

# Correspondence

## PANIC DISORDER TREATED WITH THE ANTIHISTAMINE CHLORPHENIRAMINE

*To the Editor:*

The article by Dr. Goodwin<sup>1</sup> describing comorbidity of panic disorder and hay fever is very interesting, raising questions about treatment options that might affect both disorders. Some years ago, we reported on a patient with comorbid panic disorder and hay fever, that had been treated with different antihistamines.<sup>2</sup> The response pattern of this patient, whose panic attacks and phobias ameliorated while on dexchlorpheniramine, made us believe that this drug possessed specific psychopharmacologic activity. This was supported by positive clinical results in 10 additional patients with panic disorder who were treated with dex-chlorpheniramine.<sup>3</sup> This was further substantiated when we became aware that Nobel Prize laureate Arvid Carlsson along with Lindqvist<sup>4</sup> had described the serotonin reuptake-inhibiting property of chlorpheniramine as early as 1969.<sup>4</sup> This pharmacologic discovery was not further explored through clinical studies at that time, yet it served as a starting point in the development of the first selective serotonin reuptake inhibitor, zimeldine.<sup>5</sup> We now want to report another case, illustrating the clinical usefulness of acknowledging the varying specificity of antihistamine drugs.

A 67-year-old woman, complaining of chest pain, was investigated and treated at a ward of internal medicine. The cardiologist, however, found nothing wrong with her heart. It was felt that her symptoms were rather of a psychiatric origin, and one of us (MH) was consulted as a liaison psychiatrist. It turned out that she suffered from moderately severe panic attacks and agoraphobia in her 20s. These symptoms abated successively while her hay fever was chronically treated with chlorpheniramine. Two months before the present admission, her general practitioner had substituted this drug with loratadine, in the ambition to reduce possible side effects. Shortly after this, the reappearance of her panic attacks was accompanied by chest pain, lowered mood, and a phobic tendency. Having delineated this sequence of events, it was decided to change back to dex-chlorpheniramine. Her symptoms gradually subsided, and she was happy to continue with her "oldfashioned" antihistamine.

This case illustrates the consequences of ignoring the psychotropic properties of chlorpheniramine, and the usefulness of the varying pharmacologic actions of these agents. By use of chlorpheniramine in the treatment of patients with hay fever and panic disorder, one medication might treat both conditions. This could provide the benefits of simpler administration as well as being more cost-effective. Controlled studies should be performed of this safe old drug.

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#### *Response:*

We agree with Drs. Hellbron's and Humble's suggestion that future controlled clinical trials would be useful in helping to

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identify more tolerable methods of treatment of more than one disorder,<sup>1</sup> especially when they are seemingly unrelated. Of interest, we also found a nonsignificant but lower percentage of self-reported hay fever among participants in the previously reported study<sup>2</sup> who were depressed and reported taking medication for depression compared with those who were depressed and not taking medication (14.22% vs 22.13%), which is theoretically consistent with the authors' suggestion that a medication for depression (eg, antidepressant, possibly, and SSRI) is acting on both depression and hay fever. The authors' observation of a pharmacologic commonality is also consistent with our hypothesis of a common vulnerability to panic attacks and allergy/respiratory disease, and suicide behavior which have all been associated with a dysregulation of serotonin neurotransmission. There has been documented evidence of common links between allergy/respiratory disease and panic,<sup>2-5</sup> respiratory disease and suicide ideation and suicide behavior,<sup>6,7</sup> panic and suicide behavior.<sup>8-10</sup> Convergent data are emerging from microbiology suggesting that dysregulated immune functioning and cytokine production,<sup>11</sup> which is tied to serotonin regulation,<sup>12</sup> provide additional support for this theory.

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