Post Traumatic Stress Disorder with Psychotic Features

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**Aim.** To study the combined course and interaction of post-traumatic stress disorder (PTSD) and psychosis through detailed case studies.

**Method.** We described 6 case studies of Israeli veterans with PTSD and psychosis, who were referred to our Center for the evaluation of their psychiatric status.

**Results.** All the patients developed PTSD shortly after the exposure to a combat/military trauma. Psychosis appeared after months or even years, sometimes after a trauma-related trigger. Psychotic symptoms, such as delusions or auditory hallucinations, were usually paranoid or depressive and related in content to the traumatic experience.

**Conclusion.** The combined course of PTSD and psychotic disorder may reflect two distinct disorders, but in some cases it seems justifiable to make a diagnosis of PTSD with psychotic features. In addition, it seems that in certain conditions, traumatic exposure and/or PTSD may serve as a trigger for psychosis.

**Keywords:** combat disorder; comorbidity; depression, reactive, psychotic; psychotic disorder; psychosis; PTSD, stress disorder; post-traumatic; war

Post-traumatic stress disorder (PTSD) is by definition associated with traumatic experience. From a conceptual and clinical point of view, PTSD reflects continuous psychiatric consequences of an exposure to trauma.

According to the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM IV) (1), PTSD is classified as an anxiety disorder. It occurs after a traumatic event endangering the existence of a person or of those around him/her. Consequently, expressions of this disorder may have the characteristics of anxiety, obsession, phobia, disassociation, or depression. Furthermore, other disorders, usually depression and anxiety (2,3), frequently accompany PTSD.

This emphasizes the complexity of post-traumatic psychiatric comorbidity in which PTSD, although not an exclusive disorder, occupies a central role. It also stresses the need for further research on the syndrome and disorders that accompany it, as well as their interrelationships.

Less characteristic and poorly investigated symptoms of PTSD are those of a psychotic nature. Several case reports (4-8) described patients with PTSD related to traumatic war experiences who had psychotic symptoms, such as visual and auditory hallucinations, or paranoid or depressive delusions. Mueser and Butler (5) described 5 PTSD patients with hallucinations and also reported on a relatively large group of 20 war veterans with PTSD who had more psychotic symptoms (hallucinations, delusions, and bizarre behavior) than similar subjects without PTSD (9).

Recent studies on American (10,11) and Croatian (12) war veterans, with samples of 53, 45, and 41 veterans, respectively, found a substantial number (20%-40%) of PTSD casual ties with comorbid psychotic symptoms (e.g., delusions and hallucinations). In the majority of these cases, psychotic symptoms were associated with depression or depressive disorder. The content of psychotic symptoms was usually related to the traumatic events, and that these symptoms were different from disassociative symptoms in PTSD, such as flashbacks. As to the suggestion that some of these patients could be diagnosed as "PTSD with psychotic symptoms", the possibility of comorbid psychotic disorders was not excluded in all cases.

Since the usual association with traumatic exposure is clearly defined in PTSD, but not in other psychotic disorders — schizophrenic or affective, diagnostic issues play a significant role in deciding on the status of pa-
tient's claimed mental disability and its associated compensations.

We describe 6 PTSD patients with psychotic symptoms to demonstrate diagnostic problems involved. All the patients were casualties of military activities and were referred to our Center for diagnostic and evaluation of their mental disability. They all underwent psychiatric assessment according to DSM-IV criteria, as well as psychological evaluation.

Case Studies

Case No. 1

A 39-year-old man, married and a father of two children, participated in the Lebanon War as a tank crew member when he was 25. An artillery shell had hit the tank and he was thrown by the blast, while other crew members were killed. During the first few days after the traumatic event, he developed psychotic-like symptoms with low threshold to stimuli, sleep disturbances, and avoidance of exposure to weapons. These symptoms were integrated later on in a clinical picture of PTSD. After several weeks, he started to experience attacks of auditory hallucinations. He heard the voices of his dead comrades accusing him of having betrayed them by leaving them to remain alive. Further more, these voices commanded him to join them by committing suicide. He also had delusions of persecution. The patient has been under treatment with medication (including anti-psychotic drugs) and psychotherapy, but only with partial remissions. His clinical picture, after all these years, is chronic PTSD with exacerbating occurrences of psychotic symptoms.

Case No. 2

A 31-year-old Druze man, married and a father of three children, participated at the age of 20, in a fierce battle during the Lebanon War, in which he was wounded by splinters. Several of his comrades were killed in that fight. During the weeks following the event, symptoms of PTSD were observed. He was overwhelmed by memories and nightmares of the battle, vari ous fears, and increased suspicion and tension. He had difficulties in concentration, sleep disorders, and decreased mood. He was later diagnosed as having a chronic PTSD. At the age of 28, with out any apparent cause, his mental condition deteriorated. He suffered from persecutory delusions and auditory hallucinations in which disguised terrorists followed him in order to harm him, saying that he would be killed in a scene of persecution. He was hospitalized because of these symptoms and suicidal thoughts. He was treated with anti-psychotic drugs and his condition improved. His psychotic symptoms disappeared, but the post-traumatic symptoms remained, although with decreased severity.

Case No. 3

A 32-year-old single man participated in the Lebanon War when he was 19. A mortar hit a strong hold where he was posted and several of the soldiers around him were injured. Immediately after the event, he became totally occupied with traumatic experience. He was flooded with feelings of guilt because he ran for shelter rather than helped his injured colleagues. He had diffi culties falling asleep and would often wake at night because of nightmares. After he could not function as a combat soldier any more, he was deployed to the kitchen, where he also had difficulties performing his duties. However, in spite of several breaches of discipline that occurred after the event, he succeeded in completing his compulsory military service.

He continued to suffer from PTSD and it significantly affected his functioning in the village setting. He was unable to function at work and was dismissed from several jobs because of the difficulties with concentration, restlessness, and frequent outbursts. At the age of 24, during his reserved duty on the border with Israel, he had paranoid delusions of terrorists entering the strong hold in order to kill him. These delusions were accompanied by auditory hallucinations of terrorists, ritualizing and cursing him and threatening his life. Overcome with psychotic anxiety, he deserted. After he had been caught, he was diagnosed and hospitalized in a psychiatric ward. He was treated with anti-psychotic drugs and attained partial remission. Since then, he had to be hospitalized several times due to exacerbations of paranoid schizophrenia. He was diagnosed as suffering from PTSD and schizophrenic disorder, although the psychotic symptoms of ten obscure the post-traumatic symptoms.

Case No. 4

A 43-year-old man, married and a father of four children, took part in the Yom Kippur War when he was 19 years old. He fought in an elite combat unit in the battle for the access to the City of Suez. During this violent fight, most of his comrades were inured, but not him. After the battle, soldiers of another unit found him in a disoriented state, wandering among a mess in the field. He recovered after receiving first aid and was sedated to a unit which, among other activities, was engaged in gathering the bodies of dead soldiers. His mental state rapidly deteriorated. He had attacks of pronounced restlessness and fear, persisting thoughts of the horrors of the war, sleeplessness, and depression.

He was treated in the military setting (rest and therapeutic conversation), after which he somewhat recovered, but continued showing post-traumatic symptoms. Over the following years, he was engaged in military education and training, which was repeatedly bringing back the memories of the battles and his fallen comrades. Many years later, on the 20th Anniversary of the Yom Kippur War, he was admitted to a psychiatric hospital in a condition defined as psychotic. He was in deep depression, had auditory hallucinations—his dead comrades accusing him of remaining alive and ordering him to join them by committing suicide. He was treated with anti-psychotic and anti-depressant drugs. His condition improved considerably. After that, he suffered only a single exacerbation of psychotic depression on a necessary hospitalization, although he has been continually suffering from the PTSD.

Case No. 5

A 28-year-old single man participated in the dispersal of violent demonstrations in the West Bank, during the “Intifada”. He was 19 at the time, serving a compulsory military service. In a combat action, he shot and killed a member when he was 25. An artillery shell had hit the strong hold where he was posted and several of the soldiers around him were injured. Immediately after the event, he became totally occupied with traumatic experience. He was flooded with feelings of guilt because he ran for shelter rather than helped his injured colleagues. He had diffi culties falling asleep and would often wake at night because of nightmares. After he could not function as a combat soldier any more, he was deployed to the kitchen, where he also had difficulties performing his duties. However, in spite of several breaches of discipline that occurred after the event, he succeeded in completing his compulsory military service.

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killed a young Arab. Immediately after and during the investigation of the event, he suffered an acute anxiety reaction. Several days later, he began to feel in tense fear and have outbursts of rage, persisting thoughts, and sharp images of the event in which he saw the face of the man he had shot. A few months after his discharge from the military service, while working with Arab laborers on a building construction site, he was seized with delusions that they intended to kill him to avenge the death of the Arab whom he killed in the “Intifada.” These delusions extended to all Arabs that he met on the streets. As he started to suffer from in tense fear, he shut himself at home. He also had auditory hallucinations in which he heard “Arab voices” threatening his life. He spent more and more time at home, completely shut off, and refused treatment. Much later, he asked for treatment and received anti-psychotic drugs, but the response was only partial. He was diagnosed as suffering from PTSD and schizoaffective paranoid disorder.

Case No. 6

A 28-year-old single man served in a special combat unit and participated in a complex operational exercise at the age of 21. Due to a mishap, several of his comrades got wounded or killed. He was actively engaged in the event and tried to render assistance in the care of the wounded. During the several-day investigation of the incident, he began having persistent thoughts of the event, nightmares, insomnia, tension, restlessness, nervousness, and depressive mood, associated with strong feelings of guilt. These symptoms integrated into a prolonged PTSD. Over time, his condition gradually improved. Some post-traumatic symptoms of low severity remained, but he was able to be active in several as parts of his life. Several years later, close to the anniversary of the mishap, Prime Minister Yitzhak Rabin was assassinated, and the patient developed a psychotic attack with manic features. He had delusions of grandeur, psychomotor restlessness, logorrhea, and flight of ideas with a chaotic looseness. He was treated with anti-psychotic drugs and mood stabilizers. After some time, he became depressed and was diagnosed with an affective bipolar disorder. The affective symptoms in his clinical picture were pronounced, but it was possible to discern the presence of parallel post-traumatic symptoms.

Discussion

These case studies demonstrate the problem of the differential diagnosis of PTSD with psychotic symptoms. All of our cases developed PTSD after the exposure to a severe traumatic experience associated with war or other military activity. At a later stage, after several months or even years, psychotic symptoms appeared, sometimes after a stress factor related to the past traumatic experience. Psychotic symptoms included persecutory delusions (with “persecutors” trying to harm the patient in revenge for the killing he did in war) or auditory hallucinations (in which voices and threats of “persecutors” were heard). In some cases, the auditory hallucinations had a depressive content, with comrades killed in war or dying the patient to join them by committing suicide.

From the dynamic point of view, the described psychotic contents represented two known aspects of PTSD. The first is the patient’s feeling of severe guilt (i.e., survivor’s guilt) associated with depression and suicidal thoughts. The second is suspicion, even a paranoid attitude, which is frequently seen in post-traumatic patients. It is possible that under certain, individually specific conditions, such as nature and intensity of the traumatic exposure, continuation of PTSD of high intensity, personal identity structure prone to psychotic breakdown, trigger factors, etc., the defense and coping mechanisms break down and the described contents attain the level of psychotic mani festations in the form of delusions and hallucinations. In deed, in a recent study, Hummer et al. (11) suggested a relationship between the severity of PTSD and comorbid psychotic symptoms.

We could not diagnose such psychotic contents as dissociative expressions of re-experiencing the traumatic events, which is quite common in PTSD despite, in some cases, the clear relationship between the psychotic contents and the trauma that these patients had experienced.

Can we support the suggestion (5,9-12) that PTSD in itself can present with psychotic symptoms? The examination of our cases No. 1 and 2 shows that we can do that. However, differential diagnosis of these cases cannot exclude the possibility that one is dealing with the comorbidity of PTSD and schizophrenia. Such comorbidity is clearly demonstrated in cases No. 3 and 5. In the two remaining cases, one can explain the presence of psychotic symptoms as a PTSD with comorbid psychotic depersonalization (case 4) and with a bipolar affective disorder (case 6).

It seems that the diagnostic issue, or the justification of the diagnosis of PTSD with psychotic symptoms, remains open in some cases. Some studies (5,7,9-12), as well as this one, could support this possibility or, at least, not exclude it. In the light of the high rates of psychotic comorbidity with PTSD, one has to keep in mind in each case of PTSD with psychotic features that the latter may be part of an accompanying psychosis or disorder. For example, the high rates of depressive disorders or that accompanying PTSD (13) may explain the existence of psychotic symptoms with depressive content (10,12) in some PTSD patients. Comorbidity of PTSD with schizophrenia or other psychotic disorders has not been often reported in the literature, although some studies found (usually during psychiatric hospitalization) considerable rates of PTSD accompanied by schizophrenia or schizoaffective disorders (3). The comorbidity of PTSD and schizophrenia has also been reported by others (6). There are also reports on PTSD with a comorbid brief psychotic disorder (7) and with an undiagnosed psychotic disorder (8).

An important therapeutic implication for PTSD patients with psychotic features is the inclusion of anti-psychotic medication in the treatment plan. As can be inferred from psychiatrists’ reports in various outpatient settings, including our own experience (14), that the administration of anti-psychotic medications for PTSD patients is not rare, although it is not common either. On the other hand, there are no reports of controlled trials. A recently published treatment trial showed that the use of Clozapine in a combined disorder improved both psychotic and post-traumatic symptoms (8). This
favorable report differs from that of Iveziæ et al (12) who found Cro atian PTSD sol diers with psychotic symptoms resistant to anti-psychotic medications (altho% though not the atypical ones). Further studies are needed in this field to shed the light on this problem.

Conclusion

The question whether an independent diagnosis of PTSD with psychotic symptoms (delusions or hallucinations) does exist remains open. Case reports may support the assumption of an independent diagnosis, but it is not clear whether in these cases the existence of an accompanying psychiatric disorder has been excluded with certainty.

The described integrated course of PTSD and psychotic features points to a possible relationship between the two dis or ders - PTSD and psychosis and may support the assumption that in a given case and condition, the traumatic experience or the consequently developed PTSD may serve as a trigger for the development of a psychotic disorder.

References


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