

# Trich-o-tillo-mania in Children and Adolescents

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# Objectives

- Outline assessment of trichotillomania in a child or adolescent
- List three DSM 5 Criteria of trichotillomania
- Describe the prevalence of trichotillomania in children and adolescence
- Distinguish one medication and one psychosocial treatment option

# Outline

- Definition
  - History
  - Prevalence & Comorbidity
  - DSM5 Criteria
  - Etiology
- Case Example
- Assessment
- Treatment
  - Medication
  - Psychosocial
- Resources



# What is Trichotillomania?

- ❖ The word trichotillomania is derived from the Greek thrix (trich), hair; tillein (tillo), to pull; and mania, madness or frenzy (mania).
- ❖ A disorder characterized by the chronic compulsion of pulling out one's own hair.
- ❖ An impulse control disorder along with kleptomania, pyromania and pathologic gambling
- ❖ Part of obsessive-compulsive spectrum
- ❖ Trend towards a higher rate of OCD in families of patients with TTM

# History and Prevalence

- First described 1889 and in 1914 Epidemic of hair pulling in orphanage in England
- Lifetime prevalence 1 to 3% Bloch
- Bi modal age onset of 5 to 8 years and early adolescence but average onset 11-13 yrs
- Waxes and wanes in severity
- Preschool age children 0-6 yrs- separate entity and natural course compared with TTM in older children and adults. Accompanies comorbid habit disorders such as scratching, skin picking and thumb suckin and occurs around bed or nap time... complete remission

# Who Gets Trichotillomania?



## Lack of Research in Children and Adolescents with TTM

“No randomized clinical trials have been conducted in children with trichotillomania. Research examining the clinical course and natural history of childhood onset trichotillomania is equally sparse.” Bloch

- Lack of controlled trials in children
- Secrecy of many children TTM
- Lack of understanding in PCP of disorder

## DSM 5 Criteria

# Trichotillomania “hair pulling”

- A. Recurrent pulling out of one’s hair resulting in noticeable hair loss
- B. An increasing sense of tension immediately before pulling out the hair or when attempting to resist the behavior
- C. Pleasure, gratification, or relief when pulling out the hair.
- D. The disturbance is not better accounted for by another mental disorder and is not due to a general medical conditions (e.g., a dermatologic condition)
- E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.



# DSM 5 Changes for TTM

- **In NEW chapter “Obsessive-Compulsive and Related Disorders”**
- Reflects the increasing evidence that these disorders are related to one another in terms of a range of diagnostic validators, as well as the clinical utility of grouping these disorders in the same chapter.
- The DSM-IV diagnosis of trichotillomania is now termed trichotillomania (hair-pulling disorder)
- Moved from a DSM-IV classification of impulse-control disorders not elsewhere classified to obsessive-compulsive and related disorders in DSM-5.

# Etiology

- No single cause, several theories as to why it may occur
- Way to relieve stress
- Closely related to OCD
- Can run in families-both biological and environmental factors that lead to chemical imbalance
- Neurotransmitter imbalance of dopamine and serotonin
- Combination of genetic predisposition and aggravating stress
- Symptom caused by different factors in different people just like a cough can be produced by a multitude of different medical problems.

# Case Example

- Regina- 11 year old Hispanic female who presents with generalized anxiety wearing a scarf. Noted no eyelashes and few eyebrows. Clinical interview reveals she has always been anxious in general and last year began to pull her eyelashes out as they “felt funny”. This progressed to pulling out hair in “friar tuck pattern” on the top of her head as it never looked symmetrical and again, “felt funny”.



# Case Example (cont'd)

- Habit reversal training
- Trial of fluoxetine, lexapro, zoloft, did not help
- N-acetyl cysteine titrated to 1500 and 2400 mg gave moderate improvement



# Assessment

Goal is to establish **diagnosis & co-morbid** diagnoses

- 1. Obtain accurate baseline –**
  - Where hair pulling is noted on body (scalp, eyebrows, eyelashes, arms, legs, pubic areas)
  - How often; certain times of day? (sleep, loneliness, boredom, frustration)
- 2. Identify triggers and reinforcers**
- 3. Document response to treatment**



# Where do they pull?

- Where they pull from is important in an evaluation.
- Common sites of hair-pulling in children are the scalp (86%), eyelashes (52%), eyebrows (38%), pubic region (27%), and legs (18%).



# Assessment

Goal is to establish **diagnosis & co-morbid** diagnoses



- Clinical interview with child and caregiver
- Current illnesses, medications
- Child psychiatric and medical hx (attn. to dermatologic issues)
- Family psychiatric and medical history
- Direct measure (photograph)
- Self rating scales
- Derm consult if needed
- Refer for therapy and later meds if therapy unsuccessful

# I WEAR CAPS- Mnemonic Device for Comprehensive Assessment of Childhood Trichotillomania

## **I**nstruments

## **W**here?

## **E**xamination

## **A**utomatic vs. focused pulling-

- The MIST (Milwaukee Inventory of Styles of Trichotillomania)

## **R**ating Scales

- The Massachusetts General Hospital Hair Pulling Scale is a well validated 7-item self-report
- National Institute of Health Trichotillomania Severity Scale
- Psychiatric Institute Trichotillomania Scale.

## **C**omorbid conditions

## **A**ntecedent cognitions, urges, feelings

## **P**ost pulling behaviors

- *Trichobezoars* are possible when individuals eat their hair and can lead to bowel obstructions.

## **S**ettings



# I WEAR CAPS

## Instruments

- many individuals use things other than their hands to pull hair.
- Common tools include tweezers, pliers, mirrors, and scissors.

## Where?

- Scalp, eyelashes, eyebrows, pubic region, and legs.
- Many children pull from multiple sites.

## Examination

- Locations of hair-pulling is important
- Inspect specific areas of pulling
- Common to uncover follicle damage, atypical regrowth of hair, and irregular margins

## Processes other than TTM.

- Well-circumscribed margins
- Hair loss without pulling
- Areas of excoriation

# I WEAR CAPS

## Automatic vs. focused pulling-

- Distinguishing between automatic and focused hair-pulling can be important for behavioral treatments.
- Focused pulling describes **pulling with awareness** in **response to an urge or an emotion**.
- Automatic pulling describes **subconscious pulling** that occurs **outside of awareness**
- The MIST (Milwaukee Inventory of Styles of Trichotillomania) helps to distinguish between automatic and focused pulling behaviors. Child and adult versions freely available on the internet.

## Rating Scales

### Trichotillomania Scale for Children-

- 12 item
- both adult and child self report versions
- useful tool for monitoring TTM symptoms in children

### Older adolescent/adults

- The Massachusetts General Hospital Hair Pulling Scale is a well validated 7-item self-report, in use 10+ yrs
- National Institute of Health Trichotillomania Severity Scale
- Psychiatric Institute Trichotillomania Scale

# I WEAR CAPS

## Comorbid conditions

- Anxiety
- Depression
- OCD
- Autism spectrum

## Antecedent cognitions, urges, feelings

### Commonly experienced cognitions before hair-pulling

- beliefs about the inappropriate appearance of certain hairs (e.g., gray, coarse),
- hairlines or lengths of hair need to be symmetrical or that he/she is unattractive or

unlovable because of his/her appearance.

### Before hair pulling

- feelings of boredom, tension, tiredness, and anxiety
- many report an uncomfortable physical sensation or urge

### After hair pulling

- sense of relief

# I WEAR CAPS

## **P**ost pulling behaviors

- Biting, rubbing, eating, or discarding of hairs in stereotyped ways
- *Trichobezoars* are possible when individuals eat their hair and can lead to bowel obstructions.

## **S**ettings

- Bedroom when they are tired
- Bathroom where they have access to mirrors and instruments

- **Differential Diagnosis**

- **Alopecia areata**

(microscopically inflammatory patchy loss of hair that is usually reversible)

- **Alopecia traumatica**

(an early, excessive, temporary loss of normal club hairs from normal resting follicles as a result of traumatization that alters the normal hair cycle)

- **Fungal infections**

- **Medication effects**

- **Co-morbidity**

- **Generalized anxiety disorder**

- **Attention deficit hyperactivity disorder**

- **Depression**

- **Obsessive-compulsive disorder**

- **Pervasive developmental disorder**

# Medical Complication

- Trichophagy-5 to 18% ingest/eat of pulled hair
- Might pull the hair and then tap on lip specific number of times then eat
- Can result in obstruction in the bowel



# Trichobezoar



- Collection of indigestible material found in gastrointestinal tract
- Occupational disease in brushmakers, blanket weavers and woolworkers
- Much more common in females aged 10 to 19

# Trichobezoar

- Anorexia
- Bloating
- Early satiety
- Trichoptysis – hair may be coughed up
- May be asymptomatic





# Treatment

- No RCT or extensive research on treatment of trichotillomania in children and often treatment is derived from studies with adults

**HOWEVER** individual or combination treatments that have been effective are:

- Ongoing Psychoeducation
- Behavioral Treatments
- Pharmacological Treatments

# Psychoeducation

- REMEMBER!
  - Children and adolescents often **present when symptoms are at their worst**
- Psychoeducation is critical for parents and child as initial first step
- Define trichotillomania
- They are not alone
- There is treatment
  - Types of treatment
- Need for ongoing care
- Patient and family goals important
- Trich.org excellent site for families and therapist resources

# Behavioral Treatments

- Habit reversal therapy (HRT)  
1960s for tx of TTM and tics
- Manual based for 2 to 3 months with additional maintenance period for relapse prevention
  - Self monitoring
  - Awareness training
  - Stimulus control Bloch
- 3 randomized parallel group studies- superior efficacy compared with wait list or placebo controls for adults
- Superiority to fluoxetine and clomipramine
- No RCT Habit Reversal Therapy in children

# Behavioral Treatments (cont'd)

- Self monitoring component- patients to keep records of their hair-pulling
- Awareness training- increase the patient's consciousness of hair pulling behaviors and of high risk situations that increase the likelihood of hair-pulling
- Stimulus control-interventions designed to decrease the opportunities to pull and to interfere with or prevent pulling behaviors.
- HRT demonstrated efficacy in tx of adults.
- Large uncontrolled trials similar efficacy of HRT in children
- Several double blind randomized clinical trials -SSRIs **not effective** primary sx of TTM in adults

# Pharmacological Treatments

- SSRIs
- Clomipramine
- Naltrexone (useful with comorbid sub abuse disorders and urge)
- NAC-N-acetylcysteine
  - glutamine modulating agent
  - low-cost pharmacological agent
  - minimal side effects
  - antioxidant
  - 2009 early study by Grant 56% significant reduction in symptoms of behavior
  - 2013 current study by Bloch found NO benefit

# Summary

- Good clinical assessment
- Obtain baseline
- Psychoeducation critical and ongoing
- Habit reversal therapy cornerstone
- Pharmacology can support therapy

# Resources

- Trichotillomania Learning Center [www.trig.org](http://www.trig.org)
- Treatment Resources in Other Languages

<http://www.trich.org/treatment/resources-other-languages.html>

# References

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