

## **Case Report**

### **Blood–Injection Phobia: A Unique Presentation**

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**Abstract:** Recent studies report Blood –Injection Phobia in the Indian Sub-continent to be more prevalent in females (23.86%) than males (11.19%). Although the condition may not seem to hamper daily living, it can prove to be dangerous when presenting with co morbid diseases that need immediate medical help. We present a case wherein the presentation was one of avoidance of the feared situation to the extreme, further emphasising the need for medical professionals to keep Blood Injection Phobia patients on record to assist them in availing required treatments.

**Keywords:** Injection phobia, avoidance behaviour, suicidal attempt

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#### **INTRODUCTION**

One of the most prevalent psychological problems is Phobia. The word “phobia” originates from “Phobos” (Greek) and means ‘fear or terror’. For a long time specific phobias were considered a common but inconsequential pathological problem. However, increasing evidence has shown that specific phobias are clinically significant and relatively understudied disorder. Specific phobia refers to extreme fear of a specific object or situation; fear that is out of proportion to the actual danger or threat. In addition, an individual with a specific phobia is distressed about having the fear, or experiences significant interference in his or her day-to-day life because of the fear. Many people have a fear of a particular object or situation, but most of the time these would not be considered phobias [1].

Needle or injection phobia is a one of the specific phobia affecting approximately 10% of the world population and characterized within the American Psychiatric Association Diagnostics and Statistical Manual of Mental Disorders (DSM-IV) by the presence of fear and the occurrence of avoidance behavior. An individual’s avoidance of health care to eliminate any preconceived exposure to needles is the central premise to the diagnosis of needle phobia [11].

The Diagnostic and Statistic Manual of Mental Disorders, fourth edition provides the most commonly used classification of anxiety disorders such as specific phobias [2].

The DSM-IV has defined five types of specific phobias that include Animal (e.g. spiders), Natural

Environment (e.g. heights, water), Blood- and Injection (e.g. blood, dentists), Situational (e.g. flying, closed spaces) type and “Other Types” such as fears of choking or vomiting, loud sounds etc. The most common specific phobias include fears of spiders, snakes and heights [2].

The manifestation of Injection phobia has three domains: physical (in that person will experience real physical symptoms), psychological (in that person will experience a change in his thought patterns) and behavioral (in that person will find himself behaving differently) [3-5].

Sufferers of injection phobia typically experience temporary palpitations and increased heart rate/blood pressure. Also, fear may be expressed with increased blood pressure, shortness of breath, dry mouth, nausea, tremor, feeling faint or actually fainting, and/or feelings of panic. A full-blown panic attack can occur if he believes that escape is impossible [12].

In experiencing a rush of fear he might find frightening thoughts running through his mind. These could be fears about losing control and/or that he is going to faint. He may have the thought that something awful is going to happen, even if he doesn’t know what that is [2-4].

Subject may feel the need to escape. He may avoid any medical contact for fear of being confronted by needles or injections. Avoidance may extend to any places associated with needles/injections such as

hospitals, doctors' surgeries, blood transfusion units and dentists.

Sometimes avoidance behavior is to the extent of self harm and it's a rarity. This study highlights the extreme step of avoidance behavior by suicidal attempt in order to avoid the injection and surgical procedure.

### CASE REPORT

A 28 yrs old male educated till 8<sup>th</sup> standard hailing from rural area of low socio economic status was referred to the Department of Psychiatry. He presented with H/O suicidal attempt in the hospital restroom soon after consulting a surgeon for his bilateral varicose vein. History revealed that he was having a fear for injections since childhood and due to which he was avoiding consulting a doctor for his health problems from the beginning. The patient presented with chief complaint of varicose veins since 3 yrs and had not consulted a doctor inspite of repeated instructions from the family members and friends. But on this occasion, he was compelled by the family members to seek help. After being advised surgery, he became fearful about the surgical procedure and the injections resulting in him taking an extreme step and attempting suicide in order to avoid the situation. The patient was then referred to the psychiatric department for assessment, during which the diagnosis of injection phobia was made. There was no evidence of symptoms suggestive of mood disorder like persistent low mood, crying spells or long held suicidal ideations. No history suggestive of hallucinatory behavior was noted. A final diagnosis of Specific Phobia- Blood Injection Type was made. Treatment was commenced on SSRI's along with exposure therapy. Gradually symptoms subsided and later he showed his willingness to undergo the surgical procedure. The patient was successful in undergoing surgery. However following discharge, the patient was lost to follow up.

### DISCUSSION

Many people fear injections to some extent, but once that fear becomes persistent, excessive and unreasonable, then the fear becomes a phobia. Injection phobia is the fear and avoidance of receiving various types of injections, and/or of having a blood sample withdrawn through venipuncture. This is a specific phobia and is extremely common yet not very well recognized, affecting 3.5 % to 10% of the population [13].

The etiology of specific phobias is complex and most reports include a history of negative experiences of the feared situation but also other psychological causes as well as biological and genetic factors are described [6, 7].

Early interpretation was presented by Freud who considered phobias to be a defense against internal anxiety [12].

According to the theory proposed by Page, blood- and injection phobia are product of separate but related etiologies. The first is an underlying fearful avoidance that may involve elevated trait anxiety and the second fainting, may involve elevated disgust sensitivity. The anxiety in blood- and injection phobia is related to disgust to a greater degree than to fear [8].

Rachman described the conditioning theory of fear and avoidance in 1968. It states that anxiety is a conditioned response (CR), elicited in the presence of a conditioned stimulus (CS), resulting in avoidance or escape from the situation. This behavior reinforces through the fact that the anxiety disappears because of that behavior. In 1977, Rachman [9] proposed that there are at least three different pathways of acquisition to phobia for blood- and injections;

- Direct learning or conditioning (emergency treatment or forced treatment in childhood)
- Observational learning (watching others showing signs of fear in a particular situation)
- Informational learning (hearing or reading that the situation is dangerous) [9].

One study reports that 46% had conditioning experiences, 32% observational learning and 9% informational learning of how individuals with blood- and injection phobia had acquired their illness [10].

It has been speculated that the most serious form of blood- and injection phobia might be acquired through conditioning. The highlight of our study is extremity of avoidance behavior by *attempting suicide* in the hospital premise. As in this instance, wherein the case presented itself in an emergency psychiatric condition, quick evaluation and identification of the specific disorder prevented further episodes of self harm/ suicidal attempts.

### CONCLUSION

Injection phobia is commonly prevailing in the community and its complication or consequences can be extreme hence early recognition and treating the illness is in need. The focus is especially in instances of liaison psychiatry and the need to keep record of patients with Blood-Injection Phobias so as to avoid diagnostic dilemmas when patients present to other specialists, and ensuring timely medical care for these individuals.

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