Case Study

Case of a Bus Driver Who Suffered from Panic Disorder in the Course of Treatment for Depression

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The comorbidity of psychiatric disorders with chronic health conditions has emerged as a topic of considerable clinical and political interest, in part owing to the evidence that anxiety disorders are associated with depression. Nevertheless, the implications for health-related quality of life that result from anxiety disorders, which are comorbid to chronic medical or psychiatric illness, are not well understood, especially in primary care samples.

There are few clinical studies of depression and panic disorder comorbidity in occupational health. From the epidemiological point of view, major depressive disorder and generalized anxiety disorder frequently co-occur with panic disorder, with estimates ranging 20% to 50% for each disorder. In this report, we discuss the association between depression, panic disorder and hypertension in a bus driver.

Case Report

A 49-year-old male bus driver, who had been working in a railway company for 21 years, visited our clinic to receive psychosomatic therapy. He complained suddenly of acute palpitations, vertigo, breathlessness, dizziness, anxiety, phobia, restlessness, numbness of left hand, nausea and headache. Before onset of the symptoms, he had been treated for depression and hypertension, complaining of depression, loss of volition, stiffness (especially in his shoulders), sleep disturbance, general fatigue, asthenopia, nephelopia and loss of appetite. In the course of his treatment, he felt that the present complaints were different from previous ones, and wanted another course of treatment. On a diagnosis of panic disorder, psychosomatic therapy (medication, autogenic training and counseling) was tried for the complaint.

Past history: He had been suffering from hypertension since his thirties and had taken β blocker (atenorol, 25 mg a day); since the age of 47 he had been taking psychosomatic therapy for depression.

Family History: His 42-year-old wife had suffered from autonomic imbalance for 15 yr, and recovered 4 yr ago. His 10-year-old son and 18-year-old daughter were healthy.

Physical examination and Clinical data: Height 170 cm, Weight 65 kg. Clinical laboratory findings (blood, urine, biochemical data) in the patient were within the normal range. Nutritional condition was good. Blood pressure 125/80 mmHg, pulse pate 64/min, regular. Electrocardiogram: no specific finding.

Birth and occupation: He, the youngest of three brothers, born in Chiba prefecture, was apt to behave like a spoiled child and to depend on others. After graduating from high school, he got a job in a railway company and became a bus driver. His personality was happy-go-lucky, but he became punctual in his work. Recently, he began to feel stress after hard and long driving hours related to restructuring of the company. His wife had suffered from autonomic imbalance, but recovered and had taken care of him. His blood pressure had been unstable. He has continued to be treated for depression for 5 yr. He had taken medication, and got along without trouble in driving.

Mental test: The Score of Self-rating Depression Scale (SDS); 57 points (>50) implied depression. Manifest Anxiety Scale (MAS); 28 points (>26) revealed high anxiety. The Cornell Medical Index (CMI) Score showed a IV area (Fukumachi Method) which meant a nervous personality. Self Grow-up Egogram (SGE): Critical Parent (CP) showing a personality critical of others: 12/20 points, Adapted Child (AC) manifesting being cooperative with others: 16/20 points (highest score). Therefore he seems to have high adaptability, and may even overadapt himself to the surroundings.

Personality: He is a serious type of man and cannot refuse other’s requests. In fact, he is emotionally unstable, but forced to adapt himself to surroundings. In addition, he tended to require himself to be perfect and punctual because of his job (bus driver).

Clinical course: Figure 1 and Fig. 2 show his clinical course and treatment. Around October, 1996, he was treated for depressive mood, loss of volition and appetite, sleep disturbance, shoulder stiffness, nephelopia, asthenopia and general fatigue. After work, he felt fatigue and had unstable blood pressure, so he had been careful...
of his work condition. With the medication in Fig. 1-(1)–(4), his condition was becoming stable, and the quantity of medicine was gradually decreased, but since the middle of July, 1997, his present complaints have been different from previous ones. He often felt anxiety, phobia, sudden acute palpitations, restlessness, numbness of the left hand, nausea and headache. On the other hand, loss of appetite, sleep disturbance, general fatigue, asthenopia had been gradually disappearing. In July, 1997 he therefore asked for another treatment; medication was changed on the diagnosis of panic disorder (from DSM-IV)3). At the time, medication for his depression had continued as in Fig. 1-(4). For his severe complications caused by anxiety and phobia of panic disorder, he took 20–30 min of counseling and autogenic training at every visit and brought his mental pattern causing the symptoms to his awareness. Medication for depression had been effective since 15, July, 1997; medication for panic disorder was added to the previous treatment as in Fig. 2-(5). We decided to decrease medicines for depression and observe his condition. His agoraphobia was not reduced, and besides headache continued, and he felt pain in the whole neck, but made an effort to go to job. His anxiety was reduced, but acute palpitations, shoulder stiffness and headache had continued. When he had frequent fits, he took alprazolam 1.6 mg and oxprenolol 40 mg. In August, 1997, he often had headaches, acute palpitation, restlessness, dizziness and nausea. In the same month, we decreased the dose of drugs as shown in Fig. 2-(6). His blood pressure changed little. In September his condition was still bad, so he required one or two weeks off from the company with a medical certificate. On 4 Sep. he had an electrocardiogram, but there was no specific finding. His physical symptoms continued. Because he had frequent acute palpitation, we changed his prescription as in Fig. 2-(7). In October, his prescription was changed again as in Fig. 2-(8), because his phobia had not disappeared. In November physical symptoms decreased, so we made the prescription as in Fig. 2-(9). In January, 1998 since his condition had been stable, we changed the prescription as in Fig. 2-(10).

Discussion

The results of the present study support the diagnosis of comorbidity among depression, panic disorder and hypertension; headache may commonly imply the three diseases. The patient had been working as a bus driver for 21 yr. Before he visited our clinic in October, 1996...
he had been suffering from hypertension since his thirties and had been treated for depression for 5 yr. His primary complaints were general fatigue, headache and so on. In July, 1997 his complaints changed, and he was now diagnosed as having panic disorder.

From the viewpoint of occupational health, the authors pointed out the following problems:

1. When the patient drives a bus, the symptoms which make driving impossible, such as sudden palpitation, anxiety and phobia, shivering, chest pain, nausea and dizziness, may cause traffic accidents leading to damage; it is too late to avoid damage when the panic disorder has already occurred. As in this case, panic disorder seems to appear comorbid with other symptoms. The partial symptoms of panic attack should also be checked at screening for hypertension and depression to detect attacks in the earlier stages.

2. It is to be expected that driving, which requires continuing tension without talking, causes great stress in such workers as bus drivers. Depression, due to hypertension and cumulative fatigue in concentrating on driving for hours, is supposed to be not as difficult to detect in regular medical examinations and mental tests, but the symptoms of panic disorder are rarely checked in the field of occupational health. Panic attack is not difficult to detect in a brief medical interview; it should be looked for in regular medical examinations. Depression and hypertension need long-term pharmacotherapy. The symptoms depend on the case, and the patient often recovers after getting worse and better several times. Frequent health checks are needed if he is to continue to work as a bus driver. When a driver feels a panic symptom such as palpitation, a self-reported health check is essential before driving.

3. When taking a long time off from work, the decline in physical strength and driving technique may become serious; it is too late to avoid damage when the panic disorder has already occurred. As in this case, panic disorder seems to appear comorbid with other symptoms. The partial symptoms of panic attack should also be checked at screening for hypertension and depression to detect attacks in the earlier stages.

Balls S.G. et al. reported that the majority of patients with panic disorder complained of at two or more depressive symptoms. These symptoms met the DSM-III-R definitional criteria for significance; subdiagnostic levels of clinically significant depressive and generalized anxiety symptoms in patients with panic disorder[4]. Past epidemiological and clinical research has identified depression as the most common psychiatric disorder, associated with headache. When taking a long time off from work, the decline in physical strength and driving technique may become serious. Therefore, it is considered to be necessary for the treatment of depression and panic disorder to let the patient go back to daily work gradually, taking 6 to 12 months. And the work schedule should be adjusted appropriately with agreement of superiors under the direction of an occupational physician.

The recent study, carried out in a neurology headache clinic, showed that the major associations of headache were with current anxiety disorder, especially panic and related conditions[5]. Moreover, another recent study observed no differences in the prevalence of panic, anxiety and depression between patients with resistant hypertension and non-resistant controls. On the other hand, the prevalence of panic disorder and panic attacks were remarkably high in both groups patients attending a hospital hypertension clinic[6]. The characteristics of the patient resembled those in the report.

From the psychological point of view, he was a serious type of man and overadapted himself to the surroundings; the Self Grow-up Egogram score showed his high adaptability. In addition, he tended to require himself to be perfect because his job required punctuality. The stress caused by high adaptability and punctuality may be related to depression, panic disorder and hypertension.

Other research reports indicated that primary care clinicians should be aware of the possible coexistence of anxiety disorders (especially generalized anxiety disorder [GAD]) in their patients with chronic medical conditions (hypertension), but especially in those with current depressive disorder. Among primary care patients, those with chronic medical illness or subthreshold depression had low rates of lifetime and current panic disorder, but those with current depressive disorder had much higher rates. Concurrent phobia and GAD were more common, especially in depressed patients. Depending on the type of medical illness or depression, 14% to 66% of primary care patients had at least one concurrent anxiety disorder[7]. Another study repeated that anxiety disorders co-occurring with another disease (medical illness or depression) increase the need for counseling and the use of psychotropic medication in the general medical sector[8]. This research showed the importance of primary care including occupational health; it seems necessary to conduct advanced research on the comorbidity of the diseases (disorders), treatment and the occupational care (employment and support) of these patients. And more study should be directed at increasing cooperation between occupational health (primary care) and psychosomatic internal medicine (psychiatrics) concerning depression, panic disorder and hypertension.

References

2) American Psychiatric Association. Quick reference to


