

Can a Posttraumatic Stress Disorder be caused by a Traumatic Injury to a Companion Pet?

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Abstract

This case study explores whether an individual can sustain Posttraumatic Stress Disorder (PTSD) subsequent to witnessing serious injury to his companion pet. While walking his dog, a 62 year old man was struck by a car and while lying on the road he was emotionally traumatized by the serious injury to his companion pet dog. Although Mr. SD sustained a brief gap in memory as a result of the blow to his head, he presented with little to no cognitive residuals from the mild traumatic brain injury. Instead, he predominantly experienced significant flashbacks of his dog being injured, hyper vigilance, avoidance of the injury site and leaving his house, and fear that his dog would be reinjured among other symptoms. The case study is analyzed relative to the Diagnostic Statistical Manual of Mental Disorders, 4th edition (DSM-IV-TR) diagnostic criteria for PTSD. Currently the DSM-IV-TR limits the PTSD diagnostic Criteria A to people only, using a specific requirement that the traumatic injury take place to a "self" or "others" (American Psychiatric Association, 2000) [1]. This case study challenges the current criteria and justifies an expansion of the PTSD's Criteria A to include additional stressor events, such as companion pet loss.

Keywords: PTSD; Trauma; Companion Pet; Dog; Grief Loss; Mild traumatic brain injury; and Neuropsychology

Introduction

Post-traumatic Stress Disorder (PTSD) was initially conceptualized during the 1970s and later included in the Diagnostic and Statistical Manual of Mental Disorders, 3rd edition (DSM-III; American Psychiatric Association, 1980) [2]. The DSM-III's diagnostic criteria for PTSD were general and unspecific, requiring that the event be universally distressing and unusual to most people's life experience (1980) [2]. With the release of the DSM-IV and the DSM-IV-TR, the diagnostic Criteria A were refined to include a list of qualifying traumatic events that could cause PTSD. Criteria A now require the traumatic event be a threatened or actual death or serious injury to the self or others (American Psychiatric Association, 2000) [1]. It further requires that the stressor lead to impairment in multiple areas of a person's functioning (2000) [1].

PTSD was born out of the need to describe the harmful psychological and physiological symptoms of veterans returning from the Vietnam War. Despite its narrow origin in war trauma, PTSD was later applied to a wider range of individuals exposed to trauma including but not limited to accidents, natural disasters, childhood abuse, domestic violence, rape, and assault. A consistent factor in the aforementioned examples of trauma is that loss or threat of loss is strictly reserved for human beings, at the exclusion of other living beings such as companion pets. This human requirement stems from the DSM-IV-TR diagnostic entry criteria for PTSD which defines the victim as a person who has experienced the traumatic event (American Psychiatric Association, 2000) [1]. It further emphasizes the human requirement in stating that actual or threatened death must occur to "self" or "others" (2000). This definition precludes other living beings such as companion pets.

Companion pets occupy a significant role in American society. With approximately 60% of households owning companion pets, a 2003/2004 [3,4] Annual National Pet Owners Survey estimates there are more pets than people in the United States Hall et al. [4]. The emotional bond developed between owners and their pets is strong, with most viewing their pets as members of their family Cohen [5]. Pets are also credited with improving both the mental and physical health

of their owners. Several studies have confirmed the positive physical benefits pets bring to patients by reducing the risks of coronary heart and cardiovascular disease Morley [6].

Offering emotional benefits of companionship, affection, and unconditional love, pets provide their owners increased security and well being Brown et al. [7]. Pets are also credited with increasing trust and decreasing occurrences of depression and anxiety Morley [6]. It has further been postulated that owners who lose pets may suffer distress and bereavement similar to losing a family member Brown et al. [7].

While significant research exists on the benefits of companion pets, very few studies have explored the psychological sequelae of actual or threatened companion pet loss and the relationship to PTSD. Forced abandonment and/or loss of a pet during a natural disaster were found to increase the risk of acute stress and PTSD while controlling for loss of home Hunt et al. [8]. In one study, 65 predominantly Caucasian female pet owners who survived Hurricane Katrina were evaluated for signs and symptoms of psychological distress. Results showed that pet loss was a significant predictor of acute stress, peritraumatic dissociation, and PTSD symptom severity Hunt et al. [8]. In contrast, death of a companion pet was found to cause significant symptoms of grief in owners due to attachment but rarely severe psychopathological reactions such as PTSD Adrian et al. [9]. In this study, 106 participants, survivors of pet loss, were recruited at a veterinarian clinic. Results showed most owners of deceased pets experienced common signs of grief and bereavement but lacked more severe pathology such as PTSD Adrian et al. [9]. A factor that may have obviated the experience of

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traumatic symptoms was that over 50% of participants lost their pets to natural causes versus traumatic loss. In fact, traumatic loss or injury to an animal was not indicated and researched in the study.

Based on the paucity of research on the relationship between psychological sequelae and companion pet loss, this case study explores the question: Can one experience PTSD symptoms following a traumatic event to a beloved companion pet? Furthermore, this case study raises questions regarding limitations of the DSM-IV-TR's use of a human requirement as "person", "self", and "other", in the PTSD diagnostic Criteria A.

Case Study

A 62 year old Caucasian gentleman was referred for neuropsychological and psychological testing following an automobile accident. The case study was conducted through a review of the medical records, two clinical interviews, behavioral observations, and comprehensive neuropsychological and psychological evaluations.

On May 8th 2006, Mr. SD and his dog, a Basset Hound, were pedestrian victims of an automobile accident. The circumstances surrounding the accident were obtained in a clinical interview with Mr. SD and corroborated by a witness and paramedics. The witness reported to paramedics that Mr. SD stepped into the crosswalk and was struck by an oncoming vehicle on the left side of his body. Following the blow, he fell to the ground and remained unresponsive for approximately 5 minutes. Medical records document his inability to remember the event, indicating a dense posttraumatic amnesia of approximately 15 minutes.

In our examination Mr. SD was unable to remember the details of the accident. However, he was able to recall the preceding event of commencing his routine of a midmorning walk with his dog. His next memory consisted of lying on the ground, feeling pain on the left side of his body, and "hearing his dog crying". Unable to see her and come to her aid, he felt great anxiety that she was seriously injured and recalled feeling more worried for her than him. His anxiety continued to rise when a police officer informed him his dog would go to the animal shelter if he could not provide the contact information for a person that could take care of his dog.

Paramedics transported him to the hospital via ambulance where Mr. SD was diagnosed with a mild traumatic brain injury (MTBI) including a subarachnoid hemorrhage. Radiological studies, including a non-contrasted head CT, revealed a right brain contusion with very small amounts of blood present in the right frontal and right parietal lobes, specifically the anterior middle fossa and sylvian fissure areas. In addition, the scans showed swelling of the right parietal sulci.

Over the course of one year following the accident, Mr. SD complained of several physical, cognitive, and emotional difficulties. Physical complaints included decreased energy level, sleep maintenance issues, extreme headaches, balance problems, and left hip pain. His preexisting chronic orthopedic problems were exacerbated to a level rendering Mr. SD unable to work professionally and qualified him for Social Security Disability.

Cognitive complaints included intermittent difficulties with word finding, decreased short-term memory and forgetfulness, and spelling and numbering errors. Results from the neuropsychological examination documented that Mr. SD possessed superior intellectual abilities with scores placing him well above average in the areas of verbal and spatial processing, as well as attention, memory, learning, and

executive functioning. Thus, from a cognitive perspective no significant deficits were found. Furthermore, he was able to independently manage his activities of daily living.

Mr. SD emotional distress was quiet salient. During the initial interview, Mr. SD reported feeling increased fear, vulnerability, and helplessness specifically surrounding his companion dog. Furthermore, he reported feeling upset often, avoiding the location of the accident, and experiencing ongoing "flashbacks of hearing the dog crying and lying on the street helpless". To cope with his feelings of panic around automobiles, Mr. SD isolated himself and his companion dog at home, for long period of time following his accident.

Upon further exploration of Mr. SD's recent psychological history, grief, loss, and worry emerged as constant themes. Two years prior to Mr. SD's accident, his life partner died of a terminal illness. During the last few months of his partner's life, Mr. SD adopted and cared for his partner's dog, the Basset Hound. Growing attached to his pet, he relied on her for support and companionship through his grieving process. He reported "emotionally, I could not have made it without her". Further exacerbating his fear of losing his companion pet was the history of an untimely and violent death of another companion dog, the Basset Hound's brother. Mr. SD held himself responsible for this dog's death, allowing the dog out of the house without a leash when he ran into the street and was killed by a moving vehicle. Although he did not witness the death of this dog, this history of untimely loss and bereavement likely predisposed Mr. SD to a heightened vulnerability for the potential loss of the remaining dog.

Psychological examination results corroborated the Mr. SD report of emotional distress. Clinically significant elevations were identified on his test results for the Ruff Neurobehavioral Inventory's Ruff and Hibbard [3]. Posttraumatic Stress Disorder scale (PTSD Post Morbid T Score = 71 versus Premorbid T Score = 56) and the Millon Clinical Multiaxial Inventory-II's Millon et al. [10]. Anxiety scale (Scale Score = 80). Additional elevations on the MCMI-II were Dependent (Scale Score = 84), Depressive (Scale Score = 79), and Avoidant (Scale Score = 79). This combination of Mr. SD's longstanding character traits may have also contributed to Mr. SD's vulnerability to PTSD symptoms.

Were the criteria for PTSD met?

To further explore the symptoms of PTSD, a post-test follow-up clinical interview with Mr. SD was conducted. Through behavioral observations and specific signs and symptoms of trauma, a clear picture emerged meeting most of the diagnostic for a diagnosis of PTSD.

The following analysis steps through the DSM-IV-TR's criteria for PTSD and juxtaposes it to Mr. SD's presentation and symptomatology. First, to meet the DSM-IV-TR's diagnostic criteria for PTSD a person must experience a traumatic event involving actual or threatened death or serious injury to self or others (American Psychiatric Association, 2000) [1]. The person must also react with overwhelming fear or helplessness (2000). Both Mr. SD and his dog endured an automobile accident that involved serious injury and threatened death. However, Mr. SD denied fears or even thoughts that he was going to die. Rather he worried that "his dog was seriously hurt" based on hearing its "loud" and "close" crying sounds. Furthermore, he reported feeling helpless due to being unable to assess his dog's status following the accident.

As to the second diagnostic criterion, the person must re-experience the trauma in one or more ways, such as flashbacks, dreams, or intense psychological distress among others listed in the DSM-IV-TR (American Psychiatric Association, 2000) [1]. Mr. SD

was re-experiencing the traumatic event in the form of “flashbacks” of “lying helpless on the street” and feeling a “great deal upset” at being unable to “help his dog.” Upon sharing this experience with the neuropsychologist, he also exhibited signs of intense psychological distress in the form of tearfulness and crying openly as he was recalling the threatened loss of his companion dog.

Third, the person must deliberately avoid circumstances surrounding the trauma and experience numbing of response in three or more ways (American Psychiatric Association, 2000) [1]. Mr. SD avoided the location of the accident, felt his future was foreshortened, and had reduced interest in taking his dog for a walk which he had previously enjoyed. He also exhibited signs of numbing with feeling “unbalanced, light headed, and less able to get out of the way” if confronted by a vehicle while walking his dog. He communicated fears that he would be unable to move quickly or agilely enough to avoid he and his dog being struck again.

Fourth, the person must experience persistent symptoms of increased arousal (American Psychiatric Association, 2000) [1]. Mr. SD reported sleep disruptions, panic and hyper vigilance since the accident. He tended to feel unsafe out of the home, and overwhelmed and anxious when confronted with automobile traffic both as a pedestrian and when traveling in a vehicle.

Fifth, criteria and symptoms must be present for greater than one month and cause clinically significant distress or impairment in social, occupational or other important areas of functioning (American Psychiatric Association, 2000) [1]. At the time of the assessment, Mr. SD had been experiencing intense symptoms of PTSD for more than 1 year. His anxiety and flashbacks fueled his isolation which negatively impacted his social relationships.

Discussion

Mr. SD's symptoms, behavioral observations, and test results pointed to a diagnosis of PTSD, however, we were unable to render this diagnosis based on the DSM-IV-TR's diagnostic entry Criteria A of a threat to “self” or “others” (American Psychiatric Association, 2000) [1]. Mr. SD repeatedly stated that he did not fear losing his life in his accident, instead feared for the life of his beloved dog. He was traumatized by the life threatening injuries to his companion pet characterized by hypervigilance, avoiding the scene of the injury, flashbacks, and feeling emotionally numb. Nevertheless, the persistence of Mr. SD's trauma symptoms, suggest he was quite traumatized by the injury to his pet and this threatened loss was consistent with PTSD.

This case study challenges the DSM-IV-TR's limited application of victimhood to humans and in our opinion warrants consideration for expanding the criteria to include companion pets for which there is a strong emotional attachment. The recommendation to expand the diagnostic criteria for PTSD is not a new one. Kilpatrick et al. [11] argued the importance of reconsidering Criteria A to ensure an accurate and comprehensive diagnosis. Specifically, they recommend that Criteria A be retained; however, with a statement indicating the “list of events is not exhaustive” and other stressors not stated may also lead to PTSD Kilpatrick et al. [11], North et al. [12]. This addition would provide the flexibility to capture people who have symptoms to warrant services yet do not meet the DSM-IV-TR's Criteria A (American Psychiatric Association, 2000) [1].

Mr. SD's strong emotional attachment to his companion pet was a central feature in this case. The companion dog may have represented a transitional object, one of the few remaining connections he had to

his deceased partner. Mr. SD's statements such as “emotionally, I could not have made it without her,” are suggestive of Winnicott's concept of transitional object phenomena in terms of using symbols to buffer the stress between one's inner and external worlds Winnicott [13].

“Loss throws the inner world of the sufferer into turmoil” Holmes [14]. It can be an assault on the security of life as we know it. A beloved pet can emotionally shield us from this attack providing comfort where otherwise none exists. A transitional object such as a companion pet can help to provide a predictable harbor of safety as someone makes their way from one life phase to the next. It helps augment feelings of personal control and continuity of the self. However, threatened loss of the transitional object can understandably trigger overwhelming panic and traumatization as the person is left with little way to buffer their anxiety and grief.

Mr. SD's initial refusal to be transported by ambulance to the hospital is understandable as he wanted to ensure his beloved dog received the care she deserved. It was only after he was assured that his dog would receive the appropriate care, that he consented to be taken to the hospital. Fortunately, his dog recovered.

Even though Mr. SD was not given a formal diagnosis of PTSD, the treatment recommendations included psychotherapy for the treatment of his symptoms. Mr. SD represents an example of an individual who sustained both a mild traumatic brain injury (MTBI) as well as a PTSD. The MTBI was diagnosed on the basis of the dense gap in memory and the positive neuroimaging. It is important to point out that the etiology of the PTSD is not the same as the etiology for the MTBI Sbordone and Ruff [15]. That is, the MTBI was caused by the impact sustained to his head that resulted in a post-traumatic amnesia. The PTSD was caused by his traumatic realization, once Mr. SD was no longer amnesic, but fully cognizant of his dog's injuries. It is also noteworthy that Mr. SD did not develop a post-concussional disorder, but regrettably the PTSD persisted at a pronounced level. In sum, as to the question – can one develop PTSD from witnessing a trauma to a pet companion – our case seems to support this occurrence.

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