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In Reply: Spontaneous MAOI hypertensive reaction, not likely armodafinil – tranylcypromine interaction

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Keywords

Tranylcypromine; Armodafinil; Hypertension; Drug interaction

We would like to thank Dr. Feinberg for his comments on our case report, in which we describe a patient who developed an acute hypertensive crisis, hours after her dosing schedule of armodafinil and tranylcypromine was adjusted. We agree that it is possible that her reaction was a spontaneous hypertensive crisis due solely to the MAOI, and not a combination of the two drugs. Severe hypertensive episodes are rare in patients receiving MAOIs (less than 1%), and an unprovoked or spontaneous episode in a patient without a history of dietary noncompliance or use of restricted medications would be unusual [1]. There is ambiguity regarding the mechanism of action of modafinil and its second-generation enantiomer, armodafinil, as the compounds exhibit robust effects on catecholamine, serotonin, glutamate, gamma amino-butyric acid, orexin, and histamine systems within the brain [2]. These systems are modulated both by changes in the extracellular concentrations of their neurotransmitters and by direct agonism/antagonism of their respective receptors. Armodafinil is more potent than modafinil and has a substantially different pharmacokinetic profile [3], making it difficult to predict its safety profile in combination with other drugs. For this reason, their use in combination with MAOIs is either cautioned or contraindicated by some sources for risk of acute hypertensive episodes [4]. We would welcome more reports of cases in which the two drugs are used together, such as those described by Dr. Feinberg in his commentary. We believe that the data we present still support our conclusion, that physicians should exercise caution if using these two drugs together. Experts may still choose to use the combination, but it has been recommended that patients on this regimen be carefully monitored [4].

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