the concluding session, patient's improvements after different sessions were analysed. Patient was asked to comply with the strategy and parents were instructed to ensure the compliance.

With the combination of pharmacotherapy and behaviour technique, there was significant improvement. During follow-ups, over a period of six months, her hair pulling habit was reduced from multiple times in a day to 1-2 times in a week and hairs started growing on the scalp.

Discussion

In this patient there were other habit disorders like nail biting and biting inedible things which are known to exist together. Maximum impairing and embarrassing behaviour was hair pulling so it was addressed in the treatment strategy. Another important reason for targeting this behaviour was its association with high risk behaviour of swallowing the hairs which could lead to formation of trichobezoars landing in life threatening complications. Short duration of illness, absence of other psychiatric co-morbidities and combined treatment approach are the predictors of good outcome. Combined treatment approach (SSRI & HRT in this patient) is believed to be the best treatment modality in the treatment of trichotillomania [5].

In this patient Habit Reversal Therapy (HRT) was attempted. HRT is a highly effective behaviourtherapy technique for patients of trichotillomania which is concise, well-structured and simple. It is usually conducted over 6 to 8 sessions held weekly [13 - 14]. This therapy not only needs patient's participation, but also needs support of parents and other support groups as involved in our case. Evidences of effectiveness of HRT in children and adolescents are less in comparison to adults but one can't deny its efficacy. HRT is proven to be effective in paediatric population [11, 15]. More evidences and studies are required, in paediatric population to see the effectiveness of HRT.

Just conducting HRT or any modality of psychotherapy is not enough, because once the therapy sessions are over; there is possibility of non-adherence to the strategic approach. It may lead to relapse of the symptoms. So it is required to review the case in regular

intervals after the completion of HRT and monitor patient's behaviour. Long term follow-up and compliance to treatment holds definite promise for good outcome.

References

- Christenson GA, Crow SJ: The characterization and treatment of trichotillomania. J
 Clin Psychiatry 1996; 57 Suppl 8:42-7; discussion 48-9.
- 2. Neudecker A, Rufer M: Trichotillomania: clinical presentation, causes, treatment options. MMW Fortschr Med 2004 Nov 4; 146(45):40-2.
- 3. Ko SM: Under-diagnosed psychiatric syndrome. I: Trichotillomania. Ann Acad Med Singapore 1999 Mar; 28(2):279-81.
- 4. Walsh KH, McDougle CJ: Trichotillomania. Presentation, etiology, diagnosis and therapy. Am J ClinDermatol 2001; 2(5):327-33.
- 5. Bruce TO, Barwick LW, Wright HH: Diagnosis and management of trichotillomania in children and adolescents. Paediatr Drugs 2005; 7(6):365-76.
- 6. Drysdale E, Jahoda A, Campbell E: The manipulation of arousal on the intensity of urges to pull hair in a 16 year old female with trichotillomania: a single case study. BehavCognPsychother 2009 Jan;37(1):115-20.
- 7. Rapp JT, Miltenberger RG, Long ES, Elliot AJ, Lumley VA: Simplified habit reversal treatment for chronic hair pulling in three adolescents: a clinical replication with direct observation. J ApplBehav Anal 1998; 31:299–302.
 - 8. Tay YK, Levy ML, Metry DW: Trichotillomania in Childhood: Case Series and Review. Pediatrics2004, 113(5); e494 -e498

- 9. Chess S, Thomas A: Temperament in Clinical Practices. New York: The Guilford Press; 1986.
- 10. Wright HH, Holmes GR: Trichotillomania (hair pulling) in toddlers. Psych Rep 2003;92: 228–30.
- 11. Hanna GL: Trichotillomania and related disorders in children and adolescents. Child Psy-chiatry Hum Dev 1997; 27:255–68.
- 12. World Health Organization: International Classification of Diseases–10th Ed, Clinical Description and Diagnostic guidelines. Geneva: WHO; 1992
- 13. Van Minnen A, Hoogduin KAL, Keijsers GPJ, Hellenbrand I, Hendriks GJ: Treatment of Trichotillomania With Behavioral Therapy or Fluoxetine: A Randomized, Waiting-List Controlled Study. Arch Gen Psychiatry 2003; 60(5):517-522.
- 14. Franklin ME, Tolin DF: Treating trichotillomania: Cognitive-behavioral therapy for hair pulling and related problems. New York: Springer Science + Business Media; 2007.
- 15. Sah DE, Koo J, Price VH: Trichotillomania. Dermatol Ther 2008; 21:13–21.

Sujit Kumar Kar, Senior Resident, Rajesh Kumar, Associate Professor, Department of Psychiatry, Institute of Human Behaviour and Allied Sciences, Delhi.