# CHRONIC DIZZINESS PRESENTING IN A PATIENT WITH PANIC DISORDER

## Response to imipramine

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Dizziness is the third most common complaint in clinical practice, and it still represents a challenge to clinical reasoning<sup>1</sup>. It may have over a thousand causes and can be grouped under more than three hundred syndromes<sup>1</sup>. The most common vestibular syndromes in a brazilian sample with 515 patients were benign paroxysmal positioning vertigo (BPPV) (28.5%), phobic postural vertigo (PPV) (11.5%), central vertigo (CV) (10.1%), vestibular neuritis (VN) (9.7%), Menière disease (MD) (8.5%) and vestibular migraine (VM) (6.4%)<sup>2</sup>. Many patients with chronic dizziness without a clear organic origin, also called idiopathic dizziness, may have an association with a psychiatric disorder<sup>3</sup>. Nevertheless many patients with organic dizziness may also initiate or worsen a psychiatric disorder<sup>4,5</sup>. The association between dizziness and psychiatric disorders is well known, but it still is understudied, mainly due to a lack of a multidisciplinary evaluation of these patients.

Staab and Ruckenstein<sup>5</sup> did a retrospective review of 132 patients with psychogenic dizziness with or without physical neurotologic illnesses, and found three equally prevalent patterns of illness: anxiety disorders as the sole cause of dizziness (33%), neurotologic conditions exacerbating preexisting psychiatric disorders (34%), and neurologic conditions triggering new depressive or anxiety disorders (33%). In this sample depression was considerably less common than anxiety and was never a primary cause of dizziness. A German study compared 68 patients with organic vertigo syndromes with 30 healthy volunteers looking for comorbid psychiatric disorder, and found increased psychiatric comorbidity in patients with VM (65%) and MD (57%) when compared to patients with VN (22%),

BPPV (15%) and normal subjects (20%)<sup>6</sup>. Phobic postural vertigo (PPV), for example, is a somatoform syndrome characterized as a chronic and incapacitating condition with subjective imbalance and recurrent attacks of dizziness. Phobic avoidance is an associated behaviour. In another brazilian study 65% of patients with PPV also had a psychiatric diagnosis (but the authors do not specify the diagnosis)<sup>7</sup>. Dizziness is one of the symptoms of panic attacks, as are palpitations, shortness of breath and chest pain or discomfort, but psychiatrists usually do not refer panic disorder patients for otoneurologic evaluations as they refer them to cardiologic evaluations. This lack of adequate evaluation may lead patients away from an adequate diagnosis and treatment<sup>4</sup>.

The following case report illustrates the importance of an adequate psychiatric and otoneurologic evaluation of a patient with chronic dizziness referred to an anxiety disorder outpatient unit.

#### **CASE**

A 36-year-old female patient presented at age 33 sudden episodes of palpitations, tingling, trembling, chills, shortness of breath, dizziness, feeling of choking, depersonalization and fear of dying that progressively increased in frequency over three years, reaching a peak of three to four panic attacks daily. After four months she developed dizziness episodes without the other symptoms, also with increasing frequency, reaching a peak of five to six dizziness episodes daily. The increase in the dizziness episodes' frequency led to a fear of having these "crisis" while away from home, and after some time she developed agoraphobia. In these three years she had been evaluated by gen-

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Received 25 June 2008, received in final form 14 October 2008. Accepted 22 November 2008.

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eral practitioners, cardiologists, neurologists, and gastroenterologists without a precise diagnosis or treatment.

She presented at the Anxiety and Depression outpatient unit of the Instituto de Psiquiatria - UFRJ, where she was diagnosed with current panic disorder and agoraphobia using the Mini International Neuropsychiatric Interview (MINI version 5.0.0) Brazilian version<sup>8</sup>. She had no alterations on physical examinations and on laboratorial evaluation (hemogram, thyroid, liver and renal functions, serum lipids and electrolytes). The patient never smoked, denied drinking alcoholic beverages, coffee or soft drinks or the use of illicit drugs. Since she had prominent dizziness we asked her to complete the Brazilian version of the Dizziness Handicap Inventory (DHI)9, with a result total score of 92. We also applied the Hamilton Scale for Anxiety (HAM-A)<sup>10</sup> and she had a score of 31. She was referred to otoneurological evaluation with vestibular testing and electronystagmography to evaluate her prominent dizziness. No otoneurological abnormalities were found.

Treatment was instituted with imipramine 25 mg/day increased after three days to 50 mg/day and after one week to 100 mg/day. After one month using imipramine 100 mg/day she had a subjective decrease in anticipatory anxiety and an objective decrease in panic attacks (one attack/week) and dizziness episodes (two episodes/week). On her next evaluation with two months use of imipramine 100 mg/day she had no panic attacks or dizziness episodes on the two preceding weeks. After the third month of treatment she had also achieved full remission of the agoraphobia, and both the DHI and HAM-A were applied, with significant decreases in both scores (DHI score of 4 and HAM-A score of 11).

#### **DISCUSSION**

Anxiety disorders are the most prevalent psychiatric disorders on the general population and can be found on 15 to 20% of all clinical outpatients. Anxiety can be a primary psychiatric disorder, one of the causes of a clinical condition or a secondary consequence of a clinical disease<sup>11</sup>.

Panic disorder is characterized by the occurrence of recurrent unexpected and sudden panic attacks that develop usually in 10 minutes and end after one hour. After the panic attacks one of the following must also be present for the diagnosis of panic disorder: persistent concern of future attacks; worry about the meaning of or consequences of the attacks; and significant change in behavior related to the attacks<sup>11</sup>.

Simon et al.<sup>12</sup> in a prospective pilot study using fluoxetine for vestibular dysfunction and anxiety, treated five patients with vestibular dysfunction but no primary anxiety disorder, although all patients had a significant level of anxiety at baseline. All patients had impairment due to dizziness measured by the DHI scale (baseline: mean 30.2, range 14–42) and all patients completed a 12 week course

of fluoxetine treatment, with reductions in the HAM-A and DHI scores, which were the primary outcome measures.

Vestibular complaints have many possible differential diagnoses, and usually are difficult to control clinically. Even in the absence of anxiety disorders, anxiety levels should be assessed. These patients should always have psychiatric and otoneurologic evaluation, since the correct diagnosis and treatment can improve symptoms and quality of life.

There is one Brazilian retrospective study on patients with PPV where the authors describe the use of amytriptiline (25 to 50 mg/day), fluoxetine (20 mg/day), sertraline (50 to 100 mg/day) or clonazepam (2 mg/day) between 1 to 6 months, according to psychiatric comorbidities<sup>6</sup>. There is also a German follow-up study, 106 patients with PPV were evaluated for up to 15 years and 47% of the sample received antidepressant therapy (selective serotonin reuptake inhibitors (SSRI) or tri/tetracyclics) or tranquilizers, but this study also do not specify why were these medications prescribed, their types, doses or duration of treatment<sup>13</sup>.

As this case illustrates there was marked improvement of anxiety symptoms and dizziness impairment with the use of imipramine. More studies are necessary with bigger samples of anxiety and dizziness patients, to further elucidate the physiopathology and treatment alternatives.

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