Insecticide Phobia Treated With Exposure and Response-Prevention: A Case Report

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Introduction

Specific phobia is defined as a marked and persistent fear cued by the presence or anticipation of an object or situation. The fear is recognized by the individual as excessive or unreasonable in proportion to the actual dangerousness of the object, activity or situation. Specific phobias differ from agoraphobia & social phobia in that they are usually not accompanied by the generalized anxiety, spontaneous panic, depression and lack of psycho-physiological concomitants as seen in other anxiety disorders. Specific phobias can occur in virtually any situation, but in clinical practice the most common types of specific phobias are fear of specific types of animals/insects, blood injection or injury, dental & medical procedures, urination & defecation in public toilets, heights, noise, thunder, storms or wind, darkness, flying, enclosed spaces, eating particular food or sexual activity (Marks,1987).

Some of the specific phobias have special features of interest that merit separate consideration; one of them is insecticide phobia, which has been rarely described in literature. The case of 36-year old male who presented with insecticide phobia and responded to exposure treatment is reported here.

Case Report

R.S, a married Sikh farmer presented to the outpatient clinic with an insidious-onset fluctuating illness of 10 years duration. His problems started after a mild bout of accidental organophosphorus poisoning while spraying crops in his farm. For the next three years he kept on working normally in the fields apart from the time when insecticides would be sprayed. At such times he would leave the village and stay at his uncle's house in neighboring village till the spraying was over. Over the next few years his symptoms progressed further and he started becoming anxious on smelling insecticides, or at the sight of insecticide containers. He would not allow family members to use any empty insecticide containers around the house and would avoid going near shops selling insecticides. By about seven years after the onset of the illness he started having similar problems on being exposed to industrial fumes or vehicular exhaust. All the above symptoms led to marked difficulty in his day-to-day functioning and marked interpersonal problems between the patient and his family members. He sought treatment from several psychiatrists, physicians and faith healers, but did not improve. There was no history suggestive of hypersensitivity to insecticides, any other anxiety disorder, depression, substance abuse or organic mental illness. Past history, family history, birth and developmental history, and premorbid personality were unremarkable.

A diagnosis of specific phobia was made and he was treated with exposure and response-prevention. The patient and his relatives were educated about the nature of the disorder and behaviour therapy. Their consent for behavioural treatment was obtained. Following a structured analysis of his problems, a hierarchy of anxiety-provoking stimuli was created with the patient's help. Live exposure was carried out for each situation on the hierarchy beginning with minimally anxiety-provoking stimuli and ending with those causing maximum distress. Initial sessions were supervised by the therapist and relatives, followed by self-exposure sessions. After 90 sessions over 3 months the patient became completely asymptomatic. He was able to return to work at the farm and tolerate insecticides without much difficulty. Currently he is continuing with self-exposure sessions and maintaining well.
Discussion

The list of specific phobias is a long one and includes almost every modern day object or situation. However, phobia for insecticides does not seem to have been reported previously. An extensive Medline search yielded only 2 cases of obsessive compulsive disorder with fear of contamination by insecticides and compulsive hand-washing, which responded poorly to systematic desensitization (Frust & Cooper,1970). On the other hand allergic reactions to insecticides or reports of poisoning were very common (Beard et al, 2003; Senanayake 1998). As per DSM IV TR insecticide phobia would probably fit in the natural environment subtype of specific phobias. However, the presentation of this patient was somewhat akin to traumatic phobias, not the least because his problems followed a bout of accidental (albeit mild) organophosphorus poisoning. Traumatic phobias resemble post-traumatic stress disorder in that in both there is fear from specific cues and both are mitigated by exposure treatment. Then again, they differ from PTSD in onset and the prevalence of greater generalized distress (Marks, 1987).

Relatively few people with specific phobias seek treatment, perhaps considering their 'fear' as a part of their normal personality. This is more likely if they can manage to avoid the phobic situation without much difficulty. Unfortunately, for this man the phobic stimulus was an integral part of his daily routine, and the phobic symptoms nearly ruined his life. He was therefore well-motivated for treatment and complied well with the exposure regime. The good response to this treatment was not surprising given that exposure-based treatments are one of the most effective ways of treating specific phobias (Crowe et al 1972; Gelder et al 1973; Marks 1978). Quite possibly the support he received from his family, the relatively long duration of treatment, and the gains he made in terms of improved quality of life also contributed to the good outcome, further emphasizing the importance of these factors in behavioural treatment of phobias.

References

Frust BJ & Cooper A. Failure of systematic desensitization in two cases of obsessive-compulsive neurosis marked by fears of insecticide. Behaviour Research and therapy, 1970, 8, 203-206