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RISPERIDONE IN THE TREATMENT OF ACUTE STRESS DISORDER IN PHYSICALLY TRAUMATIZED IN-PATIENTS

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Although symptoms of acute stress disorder or PTSD in the aftermath of physical trauma may be a reason for psychiatric referral, little has been written on the management of patients in this context. We report the possible benefit of risperidone, an atypical antipsychotic, in 4 cases where flashbacks were reported in patients hospitalized for the treatment of physical trauma. Depression and Anxiety 11:187–188, 2000. *© 2000 Wiley-Liss, Inc.*

INTRODUCTION

Physical trauma, sustained in motor vehicle collisions and other traumatic events, is an important antecedent of acute stress disorder and post-traumatic stress disorder (PTSD) [Breslau et al., 1998: Arch Gen Psychiatry 55:626–632; Blanchard et al., 1995: J Nerv Mental Dis 183:495–504]. Certainly, the differential diagnosis of behavioral symptoms in the aftermath of physical trauma should include these disorders. Nevertheless, little has been written on the management of acute stress disorder or PTSD in this context. We wish to report on the possible benefit of risperidone, an atypical antipsychotic, in four cases where flashbacks were a presenting symptom of acute stress disorder (American Psychiatric Association, DSM-IV) in patients hospitalized for the treatment of physical trauma. None of the four cases reported here had any history of pre-existing psychiatric disorder, nor did they have any other comorbidity at the time of presentation.

CASE REPORTS

1. Ms. A., a 72-year-old woman, was hospitalized after sustaining arm and neck injuries in a motor vehicle collision. Three weeks after admission, there were several episodes in which she began pulling off her neck brace, jumping out of bed, and tearing off her clothes. On psychiatric interview, she explained that she had had flashbacks of the collision and was attempting to escape. She also described numbing/avoidance and hyperarousal symptoms, particularly insomnia. A computed tomography (CT) brain scan was normal. She was diagnosed with acute stress disorder (DSM-IV) and was treated with risperidone (1 mg) twice daily. There was immediate improvement in her symptoms. Medication was discontinued 2 months later, by which time the patient had been discharged.

2. Mr. B., a 26-year-old man, was hospitalized after being crushed between a reversing truck and a pole, and sustained pelvic injuries. Ten days later, the nursing staff reported inappropriate behavior, with the patient jumping out of bed and defaecating on the floor. On psychiatric interview, he explained that he had been having flashbacks of the traumatic event and was attempting to escape. He also described numbing/avoidance and hyperarousal symptoms. There was no evidence of delirium or of psychosis, and a CT brain scan was normal. The diagnosis of acute stress disorder (DSM-IV) was made, and risperidone (1 mg) twice daily was initiated. Within a few days there was marked improvement in symptoms. The patient was lost to follow-up at discharge 4 weeks later.

3. Mr. C., a 50-year-old man, was hospitalized after a work related incident in which scaffolding collapsed and crushed his left foot. Ten days later, he demonstrated motoric agitation with pacing, suspiciousness, and hypervigilance, and occasionally appeared to respond to hallucinations. On psychiatric interview, he reported that he was experiencing flashbacks and that during these episodes he heard voices telling him to escape. There was no evidence of delirium or psychosis, and a CT brain scan was normal. A diagnosis of acute stress disorder (DSM-IV) was made, and risperidone 2 mg nightly was commenced. There was an immediate and marked decrease in symptoms. The patient was lost to follow-up at discharge 2 weeks later.

4. Mr. D., a 30-year-old man, was hospitalized after being shot during an attempted robbery. The bullet had grazed the back of his skull, but there was no evidence on CT scan of brain injury. Three weeks after admission, he was referred to psychiatry for symptoms

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of acute stress disorder [DSM-IV]. In addition to flashbacks of the robbery, there were avoidance/numbing and hyperarousal symptoms. There was no evidence of a major depression. Citalopram (30 mg) was initiated and continued for 8 weeks without response. Risperidone (0.5 mg) nightly was then commenced, and within a few days, there was a marked improvement in all symptoms. The patient continued on this regime for several more months.

DISCUSSION

Specific medications used in the treatment of PTSD include a broad range of pharmacological agents, such as tricyclic antidepressants, monoamine oxidase inhibitors, benzodiazepines, anxiolytics, noradrenergic agents, anticonvulsants, and antipsychotics. The first-line pharmacotherapy of PTSD is currently considered to be antidepressants, in particular, the selective serotonin reuptake inhibitors (SSRIs) [Marshall et al., 1996]. These agents may require several weeks of treatment before symptoms respond and may therefore be less useful for disruptive behavioral symptoms on an inpatient setting. Given recent studies that demonstrate that flashbacks and even psychotic symptoms are not unusual in PTSD [Hamner, 1997; David et al., 1999], treatments that specifically and effectively target such symptoms would be welcome.

The acute stress associated with experiencing or witnessing physical trauma can cause marked alterations in mental state, including transient dissociative symptoms, anxiety symptoms, and flashbacks. The cases presented here, which suggest that risperidone may be valuable for these kinds of symptom, are consistent with several previous reports. First, there is evidence from preclinical models and from pharmacological challenge studies that sensitization of the dopaminergic system may play a role in mediating the symptoms of PTSD [Charney et al., 1993]. Second, previous case reports have suggested the value of typical neuroleptics in the treatment of patients with PTSD, perhaps particularly when flashbacks are present [Dillard et al., 1993]. Finally, a recent open-label case series of four patients with chronic, disabling PTSD suggests the efficacy of risperidone in treating vivid flashbacks and nightmares [Leyba and Wampler, 1998].

There have been a few case reports that have reported success with atypical neuroleptics (clozapine and olanzapine) in patients with PTSD and psychosis [Izraelit, 1998; Hamner, 1996]. The obvious limitations of anecdotal clinical reports should be borne in mind, and controlled, long-term studies of these agents are needed before their value in acute stress disorder and PTSD (with and without psychotic symptoms) can be asserted with any degree of assurance. In addition, the question of what happens to core symptoms and function after drug discontinuation needs to be answered. Nevertheless, it may be useful to consider the use of such agents in in-patient settings where disruptive behavioral symptoms and flashbacks associated with the diagnosis of acute stress disorder or PTSD require rapid control.

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