

## Correspondence

# Additive effect of propofol for attenuation of hypertension in a patient with undiagnosed phaeochromocytoma

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### EDITOR:

I read with interest the letter by Isik and colleagues [1] describing the attenuation effects of propofol in a case with undiagnosed phaeochromocytoma. Management of patients with pheochromocytoma is very challenging, especially if undiagnosed and unprepared. The use of propofol in this case is very logical. Propofol has vasodilator properties, readily available and easy to administer. The hypotensive effect seen was most probably due to potentiation of the effects of other vasodilator drugs. As to the other medication used in this case, I would like to make few comments.

The use of beta blockers is not a favourable option when phaeochromocytoma is suspected in a non-prepared patient. This is because of the risk of unopposed alpha vasoconstrictor stimulation that could be precipitated by removal of the beta vasodilator effects. In addition, it is important to maintain good cardiac contractility after resection of the tumour, which can be jeopardized by beta blockers [2].

Two important drugs were omitted in this case: phentolamine, a short-acting alpha blocker, and magnesium sulphate, which inhibits the release of catecholamine from the adrenal medulla, decreases

the sensitivity of alpha receptors and causes direct vasodilatation [3,4]. Both drugs are useful in hypertensive crises secondary to phaeochromocytoma and can be given peripherally and rapidly.

Hypertensive complications in patients with phaeochromocytoma may arise suddenly, especially in unprepared cases. I emphasize on the importance of the use of alpha blockade and magnesium sulphate in undiagnosed cases of phaeochromocytoma. I agree with the authors about the useful attenuating antihypertensive effects of propofol in hypertensive crises. Further research into propofol effects and phaeochromocytoma may be needed.

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## Reply

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### EDITOR:

We thank Dr Fassam for his interest in our study and his comments [1]. We agree with him that the

use of beta blockers is not a favourable option and has limited indications during arrhythmias in case of phaeochromocytoma. In our case, during surgery both beta-blocker drugs were selected to control aggravated hypertension of the patient who had regulated hypertension before surgery. The diagnosis of phaeochromocytoma was not suspected at that time. So we agree with Fassam that beta

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