

## Case Report

# TRICHOTILLOMANIA WITH HYPOTHYROIDISM AND MENTAL RETARDATION: CASE REPORT

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## ABSTRACT

Trichotillomania is a chronic disorder characterized by recurrent non cosmetic hair pulling driven by increasing sense of tension and resulting in alopecia. It is co morbid with a variety of psychiatric disorders including OCD, depression, anxiety, eating disorders and personality disorders. The present case is of a 15 year old girl with diagnosed to have trichotillomania with congenital hypothyroidism and mild mental retardation whose symptoms showed considerable improvement on administering Sertraline 100 mg for 6 weeks along with supportive psychotherapy. Further studies are needed to understand course of this disorder and considering the best treatment options.

**Key Words:** Trichotillomania, Hypothyroidism, Mental Retardation, Sertraline

## INTRODUCTION

The word Trichotillomania derived from the Greek thrix (hair), tillein (to pull), and mania (madness) was first described by the French dermatologist Hallopeau a century ago (Hallopeau, 1889). It was recognized as a distinct disorder by the American Psychiatric Association in 1987 (DSM III, 1987). Trichotillomania is recurrent hair pulling driven by an escalating sense of tension which gets relieved after pulling out the hair and this behaviour results in noticeable hair loss, distress or socio-occupational impairment. Lifetime prevalence seems to be in the range of 0.6-3.4% in the general population and about 1% in children and it is more common among girls (Bruce, 2005). It is co morbid with a variety of psychiatric disorders including OCD, depression, anxiety, eating disorders etc. Studies regarding the pharmacological treatment in children or adults are scarce, and there is a lack of consensus on drug treatment. In this article, we report a 15 years-old girl who is diagnosed to have trichotillomania with congenital hypothyroidism and mild mental retardation and showed remarkable improvement in response to the treatment with Sertraline 100 mg for 6 weeks and supportive psychotherapy.

## CASES

A 15 year old girl, student of 7<sup>th</sup> Std., presented with her father in the Out Patient Clinic of Department of Psychiatry after being referred from Dermatology clinic with the complaints of repetitive hair pulling from scalp for the last 8 months that had resulted in 2 bare patches on her scalp. Her father reported that family members would often notice her twirling hair. Her mother thoroughly checked her hair for the presence of lice or dandruff but could not find any evidence for either. But family members got concerned when they happened to notice hair loss from the scalp and found few hairs which she was hiding in her tight fist. On enquiry, she initially complained of only itching and denied any deliberate hair pulling at that time. Following this her father got her head shaved, but soon there were missing hair from early regrowth hair also. Soon after this she was taken to dermatology clinic of PGIMS Rohtak, where the examination and investigation were inconclusive and she was referred to Psychiatry OPD. During detailed psychiatric evaluation, patient remained quiet in the presence of father but became communicative in his absence. She told that she would have an escalating sense of tension leading to hair pulling and which would ultimately terminate into a feeling of gratification on completion of the act. On the contrary she'd

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experience discomfort when prevented from pulling her hair. She'd at times chew the uprooted hair before throwing them. She'd preferably pull out hair from the side of scalp just above the ears but denied hair pulling from any other body part. She'd hide the pulled out hair in the soil out of the fear of being scolded by parents but denied any ingesting of the hair ever. She had the history of neonatal hypothyroidism diagnosed within 10 days of birth. She was put on Tab. Thyroxin 25 µg that was discontinued after a period of 2.5 months. Treatment was again resumed after a gap of 5 months when she started having signs like lethargic appearance and protruding tongue etc. Since then, she had been compliant along with regular follow up in endocrinology clinic. She was reported to have delayed developmental milestones, poor academic performance, shyness, low self esteem, few friends, poor social contacts and avoidance of peer group activities, There was no family history of hair-pulling or any history suggestive of impulse control disorder or obsessive compulsive disorder. The general and systemic physical examination was within normal limits except for two areas of nonscarring alopecia behind the ears bilaterally. On examination of the alopecia patch hair were observed to be short, irregularly broken off at different levels. Investigatory work up including complete blood counts, bio-chemistry and metabolic profile, thyroid function test, VDRL, wood's light examination and fungal scrapings were within normal limits. Ultrasound Abdomen did not reveal any evidence of trichobezoar. IQ testing revealed mild mental retardation (IQ=52). She was put on tab Sertraline 50 mg, escalated upto 100 mg in next 2 weeks along with supportive psychotherapy. Patient showed significant improvement within 6 weeks of treatment. This behaviour pattern did not recur on subsequent follow up.

### **DISCUSSION**

Trichotillomania is infrequently seen in psychiatry clinics. It often affects female children and adolescents (Bruce, 2005). Our case is in accordance with what most of the literature says. Most of the patients with trichotillomania have the social fear they tend to have feelings of shame, helplessness, isolation, frustration and embarrassment and are secretive about the condition. These patients's avoid social contacts even with friends and relatives (Bruce, 2005). Our case fulfills most of these features. Hypothyroidism could have been offered as one of the possible causes of hair loss in this case as thyroid hormone influences the activity of hair follicles and in hypothyroidism hair may become dull, brittle, and coarse with reduced diameter as well as result in areas of hair loss (Comaish, 1985). But in this case patient is maintaining a euthyroid state for quite long and moreover hair loss is symmetrically confined to behind ears on both sides and did not involve eyelashes, eyebrows or any other hair bearing area and patient herself also admitted to hair pulling. The association of trichotillomania with mental retardation has also been reported in previous studies. The treatment of trichotillomania particularly in children has numerous limitations because of the disharmony to nonpharmacological approaches and side effects to pharmacological therapies. In terms of pharmacological therapy, various treatment options such as antidepressants particularly SSRIs, atypical antipsychotics, opioid antagonists and anticonvulsants show potentially clinical benefits in treating impulsive features (Adewuya *et al.*, 2008; Pathak *et al.*, 2004). Fluoxetine has been studied in trichotillomania with mixed results. Studies by Christenson *et al.*, (1991), Streichenwein and Thornby (1995) and Van Minnen *et al.*, (2003) did not find any significant beneficial effect of fluoxetine treatment in trichotillomania. Sertraline has been studied for use in a number of impulse control disorders. Sertraline has been shown to have good outcome in treatment of trichotillomania in a study by Dougherty *et al.*, (2006). Sertraline in the present case resulted in remarkable initial improvement in hair pulling symptoms. Finally, this case report calls for further studies with a wide sample of patients to prove the efficacy of sertraline in the treatment of trichotillomania and the long-term maintenance of these benefits. Although there are many case reports on effective treatments for trichotillomania, the data from controlled trials are scarce.

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#### **REFERENCES**

- Adewuya EC, Zinger W and Thomas C (2008).** Trichotillomania: a case of response to valproic acid. *Journal of Child and Adolescent Psychopharmacology* **18**(6) 533-536.
- American Psychiatric Association (1987).** The Diagnostic and Statistical Manual of Mental Disorders, 3rd Edition, Revised. Washington, DC, American Psychiatric Press.
- Bruce TO, Barwick LW and Wright HH (2005).** Diagnosis and management of trichotillomania in children & adolescents. *Pediatric Drugs* **7**(4) 365-367.
- Christenson GA, Mackenzie TB and Mitchell JE (1991).** Characteristics of 60 adult chronic hair pullers. *American Journal of Psychiatry* **148** 365-370.
- Comaish JS (1985).** The thyroid and hair growth. *Seminars in Dermatology* **4** 4–8.
- Dougherty DD and Loh R (2006).** Single modality versus dual modality treatment for trichotillomania: sertraline, behavioral therapy, or both? *Journal of Clinical Psychiatry* **67**(7) 1086–1092.
- Hallopeau M (1889).** Alopecie par grottage (trichomanieoutrichotillomani). *Annales de Dermatologie et de Venereologie* **10** 440–441.
- Pathak S, Danielyan A and Kowatch RA (2004).** Successful treatment of trichotillomania with olanzapine augmentation in an adolescent. *Journal of Child and Adolescent Psychopharmacology* **14** 153–154.
- Streichenwein SM and Thornby JI (1995).** A long-term, double-blind, placebo- controlled crossover trial of the efficacy of fluoxetine for trichotillomania. *American Journal of Psychiatry* **152** 1192–1196.
- Van Minnen A, Hoogduin KAL and Keijsers GPJ et al., (2003).** Treatment of trichotillomania with behavioral therapy or fluoxetine: a randomized, waiting-list controlled study. *Archives of General Psychiatry* **60** 517–522.