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**Acute OCD in veterans with PTSD**

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Abstract

Background. Posttraumatic obsessions have been reported in a few studies and case series. However, as the patients described were chronic, and the onset of their posttraumatic stress disorder (PTSD) and obsessive-compulsive disorder (OCD) symptoms was dated some time previously, this hampers interpretation of the temporal, biological and psychological relationship of OCD following traumatic events. In the current paper we describe the emergence of posttraumatic obsessions a short time following the exposure to a traumatic event.

Method. The emergence of posttraumatic obsessions, a few months after exposure to trauma, is described for five veterans. All the veterans participated in combat during the summer of 2006 (in the Second Lebanon War).

Results. For all cases, OCD symptoms were initially related to the trauma but later became generalized and independent.

Conclusions. The course of the symptoms suggests a potential environmental role in the development of OCD following an exposure to traumatic event.
Acute OCD in veterans with PTSD

Introduction

Posttraumatic stress disorder (PTSD) is a severe and debilitating disorder, which affects close to 7% of the population (1) and emerges among 10-20% of those who were exposed to traumatic events (2). Obsessive-compulsive disorder (OCD) affects about 2% of the general population and is characterized by repeated intrusive thoughts (obsessions) and repetitive actions (compulsions). Several studies, case series and case reports have described the emergence of both PTSD and OCD following combat (3, 4) or other violence-related trauma (5).

PTSD and OCD share several common elements in symptomatology. Both are characterized by repeated intrusive thoughts; both include avoidance behavior that severely interferes with daily functioning and is directed by the need to avoid any cue, object or place that causes distress; and both involve compulsions that are performed in order to reduce anxiety (6, 7). From an etiological perspective, both PTSD and OCD are associated with classical conditioning to an anxiety-provoking stimulus; this connection between stimulus and anxiety, in turn, is reinforced by behaviors that reduce the anxiety (6, 8). In addition, both PTSD and OCD include negative thoughts and/or memories that evoke intense anxiety, which leads to labeling of stimuli as threatening (9); and both involve the serotonergic system, as the hypersensitivity to specific cues and the discomfort associated with it have been postulated to be mediated by serotonin (3, 8).

In previous reports on posttraumatic obsessions, the patients described usually presented with a chronic condition in both disorders, which hampers attempts to
sequence the disorders (i.e. does PTSD start first and then OCD, or vice versa?). In
the current paper, we report on five combat veterans who participated in a war (the
Second Lebanon War, July-August 2006). All veterans were interviewed within a few
months following exposure to a traumatic event, thereby allowing us to examine
closely the course and the sequence of the development of PTSD and OCD following
combat trauma.

Materials and Methods

This case series includes five veterans who participated in combat (the Second
Lebanon War). All of them participated actively in the battles. Four were soldiers
during their mandatory service and one was a reserve soldier. All were referred for
treatment at the trauma unit in the Chaim Sheba Medical Center's Psychiatry Division
due to PTSD. Participants were interviewed by two senior psychiatrists (N.N. and
J.Z.) and were specifically asked about OCD symptoms. All participants fulfilled
DSM-IV criteria for both PTSD and OCD. All participants had good insight for
their OCD symptoms, yet as many of OCD patients they did not come forward
on their symptoms, only after specifically being asked for it, their pathology was
revealed.

Case Descriptions

Case 1
Mr. E is a 21–year-old single male who participated in the war during his mandatory service. In his most significant event during the war, he witnessed another soldier, his friend, being shot in his head. Some time after this event, Mr. E was wounded in his leg, evacuated for medical treatment, and did not return to the battlefield. He reported that the image of his friend being shot in his head recurs repeatedly. During his hospitalization, Mr. E was diagnosed as suffering from posttraumatic symptoms, which included intrusive thoughts of the combat events and intrusive images of his friend being shot, flashbacks, nightmares, difficulties in falling asleep and hypervigilance. He also started avoiding bushes, crowded places such as clubs, malls, and grocery stores, avoided eating meat, and started to fear the dark.

After his discharge from the hospital, Mr. E started working in a bakery. He became bothered by the dirt and dust that were entailed in his work, and started to obsessively clean the floor at work and at home. Mr. E also started washing his hands obsessively a few hours a day which impaired his work significantly, and reported an unexplained urge to do this. Mr. E reported no past concerns with dirt or dust, despite difficult sanitary conditions during his military service. In addition Mr. E did not have any history of other psychiatric disorders prior to the traumatic event and no history of OCD in the family. Mr. E also did not have any substance misuse in the past, during his military service, nor when diagnosed.

Case 2

Mr. A is a 21-year-old single male, living with his parents, who participated in the war during his mandatory service. His most significant event during the war was
loading bodies of dead soldiers. Just before the end of the war, he sustained a missile injury and was evacuated to a home front hospital.

While still in hospital, Mr. A suffered intrusive memories of a soldier who was killed nearby him, and of the bodies he had to pack. He also started washing his hands excessively in reaction to the mental image of bodies he had to touch with his hands without being able to wash them. A few weeks later, after his discharge from hospital, Mr. A was referred for psychiatric treatment. He reported nightmares and sleep disturbances, memory and concentration difficulties, high levels of stress and anxiety, depressed mood, anhedonia, and avoidance of friends and social activities. He also described severe outbursts of rage including throwing and breaking objects.

At this point, his urge to wash his hands was no longer related to mental images of the traumatic event, but to a disgust of dirt. Mr. A also described fear of contamination, avoiding public toilets, and avoiding touching garbage and dirt. His hand washing increased to about twenty times per day, which lasted a few hours each day and caused severe distress and functional impairment. Mr. A had no history of OC symptoms, OCD, or any other psychiatric disorder prior to the traumatic event and, there is no history of OCD in his family. In addition, Mr. A did not have any past or present substance misuse.

Case 3

Mr. O is a 21-year-old single male, living with his parents, who was a military officer in a combat unit, as part of his mandatory service. During the war, Mr. O witnessed many of his friends being wounded or killed and was exposed to heavy artillery
bombardment and missile attacks. He was injured in his head by a missile just before the war ended.

During his hospitalization, Mr. O underwent head surgery and had to take care not to contaminate the surgical site. In response, he started washing his hands frequently in order to maintain good hygiene. However, eight months later, Mr. O still reported frequently washing his hands, even after the head wound had long healed. At this point, Mr. O described his washing behavior as an automatic action, triggered by an urge to wash hands, and followed by a feeling of relaxation after completing the action. In addition to washing, he also feared dirt and avoided public toilets. He also reported repeatedly checking whether the front door and gas outlet are closed, and has urges to check whether his wallet and other items are still in his bag. **His symptoms go on several hours a day and cause severe impairment to his function.**

Mr. O's PTSD symptoms include severe intrusive thoughts such as repetitive images, and dissociation conditions in which he hears incoming missiles and feels as though he is in combat again. He also avoids bushes and crowded places, and suffers from nightmares and sleep disturbances. **Mr. O reported no past concerns or OC symptoms, no history of other psychiatric disorders prior to the traumatic event, and no substance misuse. In addition, he reported on no history of OCD in the family.**

**Case 4**

Mr. M is a 21-year-old single male who participated in the combat during his mandatory service. The most significant event he experienced was evacuating the
body of a soldier killed by a missile hit. In the ensuing two weeks, Mr. M experienced repeated flashbacks of the smell of the blood, and felt as though he himself smelled of blood and sweat. He also felt an urge to clean his hands and repeatedly wiped his hands with moist towels.

After the war the symptoms worsened and were accompanied by PTSD symptoms. These included flashbacks of missile explosions and the smell of blood (which made him feel as though he was in the war again), sleep disturbances and nightmares. He described waking up sweating and with his heart pounding. Mr. M reported distress when he is in crowded places, and avoids leaving home, being with friends, or any other activity.

Along with his PTSD symptoms, Mr. M also developed, for the first time in his life, OCD symptoms. These symptoms include smelling everything before he touches it, in order to make sure it doesn’t smell of blood. Additionally, he avoids eating unless the dishes smell of soap, and therefore checks all dishes before eating. Mr. M also reported taking long showers, washing his clothes frequently, and avoiding wearing the same shirt two days in a row, in order to avoid malodorous cloth. His rituals continue several hours a day with significant functional impairment. Mr. M reported no past concerns or OC symptoms, no history of other psychiatric disorders prior to the traumatic event, and no substance misuse. In addition, he reported on no history of OCD in the family.

*Case 5*
Mr. L is a 22-year-old single male who was drafted as a reserve-duty soldier to participate in the same war. During his service, he was exposed to severe artillery bombardment that caused many casualties. In another event of severe bombardment, he was wounded in the head, although he remembers the event despite losing consciousness.

After his hospitalization, Mr. L suffered from PTSD symptoms, including intrusive memories and images of the war, nightmares, sleep disturbances, feelings of detachment from others, numbness, avoidance of crowded places, and outbursts of anger in which he throws and breaks objects.

In the interview, Mr. L also described OCD symptoms of uncertainty and checking, which also started after the war. He repeatedly checks whether the door is locked and whether the boiler is off. He described the checking as "continues a few hours a day with severe interference with daily functioning," being motivated by uncertainty, and not out of fear that someone might break into his home. Mr. L had no history of OC symptoms, OCD, or any other psychiatric disorder prior to the traumatic event, and there is no history of OCD in his family. In addition, Mr. L did not have any past or present substance misuse.

Discussion

This case series describes five Israeli veterans who were diagnosed with both PTSD and OCD following combat trauma, with no prior personal or family history of OCD or other psychiatric disorder. The uniqueness of the current study is that the diagnosis
of both disorders was performed within several months after the traumatic events, enabling the patients to recall more accurately the onset and development of the disorders. In all of the cases described, the onset of PTSD and OCD was simultaneous, and occurred soon after the event. According to the veterans' reports, OCD symptoms were initially related to the narrative of the trauma they experienced, but shortly after, in the course of development of the disorders, the OCD became independent, expanding and generalizing to non-trauma-related cues.

The cases described in this series demonstrate a psychiatric link between trauma and OCD symptoms that was already described 30 years earlier (10). However, while it has been suggested previously that the recurrent ideas, thoughts, and images of OCD overlap with the recurrent intrusive recollections of PTSD (4, 11, 12, 13), in the current cases the content of the obsessions are quite different from the intrusive symptoms of PTSD. The thoughts, flashbacks or psychological distress in response to reminders of the trauma in PTSD were different from the general obsessive thoughts at the OCD side of the diagnosis, which included fear of contamination, disgust of dirt, and doubt. Moreover, in this case series, the generalized OCD cues were typical of OCD (e.g. garbage, excessive washing, public toilets, etc). Similarly, the compulsions were typical of OCD, e.g. washing and checking, and unrelated to the trauma.

Understanding posttraumatic obsessions as a phenomenon directs focus to the possible biological mechanism that might be associated with the development of OCD after exposure to mental trauma. The cases described in the current paper suggest that further exploration is needed in order to better understand the relationship between
PTSD and OCD. The biological underpinning of this, which results in OCD symptomatology (rather than other responses, e.g., depression etc.) needs to be further explored. The posttraumatic obsession provides a unique opportunity to study the onset of OCD as it is a clear time point for the researcher to hang on to. Hence, researchers who have a specific interest in OCD could get a not-yet-described specific insight regarding the development of OCD by examining carefully acute cases of PTSD. The question to be studied further is how much posttraumatic obsessions represent non-traumatic obsessions. In any case, PTSD patients might provide a window for discovering the development of OCD.
References


