Case Report

A Curious Case of Flower Phobia: Anthophobia

Desiree Saimbi, Shabdita R. Sarmah, Atmesh Kumar,

Rupali P. Shivalkar, Sanjeeta Prasad

Department of Psychiatry, St. Stephens Hospital, New Delhi.

ABSTRACT

Fears, anxieties and specific phobias are classified as internalizing behavior problems. The development of specific phobias may result from the pairing of a specific object or situation with the emotion of fear. Flowers are usually perceived as pleasant stimulus, producing a relaxing effect on our mind and body, but here we present a rare case, wherein flowers are perceived as a malevolent stimulus and producing phobic anxiety in an eleven-year old boy, leading to avoidance behaviors and much interference in normal functioning. He was diagnosed to have Specific Phobia of natural environment type with Somnambulism and treated with SSRI (escitalopram) and Behavior Therapy (systematic desensitization). Over a period of eight months his symptoms remitted completely and he maintained the remission for now one year with no further intervention.

Keywords: Childhood fear, phobias, anxiety, behavior therapy, flowers fear.

Introduction

Experiencing fear and anxiety is normal and healthy in the course of child development and emotional growth. These emotions can even be looked upon as adaptive and as impressive markers of increasingly complex cognition and abstract thought processes (1, 2). However, when these fears linger and become more intense, a different type of developmental event may be signaled - the development of a specific phobia.

A specific phobia diagnosis as per International Classification of Diseases, 10th Edition (ICD-10) should be considered when there is marked fear of a specific object or situation not included in agoraphobia or social phobia or shows marked avoidance of such objects or situations. Experiences symptoms of anxiety in the feared situation at some time since the onset of the disorder with significant emotional distress due to the symptoms or the

avoidance, and recognizing these as excessive or unreasonable. The symptoms are restricted to the feared situation or when thinking about it (3).

Further childhood phobias may result from terrifying or frightening experiences; they may also be due to observing or through reading about it or hearing about fears and phobias in others.

Some childhood phobias apparently have no obvious environmental cause, direct or indirect, and reportedly 'have always been present' in the child.

In general, when a specific event is paired with an emotional experience the person is susceptible to a permanent emotional association between feared object and fear or anxiety. Avoidance behaviors in children often take the form of tantrums, crying, and shying away. Often the child is brought in for treatment not because of the fear itself but due to severity

of the disruption to the family's daily routine as a result of avoidance and distress-related behaviors (4).

Flowers are usually perceived as pleasant stimulus, but extreme irrational fear of flower is called Anthophobia; a Greek connotation for flower. It is in this light, we present a case of flower phobia, little is known about it in scientific literature, so far only one case has been reported in Indian literature. In this case they treated the child alone with behavior therapy (5).

Case Report

Master X, an eleven-year old boy, class seventh student, was a scholar at school. He was the only child of his parents, living in a joint family and had cordial relation with all. He was born at full term with normal delivery and no developmental delays. There was no history of psychiatric illness reported in the family.

He took treatment for bronchitis at one-year of age. By five years of age he was noted to be getting out of bed during deep sleep, walking around unaroused with a blank look on face, unaffected by environmental stimuli, if guided back to bed would sleep, wake up next day with no memory of it. He had no history of past psychiatry treatment.

Temperamentally he was shy, with a slow to warm up temperament, quick learner, an avid book reader, loved scientific activities, played cricket and badminton.

On his first visit to psychiatry OPD, he appeared guarded, made less eye contact. Gradually warmed up and complained of having sudden anxiety at the sight or thought of flowers, interfering in his daily functioning. Mother described the child would get flushed, scream, cry, turn sweaty, shiver, frantically run about, turn angry at times, become numb and curl-up in himself, at the sight of flowers or in their vicinity.

Anamnesis revealed the first time he was

ever noted to show his fear was on his third birthday, where he screamed and cried when he was given flowers. Later by eight years of age, the fear became prominent even in school and other social situations like flower arrangement activity at school and during picnics at park. His family noticed him avoiding situations and places that had flowers, both real and unreal, to pictures in book and television, to even not allowing flowers at home. Parents or patient couldn't give history of any specific event or stressor for onset of phobia. There was no history of other anxiety disorder or mood disorder.

Recently as he experienced severe anxiety and displayed sudden anger at a social event where he became difficult to manage, his parents got worried and brought him for his first consultation.

A dual diagnosis of specific phobia (F40.2) with non-organic sleep disorder somnambulism (F51.3) was made according to ICD-10 (3).

He was investigated to rule out medical comorbidities. Magnetic resonance imaging of brain revealed an arachnoid cyst measuring 15x20x45cm with well-defined margins in the midbrain, posterior fossa in retrocerebellar location and communicating with the fourth ventricle. No seizure activity or slowing was noted on electroencephalography.

An initial psychological assessment was also done that revealed an IQ of 112. Children's Apperception Test (CAT) showed difficulties in interpersonal relationships with parental figures conflicts between need for achievement and disapproving environment leading to anxiety reactions.

Background of the Case

Dynamic exploration revealed that the child was ambivalently attached to his mother, he showed less attachment towards his father as he was insensitive towards his emotional needs.

At home there were interpersonal and family conflicts. The family showed too much attention and concern towards his fear.

During explorative sessions, mother revealed that she had described the child one of her own fears to flower as a child, where she got bit by a bee while trying to touch it. The fears were reinforced later by watching a man in a serial who displayed a terrifying behavior at the sight of flowers. Our patient described he feared the nectar and the pollens of a flower as it attracts the bees and they bite that causes pain. He also feared the petals, leaves and big flowers specifically like marigold and tuberose. The child so far has never had a personal bee biting experience but he appears to have role modeled his fears from his mother and the television character, leading to avoidance behaviors.

Treatment

Treatment was started with escitalopram and gradually increased to 10 mg along with clonazepam 0.25 mg. Psychological management was started with free association and relaxation training exercise.

Relaxation was followed by systematic desensitization. We started in-vitro exposure with imagery and then in-vivo exposure to artificial and real flowers, simultaneously cognitive restructuring was also started. Initial few sessions were interactive using creative therapies like drawing and writings following which his interactions with therapist improved. By the sixth session the child appeared comfortable to touch and even hold artificial flowers in hand, first small then big flowers; slowly his proximity with real flowers was reinforced and by the ninth session he could come to holding them in his hands. A total of 12 sessions were conducted.

His mother was enrolled into therapy as a co-therapist that helped him to cope better at home. Once he mastered control over fears and anxieties he was taken to the garden where he

displayed fear to hibiscus and sunflowers but could endure it with reduced anxieties, showed no terrifying response.

During Cognitive Behavior Therapy (CBT) sessions he was explained the mechanism of learning the fear and how it was being maintained. Therapy was focused on giving him alternative explanations to challenge his fears, avoidance behaviors and attempts were made to substitute it with more adaptive beliefs and responses. He was given homework(s) like reading about flowers, noting facts, watering flowers, making small bouquets at home, etc.

Treatment Outcome

By the end of eight months the child showed marked improvement in his overall symptoms, that is when other aspects of his personality were brought into therapy for which social skill training were regularly conducted. Currently patient and his family have reported improvement in anxieties and also in his sleep behavior. He was gradually tapered down to 5 mg dose of escitalopram and CBT maintenance sessions were continued.

Discussion

Specific phobias are the most prevalent anxiety disorders according to nearly all epidemiological studies of the general population (6,7). There is research suggesting that the typical age of onset for specific phobia is between ten and thirteen years of age (8).

Environmental factors like trauma, vicarious learning, genetic factors, temperamental predispositions, parental psychopathology, parenting practices, contribute to development and maintenance of childhood phobias, thus emphasizing need to address these multiple dimensions during treatment (6,9).

Excessive fears leading to anxiety disorders affect the neuronal circuitry and can

induce lasting structural change in synaptic connectivity and plasticity. Successful treatments with pharmacological agents like selective serotonin reuptake inhibitors are thought to be safe in children with evidence of improving neuronal plasticity in recovery (10), which is why we preferred using escitalopram. Such benefits are known to be augmented when coupled with psychotherapy.

Most commonly exposure therapy is used, however studies show techniques like counterconditioning, extinction, habituation, change in catastrophic cognitions, development of coping skills, increased self-efficacy, emotional processing, and changes in perceptions of dangerousness are even helpful (11, 12).

Children usually enjoy flowers but here we attempted in highlighting the phobic avoidance that the child developed which is rarely seen or identified. We aimed to provide the child a holistic treatment involving the family and correcting his environment. It is seen that the families either do not know how to handle their child's fears, think it will go away after a "phase" or "stage", or have just grown to accept the fear and have altered their lives to live with it. In this case an intelligent and cooperative child and parent, regularity of CBT sessions, understanding of diagnosis, psychoeducation were the key for success of therapy and recovery.

References

1. Peter M, Herald M, Cor M, Karlijn VDB (2002). Cognitive development and worry in normal children. *Cogn Ther Res* **26**:775-787.
2. Ollendick TH, Hagopian LP (1997). Specific phobias in children. In: *Phobias: A Handbook of Theory, Research and Treatment*. Graham C Davey, ed. London: John Wiley and sons, 201-223.
3. The ICD-10 (1993). Classification of mental and behavioural disorders: Diagnostic criteria for research. Geneva: World Health Organization.
4. Crozier M, Gillihan SJ, Powers MB (2011). Issues in differential diagnosis: Phobias and Phobic conditions. In: *Handbook of child and adolescent anxiety disorder*. McKay D, Storch EA, eds. New York: Springer, 7-22.
5. Joshi SS, Deshpande SS (2014). Flower phobia- a case report. *Indian J Appl Res* **4**(11).
6. Lichtenstein P, Annas P (2000). Heritability and prevalence of specific fears and phobias in childhood. *J Child Psychol Psychiatry* **41**:927-937.
7. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry* **62**:593-602.
8. Strauss CC, Last CG (1993). Social and simple phobias in children. *J Anxiety Disord* **7**:141-152.
9. Thompson EDI, Thomas HO, Lars GO (2009). Intensive treatment of specific phobias in children and adolescent. *Cogn Behav Pract* **16**:294-300.
10. Ian K, Carol R, Chris V (2011). Pharmacotherapy for anxiety disorders in children and adolescents. *Dialogues Clin Neurosci* **13**: 439-452.
11. Bouchard S, Mendlowitz SL, Coles ME, Franklin M (2004). Considerations in the use of exposure with children. *Cogn Behav Pract* **11**:56-65.
12. Kendall PC, Robin JA, Hedtke KA, Suveg C, Flannery SE, Gosch E (2005). Considering CBT with anxious youth? Think exposures. *Cogn Behav Pract* **12**:136-148.