LETTERS TO THE EDITOR

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Indication for bromocriptine in peripartum cardiomyopathy

We read with great interest the case report of Habedank *et al.*¹ We would like to bring to your attention the fact that the authors overstate the efficacy of bromocriptine in their case report, and prematurely conclude with the indication of bromocriptine in the situation of peripartum cardiomyopathy.

The authors report the case of a young patient presenting with acute heart failure within days following delivery of healthy twins. The clinical description along with the left ventricular dysfunction assessed through both echocardiography and cardiac MRI are clearly in favour of peripartum cardiomyopathy. Following the improvement in left ventricular ejection fraction assessed by MRI, from 15% after delivery to 60% two months later, the authors claim the efficacy of bromocriptine, prescribed for 6 weeks after delivery. However, bromocriptine was prescribed with the usual combination of a beta-blocker and ACE inhibitor. Even though low ejection fraction and left ventricular dilation at the acute phase of heart failure are pejorative for short-term left ventricular function recovery, it has been clearly demonstrated that such improvement can occur in some patients. We and others have reported cases of patients with initially very low ejection fraction and ventricular dilatation, who recovered normal cardiac function under beta-blocker and ACE inhibitor combination.^{2,3}

The reasons underlying this left ventricular alteration after the acute phase remain unexplained. The hypothesis of potential treatment of patients with bromocriptine has recently been proposed by Hilfiker-Kleiner *et al.*,⁴ and is currently under clinical evaluation. Until the results of randomized trials are reported, this option should not be used routinely, and cautionary issues have already

been raised.⁵ Even though we obviously cannot say that bromocriptine did not improve cardiac function in the case reported by Habedank *et al.*, the contrary is also true: unless the authors can show that the improvement was not related to usual beta-blocker and ACE-inhibitor treatment, their conclusion should be more balanced.

References

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Indication for bromocriptine in peripartum cardiomyopathy: reply

In their comment to our case report on postpartum cardiomyopathy, Drs Mouquet, Lamblin, and de Groote emphasize two important aspects of bromocriptine use: Was it justified to start bromocriptine at this stage of disease, and how can a treatment effect additive to ACE inhibitor and beta-blocker be evaluated?

Our decision to use bromocriptine was made following rapid deterioration of the patient. Faced with a continuous clinical deterioration, we increased ramipril from 2.5 to 5 and then 7.5 mg, and bisoprolol from 2.5 to 3.25 mg without any change in left ventricular diameter or ejection fraction. Being aware of a new pathophysiological concept¹ and watching the failure of standard therapy, a therapeutic attempt with bromocriptine was surely justified, particularly since adverse effects with bromocriptine at this dosage are rare. Further deterioration would have led our patient to catecholamine therapy, assist device or heart transplantation, considering these alternatives, the side effects of a long-time licensed drug such as bromocriptine seemed worth the risk.²

The other issue mentioned by Drs Mouquet, Lamblin, and de Groote concerns the therapeutic effect of bromocriptine. A randomized controlled study is required to test the efficacy and safety and is currently planned by the Hannover Medical School.³ If bromocriptine is used off-label in acute life threatening conditions, we suggest documentation of the patient's informed consent, surveillance of side effects, and annual reporting to the local ethics committee. We consider this a reasonable balance between the patient's wish for the most promising therapy and the need for ongoing evaluation.

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